

NOTES RE RESTRICTED LICENSING.

Thursday 20 June 2002

10 am - Veronica Mauri - Head of Restricted Electrical Licensing.

I Margaret Underhay posed the following question to Veronica

"We have had members complain to us that they are being targeted by the ELB and some electricians in an attempt to drive them out. I said that we realised that there are safety and other problems that need addressing but to do this effectively for our members I would need to clarify the grey areas so that we can best assist our members to work within the guidelines? I then asked her what were the intentions of the ELB towards the RAC Industry?

Veronica replied as follows:-

- a) She said "The main aim of the ELB is to ensure that those that are doing electrical work on RAC are actually the holders of restricted electrical licences. This also applied to other industries not only the RAC Industry."
- b) She said "The main area of concern is split systems - plug in plug out looms can be done under restricted electrical licence however an electrical contractor must be engaged to do any looming that needs to be manufactured and connected. The legislation is very clear on this and it will be made available to you for dissemination to your members."
- c) A refrigeration air conditioning contract can employ a licensed electrician but must also be the holder of an electrical contractor licence before they can undertake electrical contract work even on RAC systems. The QBSA licence does not cover this.
- d) Safety and other legislation is being re-written as we speak and safety issues will no longer fall under the ELB but will fall into a separate division.

I mentioned to her that it had also been brought to our attention by our members that electrical contractors were carrying out installations of RAC equipment and especially the "split systems" without the proper qualifications or equipment to carry this work out.

Her reply to this was "Yes I understand that and they shouldn't be doing that and that is another area that we need to work together to fix."

She then went on to say "there are many facets that we could go on taking about and I would rather meet face to face with you." A meeting has been set up which Mike Gilmore and myself will attend on the 15 July at 2pm. She has asked us to bring any questions that we have and she said she would attempt to give us answers and or to work with us to find the answers if necessary.

2pm - Thursday 15 July 2002
Lutwyche City Shopping Centre
Level 4 in the Department of Industrial Relations Offices.

MEETING WITH THE QLD ELECTRICAL LICENCING BOARD 15 JULY 2002-07-15

10 am

ELB - Veronica Mauri and Bill ?

RACCA-IRASE/NRAC - Mike Gilmore and Margaret Underhay

Veronica Mauri welcomed us and asked as what they could do for us.

Mike opened the meeting with an overview of NRAC and what it is moving towards for the future of the Refrigeration Air Conditioning Industry.

Mike then mentioned the problems with "Split" Systems and both Veronica and ? agreed that this was also a problem area for the ELB. Mike Gilmore then said that he felt some of the problems being encountered on both sides was that the message was not getting over to those involved in "Split" system installations.

Margaret then went on to say that we RACCA-IRASE were continually receiving complaints from members about "Split" installations being done by electrical trades persons. The members say that re-gassing and repair are being carried out on these units - are the persons qualified to do so? Margaret then went on to say this appeared to be and are where the problems were like a two way road, the ELB are having problems from their side and vice versa.

Veronica then asked Mike how are you promoting NRAC.

Mike then said that from next week he would be visiting wholesalers in Queensland to explain the certification system to them and that every wholesaler would have the necessary stand with promotional material available in them for dissemination into the industry. Margaret said that nine presentations for NRAC had already been held in the SE of area of Queensland. Mike then said that this was being done on a National level but state level matters would be taken into account as well as each state differed in their requirements and this was where RACCA-IRASE Qld Inc and other like associations would be involved.

Margaret then said that it appeared that as far as electrical licensing was concerned there appeared to be a lack of knowledge and understanding of the requirements and the does and don'ts of the category. Members had been asking her what exactly does my restricted electrical license allow me to do? If they are holders of any category of electrical license they should have documentation given to them with guidelines of what they can and cannot do.

Veronica replied that they do get documentation when the license issued giving them this information and they should be given the does and don'ts during training as well.

Margaret then said that she felt there must be something missing in this system as she was often asked the question of what does this wording mean and what does it actually allow me to do on this restricted license. Margaret then went on to say that, what was the original intention of the wording at the source document could be decidedly different by the time the end user read and interpreted it.

Veronica then went on to say that the limitations etc. should be taught to the licensee during training but said that she was aware that there was a problem with this area and they had requested a meeting with the Logan TAFE Refrigeration unit to address this anomaly.

Margaret then went on to say that as the lines crossed between the two trades it was imperative that we work together to make the line much more definable and less easy to cross the trades.

Veronica then replied that they could really only have a say as far as electrical licensing was concerned and that if we wished to communicate with the electrical industry that this was not the function of the ELB at all. It would be between the RAC Industry and the Electrical Industry (NECA Qld) that what the can and can't do should be defined and discussed. Margaret then went on to say that the licensing was an important part of the do's and don'ts as they licenses issued had restrictions placed upon them. She then went on to say that the "Restricted Electrical License allowed them to put a plug on the end of a loom. Veronica agreed that this was correct. Margaret then went on to say that in the instance of "Split" systems the loom could then be terminated at both ends on the "Restricted License" and that this in fact was plug in plug out.

Veronica agreed that yes it could be interpreted this way but that this was not the way it was intended for interpretation.

Margaret replied with the fact that this was then one of the "grey" areas that needed to be defined very clearly for those holding and working under the "Restricted Electrical License".

Veronica agreed that this was correct and would probably have to be addressed. It was agreed that every license holder would probably push the use right to the limits and hope that in doing so they wouldn't overstep the mark.

Margaret then went on to say that she could see their logic behind their interpretation, that I am licensed to put a plug on a loom therefore I must be able to do the job.

Veronica then went on to say that they understood the problem areas and that there was no doubt about that and that had been recognised for some period of time. She then went on to say a strategy would have to be employed to overcome the problems that have been identified and what time frame could be put in place to address this problem. Veronica then went on to say that the ELB has been pushed to the limits due to lack of human resources. They were undergoing some major changes within the ELB, and that they know there is a problem that needs to be addressed but where do we start and how do we do this. Veronica said the legislation was currently being re-written and that this would probably bring about a few odd changes. Veronica went on to say that she felt there was a need to put into place some sort of education program to address some of the misunderstood areas. Veronica said that he had been contacted by Graham Mackrill of AMCA to address a meeting that they are holding on the 23 July 2002. She asked us if we were involved with them. Mike Gilmore said yes but only at the NRAC level of operation.

Mike said he would like to bring to the ELB's attention that NRAC was owned and operated by all major RAC related associations including AMCA and that he would contact them for more information. Mike also said that AMCA was involved with plumbing as well as RAC.

Margaret said that although AMCA and RACCA-IRASE were both involved with the RAC industry, RACCA-IRASE was more the small to medium businesses whereas AMCA was more the very large businesses.

Margaret said that there were a number of issues that were put to them from people encountering problems with licensing. In some instances they had almost lost their employment due to not being able to fulfil their role within their employment.

Veronica asked Margaret what she had meant by people having lost employment over licensing.

Margaret said Mike had been the major point of contact with this area and that he could expound on it.

Mike then went on to say one of the companies that had contacted him had said that as they had not been issued with their "Restricted Electrical Licenses" they could not fulfil their duties for their employers and that the employers could not afford to cover them in this instance.

Veronica asked Mike if she knew if they had been rejected from obtaining the license.

Mike said that no as far as he knew this was not the case. Veronica then said that this would then appear to unreasonable grounds for dismissal if it was purely a case of trying to finalise a license and not a rejection of license. Mike said that what has been perceived is that the onus is on the company. Veronica said that it always had. Mike then said that as far as he could ascertain the person had been issued with a permit but that had since expired and license still had not been issued.

Veronica said yes that with a person coming out of his apprenticeship he had to submit certain criteria for assessment and after assessment being successful they were issued a permit in the interim until the final paperwork was available for submission and the "Restricted License" issued. If there was a piece of documentation missing or not substantiated in the initial submission of documents a request would be made for this. Veronica said that this did not mean they were not going to get a license and that they could work.

Mike then said that this was not being perceived in this manner by the employers as the employers main concern is that if something did go wrong while working without the proper licensing he would be responsible.

Veronica said that the relationship between employee and employer does not change in any way with or without the license and that the employer was still responsible.

Mike said that he felt this was not being perceived by the employer in this manner at all. The employer felt he was totally responsible until the license or interim permit was issued and current. The employers felt that if the person was supposed to be the holder of the license and he had not had it issued he cannot do the work and therefore cannot fulfil the position he was hired to do so therefore he is dismissed.

Margaret said that she gathered that these permits were issued with an expiry date. Veronica said that this was correct but that could be extended. Margaret said that another of those that had contacted RACCA-IRASE had said that when he queried the expiry and the extension of his permit. He was then informed in a verbal conversation that it had been extended. He had not received the necessary paperwork granting the extension and he was told that he would receive it in due course and to carry on operating as normal. This person found that frightening as he had no document to legally say that it had been extended and felt that if something went wrong and he did not have the written extension dates he could be liable under the law of the land.

Veronica said that under normal circumstances the permit would be issued for a period of three months as that was the most that it should take to have all the paperwork finalised and the license issued.

Margaret said that one of the instances she had mentioned the permit had been used for twelve months and that the extension had been for a further six months. This would mean a period of 18 months before a license was finally issued.

Veronica said that she felt that was a lot more to this than just a delay in the issue of the license.

Margaret said that more questions could be asked to ascertain if other problems had exacerbated the time delay in the issue of the license and that now we were more aware of the process we could now ask more pertinent questions from those calling with complaints and questions about licenses. Margaret said she was aware that there was always two sides to a story and this was

one of the reasons for this meeting and that was to hear how both sides operate and what is required etc.

Veronica expounded on the potential problem areas that could occur when a license application was submitted. She said that if a permit had been issued they were usually waiting for a final piece of documentation and this was usually one or more of the following:-

1. An Employer Report from the employer which was sent to the employer after they received the information in the initial application for the license.
2. That their logbook as very little in it and didn't meet certain criteria for the issue of a license.
3. Or the logbook had not been signed or signed by someone clearly identifiable to do so.
4. In the case of an apprentice it could be the "Statement of Achievement" which they usually receive from the TAFE concerned but in the odd case these had not been received so had to be requested and received prior to issue of the license. (
5. Also in the case of an apprentice the Certificate for Completion of Apprenticeship was also required and often this was missing. (Permit issue applies if this is missing and all other documentation etc. has been technically assessed and found acceptable)
6. A Resuscitation Certificate

Veronica then said they get plenty of notification of missing documents etc. and it was a matter of the recipient of the notification reading it and complying with the request to complete the formalities required for the issuing of a license. This could take as long as three months.

Margaret asked the question that after all the documentation was received by the ELB how long would it take to issue the license.

Veronica replied with "however long it takes us within this office to read and assess"

Margaret asked for a rough indication of time, for example three months, three weeks, three days?

Veronica answered that for an apprentice they require the initial documentation and application to be submitted at least six weeks before the apprentice is due to complete their time. This would exclude the "Completion of Apprenticeship Certificate" as this would only be available some weeks after completion of their apprenticeship.

The initial documents required were the logbooks clearly signed and verified by an identifiable authorised person to carry this out.

The "Statement of Results from TAFE for each block completed.

A Resuscitation Certificate

Six weeks is the minimum requirement for the ELB to carry out the technical assessment of the applicant so that a permit can be issued to the apprentice the day that they finish their time which allows them to continue working. This will usually cover them until they receive their "Certificate of Completion of Apprenticeship" for submission and the issue of the license.

Veronica said there was some delays in the technical assessment as at this point in time there was only one person that could carry this out and that was she. She said that human resources to do this was critically short but that she had just been given permission to employ someone to assist in that area and this then should help to decrease the time taken for technical assessment presently. Ideally they would like to see the assessment etc. completed within a six week period and this is what they would be aiming for now that they have an extra person to assist in that area.

Margaret said that perhaps the time frame was not being made clear to the employer by the apprentice/employee as to the time involved to process the application and issue the license.

Veronica said that it was their intention to speak to Logan TAFE to ensure that they were informing the apprentices of the requirement to submit applications with the initial documentation

at least six weeks prior to the completion of their apprenticeship. She said that often the applications were only being made some months after the completion of their apprenticeship and this particularly applied to apprentices within the refrigeration industry. Veronica said that they need to know that a) they need to be licensed and b) that they must make their application at least six weeks before completion of their apprenticeship as it would appear that many of them were not even aware of either requirement.

Margaret then re-iterated that it appeared that there was a general lack of communication as far as requirements went and that this would have to be addressed at all levels. Margaret also said that some contractors who employed fully licensed electricians might not be aware that they also have to hold an Electrical Contractors License to do electrical work. Some may think that the QBSA license automatically allowed them to carry out electrical work.

Veronica asked if we had regular meeting as an association.

Margaret said that the council meets every month and that the administration group meet every week and that an AGM was held once a year. Our members were also widespread from as far south as the ACT up into the Solomon Islands across to Darwin so this made it a logistic nightmare to get all members in one place at one time.

Veronica then asked if we have a regular magazine for our members.

Mike answered in the affirmative.

Veronica said she would be able to get permission to publish various related articles in our magazine so that the information gets across to our members with regard to electrical requirements if we put in a written request for this.

Margaret said that this information could also be put on the Queensland web site for RACCA-IRASE members to access and it would probably go a long way to clearing up some of the grey areas.

Mike asked if this information with regard to the requirements could be put out per equipment type. Currently it was not done in this format and thus it was felt that it was not really pertinent to the man behind the tools but if it were to be done in a format by equipment type it would become very relevant to the man behind the tools.

Veronica said there was also a misunderstanding between the requirements from state to state and that a licence held in another state may only be a part of the license here and would require further modules to meet the Queensland licence requirements.

Margaret said that if this was clarified at state levels through articles in magazines etc. this may go a long way to diffuse the anger that some people were venting through finding out that once they moves states they no longer qualified for the new states license requirements.

Mike said that he hoped NRAC would be able to encompass this and alleviate some of the problems at hand being experienced by our industry. Mike also went on to say that training in all areas could be improved to encompass new legislation requirements and new products coming out into the RAC market.

Margaret then said that she felt there was a need for this to be addressed before there with people killed through lack of knowledge and not as an after thought to a tragedy.

Margaret asked Veronica if she was right in presuming there was not much inspection being carried out?

Veronica answered that yes this was the case and that inspectors were subcontracted from another department to act on complaints. They were reactive rather than proactive. She said that this was one other area that they were hoping to address in the near future with the change of legislation and that inspectors that currently only worked on their behalf when requested to do so would be directly employed by the ELB. She said at this point in time there are only 22 of them and they would be utilised in the main to inspect electrical installation work.

Margaret said that she was aware of instances where members had told her that complaints had been made and not acted upon.

Veronica assured her that all complaints received by the ELB were acted upon but the complaints had to be in writing.

Margaret and Veronica both voiced their concerns that some complaints being made were not essentially based on the truth but more as a method of upsetting another business or person.

Bill said that the other side of the thing was that the more prosecutions there were the more complaints they received and this put an enormous strain on resources available to act upon matters of complaint.

Mike said that one of the strong points as far as inspection would be that under National legislation no person that was not accredited would be able to hold or purchase refrigerants or work on equipment using refrigerants. He said that perhaps NRAC could encompass the requirement to hold a restricted electrical licence into their requirements for certification.

Veronica said that the inspectors that were going to be employed directly by the ELB were going to be trained to product and systems audits as their main function. Primarily they had air being doing products audits and they were now being trained to do audits on electrical systems on the basis of electrical contract work carried out. She said there was a need to get a deeper penetration into the RAC who were involved in that kind of work and there was little doubt that this would happen but she said she did not know how far down the track this would occur but that it would happen. She said they were going to start with the 22 inspectors who would primarily concentrate on the inspection of electrical installations however they were looking to expand on the number of inspectors being employed. She said however if we receive a complaint on the standard of any electrical installation and that they would act upon those and the company under complaint would be audited.

Margaret asked if under the proposed inspections it would mainly apply to complaints about installations carried out by our industry.

Veronica answered in the affirmative but said that a general audit of the RAC industry could be carried out was if they were recognised as workplaces and the minister decided he would do a blitz on that industry.

Margaret asked who could request this blitz type of audit?

Veronica said she didn't know about requesting it but it may be some association within the industry could strongly influence the minister and suggest that he investigate it for problems areas and that there were problems within the industry. The minister would then order a blitz audit according.

Mike said that many complaints were in fact from people who were in the isolated areas of this vast state of ours and as they are not in the main stream of the industry as we have in Brisbane and the SE corner. These people become very weary of the system and feel that they are being targeted unnecessarily. It basically comes back to being scared of the unknown and they would need to educate to understand that the inspector is not there to rip the centre out of their business.

but he is there to advise and help in this situation. It would help that if he was unsure of a requirement etc. he would feel safe to telephone the ELB and ask advice and act upon that instead of being too scared to draw attention to his business and carry on Willie Nilly perhaps doing the wrong thing. If that could happen Mike said that would go a long way to allaying fears of being audited and realising that they were there to help them understand and implement the requirements.

Margaret said that many had an automatic fear as soon as the Electrical Licensing Board's name was mentioned or any name that vaguely sounded bureaucratic to them. This was more than likely due to the fear of the unknown and there was a need to educate them accordingly.

Margaret said that she felt the meeting had gone a long way to both parties better understanding each other's perspective.

Mike then said that before we leave could we form some sort of linkage and have a name within the ELB that concerns and questions could be directed to for answers and clarification?

Veronica said that she would be more than happy to be the point of contact with and for us and that Bill would be happy to handle any complaints as he was the person involved in that area.

Mike asked if they had documentation reporting on findings of anomalies and if so where they available to read.

Veronica said that yes there was and they could make them available to us upon written request and they could be published as articles in the Celsius Journal and on the web site.

Verónica said that the article she had previously on licensing was an approved article that had been written for publication in their magazine. She said that it would not be difficult to obtain permission for us to use them in our magazine at the same time but we would have to make a written request for this information.

Mike said that his final question for them was did they have a definition of an appliance?

Veronica said that yes there was one and that it could be found in the Act and that it was available for download from the internet.

Both parties thanked each other for the very cordial meeting that had taken place.



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Korte Investments Pty Ltd v Qbsa [2002] QBT 106 (11 June 2002)

Last Updated: 28 September 2002

Queensland Building Tribunal [\[2002\] QBT 106](#)

CITATION:

Korte Investments Pty Ltd v QBSA [\[2002\] QBT 106](#)

PARTIES:

KORTE INVESTMENTS PTY LTD

V

QUEENSLAND BUILDING SERVICES AUTHORITY

TITLE OF TRIBUNAL:

Queensland Building Tribunal

APPLICATION NUMBER:

Q053-02

DELIVERED ON:

11 June 2002

DELIVERED AT:

Brisbane

HEARING DATES:

Decision on the Papers

DECISION OF:

Ms J McVeigh

CATCHWORDS:

ADMINISTRATIVE LAW-Whether installation of air conditioning units is “building work”
Queensland Building Services Authority Act, section 72
Electricity Act

REPRESENTATION:**SOLICITORS:****APPLICANT:**

Bressington & Partners

RESPONDENT:

In-house lawyer

DECISION CATEGORY CLASSIFICATION:

A

NUMBER OF PARAGRAPHS:

25

REASONS FOR DECISION:**Background**

- 1 On 5 February 2002 Korte Investments Pty Ltd (“the applicant”) notified the Queensland Building Services Authority (“the authority”) about a dispute with Goltz Electrical, relating to the Cambrad Motel in North Rockhampton.
- 2 By letter dated 12 February 2002 the authority advised the applicant that it could not exercise any statutory power in relation to the complaints made by the applicant. This decision was based on a decision that the work complained of was not “building work” within the definition prescribed by the *Queensland Building Services Authority Act 1991* (“the QBSA Act”).
- 3 The applicant filed an application for a review of that decision on 13 March 2002.
- 4 At a directions hearing on 8 April 2002 the legal representatives for the parties agreed that the matter might be determined on the papers, following an exchange of statements of evidence and submissions. The applicant delivered statements by Mr Korte, a director of the applicant, on 24 April and 22 May 2002. The authority delivered statements by Mr Goltz and Mr Ives, the regional

manger of the authority's Rockhampton regional office on 8 May 2002. The authority also delivered its submissions on 8 May 2002. The applicant delivered its submissions on 29 May 2002.

Relevant Legislation

5 Section 72(1) of the QBSA Act provides:

“72.(1) If the authority is of the opinion that building work is defective or incomplete, the authority may direct the person who carried out the building work to rectify the building work within a reasonable period stated in the direction.”

6 Schedule 2 of the QBSA Act defines “building work” as meaning:

- “(a) the erection or construction of a building; or*
 - (b) the renovation, alteration, extension, improvement or repair of a building; or*
 - (c) the provision of lighting, heating, ventilation, airconditioning, water supply, sewerage or drainage in connection with a building; or*
 - (d) the demolition of a building; or*
 - (e) any site work (including the construction of retaining structures) related to work of a kind referred to above; or*
 - (f) the preparation of plans or specifications for the performance of building work; or*
 - (g) any work of a prescribed kind;*
- but does not include work of a kind excluded by regulation from the ambit of this definition.”*

7 Regulation 3A of the *Queensland Building Services Authority Regulation 1992* excludes “electrical work under the [Electricity Act 1994](#)” from the ambit of the definition “building work”.

8 [Section 16](#) of the [Electricity Act 1994](#) defines electrical work as “the work of installing or repairing an electric line or electrical article used for generating, transmitting, supplying or using electricity”.



9 [Section 14](#) of the [Electricity Act 1994](#) defines an electric article as including:

- “an apparatus, appliance, article, cable, fitting, insulator, material, meter or wire –*
- (a) used for generating, transmitting or supplying electricity; or*
 - (b) operated by electricity.”*

10 [Section 16\(3\)](#) provides that “for licensing electrical contractors, ‘electrical work’ includes







minor building work and building services work, incidental to electrical work”.

The Evidence

- 11 Mr Korte stated that Goltz Electrical quoted \$17,750 to install air-conditioning units, to construct and install the frame upon which the compressors for the units stood, as well as the cost of the piping and electrical work to connect the system. Mr Korte stated that he was present when the work was undertaken by Mr Goltz and his apprentice. Mr Korte stated that the work undertaken by Goltz Electrical was the construction and installation of 25 steel frames upon which compressors were placed on the outside of the wall and the installation of 33 air-conditioning units inside motel rooms. Mr Korte said that the compressors for the air-conditioning units required frames of approximately 120cm x 40cm installed approximately 1.8 metres off the ground. Mr Korte said that Goltz Electrical used scaffolding and ladders and its own equipment to install these frames. Mr Korte stated that Goltz Electrical submitted an invoice for \$17,150 on 10 January 1999. He stated that after the builder had finished gyrocking the walls, Goltz Electrical returned to install the part of the air-conditioning units inside the rooms.
- 12 In his further statement Mr Korte said that it was not part of the contract between the applicant and the builder that the builder would install the air-conditioning units.
- 13 Mr Korte stated that he believed that Goltz Electrical drilled the holes through the wall and did all building work necessary to ensure the air-conditioning units and compressors were installed in the motel. He intended that they would do the drilling through the timber walls, or the rock block outside walls, because they were the ones who knew where the air-conditioning units were to go.
- 14 Mr Goltz stated that he held Licence 51995 from the Electrical Licensing Board. He stated that he was not responsible for the installation of the electricity outlets in the motel rooms, nor for drilling the holes in the walls of the motel rooms so that the air-conditioners could be installed. He described the work that he did in respect of each  **split system**  air-conditioner as:
 - (a) bolting a steel frame to the external wall of the motel room;
 - (b) inserting the outdoor unit into the steel frame;
 - (c) screwing the indoor unit to the internal wall of each motel room;
 - (d) fitting a pipe through the pre-drilled hole in the wall and connecting this pipe to the indoor and outdoor units; and
 - (e) connecting a drain pipe to the indoor unit to allow any accumulated moisture to drain away outside the room,
 all with a drill, screw driver and spanner.
- 15 Mr Korte denied that the only equipment used by Goltz Electrical was a drill, screw driver and spanner. He stated that he saw them come on-site and that they had a significant amount of equipment which they used.
- 16 Mr Goltz stated that he did not construct the steel frame that was bolted to the external wall of the motel rooms. He noted that the redesign involved an alteration to the pipe run, where it was found that the external unit was likely to protrude over the property line. He stated that this work involved bolting the external frame onto a different wall and laying additional pipe to reach the

new location. He stated that the drilling of the hole was arranged through the builder, or his foreman.

Submissions

- 17 The authority submitted that the work performed by Goltz Electrical was “electrical work” within the definition of the [Electricity Act 1994](#), and consequently not “building work” as defined by the QBSA Act. It submitted that the installation of  **split system**  air-conditioning unit into each of the motel rooms was electrical work, because it related to the installation of an appliance operated by electricity within the meaning of [section 14](#) of the [Electricity Act 1994](#).
- 18 It further submitted that as Mr Goltz was a licensed electrical contractor, he was allowed, by the terms of his licence, to carry out minor building work or minor building services work incidental with the installation of the  **split system**  air-conditioning unit pursuant to [section 16\(3\)](#) of the [Electricity Act 1994](#). The authority submitted that although there was no definition of the terms “minor building work” or “minor building services work” in the [Electricity Act 1994](#), the definition of “building work” contained in the QBSA Act should be considered. It was submitted that if the work undertaken was within that definition, then the tribunal should consider whether the building work was minor and incidental to the electrical work, which the authority submitted it was.
- 19 The authority characterised the purpose of the work undertaken by Goltz Electrical as the installation of  **split system**  air-conditioning units. It submitted that the bolting of the frame to the external wall to hold the outdoor unit, the screwing of the internal units to the internal walls and the connection of the pipe and cable between the units was both minor and incidental to the main purpose of the work. The authority submitted this would so even if Mr Goltz drilled the holes through the walls, or constructed the steel frames, as was the evidence of Mr Korte.
- 20 For the applicant it was submitted that the installation of an air-conditioning system is “building work” and not “minor electrical work” excluded by regulation. It is submitted that the scope of the work must be judged by reference to the fact that 26 air-conditioning units were installed. It was submitted that the work carried out by Goltz Electrical was not minor or incidental to the main purpose, but was necessary to ensure that the air-conditioning units and compressors were appropriately installed. It is submitted that, as the problem related to the type of piping used with the air-conditioning units, and as the choice of piping is not electrical work, nor a minor aspect of the work, that a direction should issue. It is submitted that as the rectification work includes the removal of the defective and/or inappropriate pipes and replacement of new piping to prevent flooding to the motel rooms, the work properly comes within the definition of “building work”.
- 21 It was submitted that the evidence of Mr Goltz, that he simply connected the pipes to the air-conditioning units, defied credibility, in that it was he who knew where the units were to go and he who had total control over installation of the units, compresses and pipes.

Ruling

- 22 Plainly there is a dispute in respect of who drilled the holes. Mr Goltz states that he did not. Mr Korte does not say that he saw him drill the holes, merely that pursuant to his contract he was required to drill the holes. There is no evidence from the builder about who drilled the holes. I do not think it matters who is to be believed as even if Goltz Electrical did the work Mr Korte

claimed it did my conclusion would not differ.

23 “Electrical work” under the [Electricity Act 1994](#) has clearly been excluded from the definition of “building work” pursuant to the QBSA Act by Regulation 3A of the *Queensland Building Services Authority Regulation 1992*. In my view, the work undertaken by Goltz Electrical, even if it included the installation of the pipe and manufacture and installation of the frames, falls within the definition of [section 16](#) of the [Electricity Act 1994](#) as being work of installing an electrical article operated by electricity. The vast majority of the work undertaken by Goltz Electrical was, without a doubt, electrical work. In my view the ancillary work of attaching to the walls the frames upon which the air-conditioning units sat (or indeed manufacturing them), whether internal or external, and the connection of pipe and cable was clearly incidental to the installation of the air-conditioning units.

24 I do not think it significant that Goltz Electrical installed 26 air-conditioning units as, in respect of each unit installed, the ancillary incidental work was of the same character.

25 The decision of the authority not to issue a Direction to Rectify against Goltz Electrical will be confirmed.

.....
MS J McVEIGH – MEMBER
QUEENSLAND BUILDING TRIBUNAL

1986

Who Installs Refrigeration Pipeline Work in Queensland?

(Reprinted courtesy of IRASE, Qld. Newsletter)

Recently, two of IRASE, Qld. Committee men appeared in support of refrigeration mechanics in an Industrial Arbitration Commission hearing.

This hearing involved a demarcation dispute between refrigeration mechanics and plumbers on a large building project and IRASE became involved because the A.M.W.U. was unable to inform the Commission about our industry.

After two weeks deliberation, the commission found in favour of the refrigeration mechanics. What this means is that, in Queensland, the plumbers have no right to install pipework normally carried out by refrigeration mechanics in the course of their trade.

This is a monumental achievement for our industry in Queensland.

Handed down by Commissioner Lear in Sydney:

SUMMARY OF EVIDENCE/SUBMISSIONS RE DEMARCATION ISSUE:

From the adequate and ample evidence and submissions before me in this matter, the facts may be summarised as follows:

1. Refrigeration Mechanic is a trade classification in the Federal Metal Industry Award and in the Counterpart State Award in Queensland.
2. Refrigeration mechanics complete a four-year apprenticeship in all aspects of the specialised trade.
3. There is a long history over many years in Queensland by the major companies involved in installation of refrigeration equipment to use only qualified refrigeration mechanics on the work involved.
4. The greater majority of refrigeration mechanics employed by those companies are covered by metal industry awards and are members of the Amalgamated Metal Workers Union, with a few being members of the Electrical Trades Union.
5. None of the refrigeration mechanics employed by these companies are members of the Plumbers and Gasfitters Employees Union.
6. Refrigeration mechanics are responsible for the total job of installation of pipework, testing of pipework, installation of refrigerating equipment, connection of pipework to the equipment and testing of the complete system.

7. The companies involved are responsible for providing a warranty period for operation of the complete refrigerating system.
8. The P.G.E.U. has claimed part only of the total work and that is installation of the pipelines.
9. The P.G.E.U. claims that its members are competent to install the pipework.
10. The P.G.E.U. has placed bans on general plumbing work in another area of the site in order to exert pressure in support of its claims to the refrigeration work.

CONCLUSIONS:

It is clear that there is a well-established custom and practice for complete installation of refrigeration equipment in Queensland to be performed by qualified refrigeration mechanics, the greater majority of whom are A.M.W.U. members.

The P.G.E.U. claims only to installation of the pipework would create unnecessary fragmentation of the work of refrigeration mechanics. Whether plumbers are, or are not, capable of installing pipelines is not in question. Clearly refrigeration mechanics are certainly capable of installing the pipelines and are also capable of performing all other aspects of their specialised trade. To consider fragmenting a well-established trade into two areas for two separate classes of tradesmen is an illogical proposal which could do little more than create a seed-bed for continuing demarcation disputes.

The additional cost factor alone of such an extravagant proposal for companies involved in this specialised field would be enormous.

The P.G.E.U. would be well advised to withdraw any existing or future claims to refrigeration pipeline work on this site or on any other similar construction site and I so determine. It is clearly part of the trade of a refrigeration mechanic.

It was interesting during inspections on this international hotel site to observe the immense areas of general plumbing work available for tradesmen plumbers over the complete site. The area of work available to refrigeration mechanics by comparison is minimal, and they should be allowed to perform their specialised duties unfettered by avaricious claims.

IN THE AUSTRALIAN CONCILIATION AND ARBITRATION COMMISSION

Conciliation and Arbitration Act 1904

In the matter of a notification of an industrial dispute between

Barclay Brothers Limited

and

The Plumbers and Gasfitters Employees' Union of Australia

The Amalgamated Metal Workers' Union

(C No. 6606 of 1986)

in relation to a demarcation issue in Queensland

MR COMMISSIONER LEAR SYDNEY, 15 AUGUST 1986

DECISION

The following decision was handed down in transcript at Sydney on 25 July 1986:

This dispute arose because of claims by The Plumbers and Gasfitters Employees' Union of Australia, Queensland branch (PGEU) that Plumbers should install refrigeration pipelines at the International Hotel being constructed at Surfers' Paradise. The work of installing refrigeration lines on site has been and continues to be performed by Refrigeration Mechanics who are members of The Amalgamated Metal Workers' Union (AMWU).

PGEU members imposed bans on other plumbing work particularly on the third level of the complex, work which was normally done by members of the PGEU, in order to press their claims on refrigeration pipelines. Although the bans on necessary plumbing work in the particular areas of the complex have caused considerable inconvenience to Barclay Bros Pty Limited, installation of refrigeration equipment continues to be performed by AMWU members.

Stoddarts Pty Limited have subcontracted with Barclay Bros Pty Limited, the principal contractors on the hotel project, to install kitchen and bar equipment which includes refrigeration lines and equipment. Stoddarts have sublet part of that work to a firm known as A and G Refrigeration Pty Ltd who employ Refrigeration Mechanics, members of the AMWU to do the work. This is the area of work being claimed by the PGEU. It was pointed out by Mr Taylor of the Metal Trades Industry Association (MTIA) that the work is sublet by Stoddarts Pty Limited to A and G Refrigeration Pty Ltd because of the specialist nature of refrigeration work. The latter Company employs specialist Refrigeration Mechanics.

The matter first came before the Commission for hearing in Brisbane on 2 July 1986 and the question of having the dispute referred to a demarcation committee of the Queensland Trades and Labour Council (QTLC) was debated at length, as this was considered to be the appropriate body to resolve a demarcation dispute of this nature. This current dispute is the most recent in a long line of similar claims on various building sites in Queensland where the PGEU has placed bans in support of their claims to perform work done by AMWU members.

At that hearing Mr Girdler for the AMWU gave an assurance that his Union would accept any decision made by the QTLC demarcation committee. Mr Topatig, representating the PGEU was not prepared to give such an assurance at that hearing. The PGEU was directed to lift bans imposed on plumbing work at the International Hotel.

In a series of subsequent telephone conversations, Mr Haunschild for the QTLC advised that an appropriate demarcation committee could be speedily assembled and gave an assurance that the committee would comprise members who were independent and would be subject to acceptance by both unions. The AMWU repeated their earlier assurance that they would accept any such QTLC decision but the PGEU refused to have the matter determined by the QTLC. The PGEU bans on the International Hotel were not lifted.

The dispute again came before the Commission in Brisbane on 7 July when both parties advised at page 31 of transcript that they were willing to accept the Commission's decision with respect to demarcation of the work.

The hearing continued the following day at Surfers' Paradise when comprehensive on-site inspections of the work in question were followed by a site hearing with evidence by witnesses followed by submissions.

The AMWU claimed that the installation of refrigeration equipment including all necessary pipelines was work properly performed by Refrigeration Mechanics, a trade classification in both the Queensland Mechanical Engineering (State) Award and the Federal Metal Industry Award 1984 - Part I⁽¹⁾, for which there was a four year apprenticeship period.

The AMWU also presented as Exhibit G2, a collection of seven letters generally dated in late June or early July 1986 which were from seven companies involved in the installation and servicing of refrigeration equipment. Each letter listed construction jobs carried out in Queensland by the particular company by employees who were Refrigeration Mechanics and who were members of the AMWU and in one case members of the Electrical Trades Union. The companies, which included A and G Refrigeration Pty Ltd, were all major operators in their particular field and their experience covered hundreds of construction projects over many years, in one case as long as 70 years.

Various witnesses for the AMWU stressed the training, background and trade skills required in the installation of refrigeration equipment and the view that such skills were embraced in the training and experience applied by Refrigeration Mechanics. Particular stress was placed on some aspects of the work especially in the evacuation process used in testing refrigeration pipelines between the condensing unit and the evaporator and the fact that installation of pipelines was only one of the activities in the whole refrigeration process.

Mr J.R. Bullock, a director of A and G Refrigeration, also pointed out the requirement for companies involved in this work to provide a warranty period on all components covering refrigerant gas leaks and the continuation of efficient operation of the equipment installed.

⁽¹⁾Print F8925 [M039]

A number of the expert witnesses called by the AMWU advised that none of the refrigeration installation companies employed Plumbers - all of them employed Refrigeration Mechanics.

Mr Topatig for the PGEU made it clear on several occasions during inspections and in submissions that his Union was not interested in claiming servicing of equipment, nor connection of pipelines to the various types of refrigeration equipment. The PGEU claimed that members of the Union should only install the pipework and that they were competent to do so.

One of the witnesses called by the PGEU advised that Plumbers were involved on this site in the installation of chilled water pipe work and in the installation of LP gas piping which he considered to be no less skilled than installation of refrigeration piping. He also cited various instances where Plumbers installed pipe work carrying hospital and medical gases, where cleanliness of installation was of paramount importance. He admitted that in his sixteen years as a qualified Plumber he had no exposure to work on refrigeration systems and that while he considered work on medical gas and LP gas pipelines would be in the same area, it was not exactly the same as work with refrigeration gases.

Another PGEU witness who had been a qualified Plumber for four years had spent three months in the second year of his apprenticeship period working with a Refrigeration Mechanic in Victoria installing refrigeration pipework. He considered he was competent to install the refrigeration piping seen during inspections that morning.

A third witness, also a Plumber employed on the site in the machanical services area did have earlier experience in Sydney in installation of refrigeration pipework where the connection into the refrigerating system was done by others and he saw no problems in performing the pipework on this site.

Summary of evidence submissions

From the adequate and ample evidence and submissions before me in this matter, the facts may be summarized as follows:

- (1) Refrigeration Mechanic is a trade classification in the Federal Metal Industry Award and in the counterpart State Award in Queensland.
- (2) Refrigeration Mechanics complete a four-year apprenticeship in all aspects of the specialized trade.
- (3) There is a long history over many years in Queensland by the major companies involved in installation of refrigeration equipment, to use only qualified Refrigeration Mechanics on the work involved.
- (4) The greater majority of Refrigeration Mechanics employed by those companies are covered by metal industry awards and are members of The Amalgamated Metal Workers' Union, with a few being members of the Electrical Trades Union of Australia.
- (5) None of the Refrigeration Mechanics employed by these companies is a member of The Plumbers and Gasfitters Employees' Union of Australia.

- (6) Refrigeration Mechanics are responsible for the total job of installation of pipework, testing of pipework, installation of refrigerating equipment, connection of pipework to the equipment and testing of the complete system.
- (7) The companies involved are responsible for providing a warranty period for operation of the complete refrigerating system.
- (8) The PGEU has claimed part only of the total work and that is installation of the pipelines.
- (9) The PGEU claims that its members are competent to install the pipework.
- (10) The PGEU has placed bans on general plumbing work in another area of the site in order to exert pressure in support of its claims to the refrigeration work.

Conclusions

It is clear that there is a well established custom and practice for complete installation of refrigeration equipment in Queensland to be performed by qualified Refrigeration Mechanics, the greater majority of whom are AMWU members.

The PGEU claims only to installation of the pipework would create unnecessary fragmentation of the work of Refrigeration Mechanics. Whether Plumbers are or are not capable of installing pipelines is not in question. Clearly Refrigeration Mechanics are certainly capable of installing the pipelines and are also capable of performing all other aspects of their specialized trade. To consider fragmenting a well-established trade into two areas for two separate classes of tradesmen is an illogical proposal which would do little more than create a seed-bed for continuing demarcation disputes.

The additional cost factor alone of such an extravagant proposal for companies involved in this specialized field would be enormous.

The PGEU would be well advised to withdraw any existing or future claims to refrigeration pipeline work on this site or on any other similar construction site and I so determine. It is clearly part of the trade of a Refrigeration Mechanic.

It was interesting during inspections on this International Hotel site to observe the immense areas of general plumbing work available for tradesmen Plumbers over the complete site. The area of work available to Refrigeration Mechanics by comparison is minimal and they should be allowed to perform their specialized duties unfettered by avaricious claims.

I direct that all bans on plumbing work be lifted immediately by PGEU members on the site in accordance with the commitment given by Mr Topatig for the PGEU on several occasions, but particularly at page 71 of transcript.

Appearances:

G.T. Cuthbert for the Queensland Master Builders' Association.

R. Cush for Barclay Brothers Limited.

K. Taylor and M. Belfield for the Metal Trades Industry Association of Australia.

P. Caswell and N. Martin for Stoddarts Pty Limited.

A. Topatig for The Plumbers and Gasfitters Employees' Union of Australia.

W. Girdler, R. Veltneuer and I. McComb for The Amalgamated Metal Workers' Union.

Dates and places of hearing:

1986.

Brisbane:

July 2, 7.

Surfers' Paradise:

July 8.

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Restricted Electrical Workers Licence

(previously Disconnect/Reconnect Worker's Licence)

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The Restricted Electrical Worker's Licence entitles the holder to carry out electrical installation work involving disconnection and reconnection of equipment as indicated on the licence as follows:

Classifications under Electricity Safety (Installation) Regulations 1999	New Classifications as of 1 August 2010 under Electricity Safety (Licensing & Registration) Regulations 2010
Refrigeration & Air Conditioning	No Change
Plumbing & Gas Fitting	Water Heaters & Gas Appliances
Communications & Computing	Electronics
Instrumentation & Process Control	Instrumentation & Control Devices
Domestic Equipment	Electrical Appliances
Office Equipment	Electrical Appliances
Industrial Equipment	Motors
Commercial Equipment	Composite Equipment
Laboratory & Scientific	Control Devices
	Hazardous Area Equipment
	Neon Signs (Preassembled)

If you are planning to apply for a Restricted Electrical Worker's Licence, you must be competent in a relevant field to which the disconnection and reconnection work required is a significant function of your job. This licence, is purely for the disconnection/reconnect of like for like equipment, for the purposes of repair, replace and maintenance purposes.

Restricted Electrical Workers Licence Course

Enrolment and successful completion of the Restricted Electrical Workers Licence Course, **will not automatically entitle** you to a Restricted Electrical Workers Licence. The Restricted Electrical Workers Licence can only be issued when ESV is satisfied that you require the licence as a requirement which is incidental to your trade, vocation or calling. You must be able to display competency in the area in which you are working. Therefore a relevant trade history or display of competency, may allow you to apply for a restricted electrical licence.

Please also note in order to undertake fault finding, ESV will require you to also complete – Unit POO7 Restricted Electrical Workers Licence (including fault finding), as well as Module POO1B – Restricted Electrical Workers Licence Course.

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Fatal Explosion Risk Concerns For Shipping Containers At Sea

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Unions Praise Maersk for Prompt Action but Fear for Staff Safety



VIETNAM - BRAZIL - WORLDWIDE - The International Transport Workers Federation (ITF) which represents over 4 million union members associated with the transport industry has expressed fears over the safety of some reefer shipping containers following fatal accidents. In April of this year there were two incidents at a Cat Lai repair yard in the Port of Ho Chi Minh City whilst repairs were under way on Maersk Line reefer boxes followed by another death in Itajai ,Brazil last month.

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Maersk tell us that investigations so far lead them to conclude that the three explosions have been caused by a contaminated refrigerant being injected into the cooling system. Incorrect repair processes and procedures would not be able to cause these explosions. Until the exact reason for the incidents is known and a safe repair method has been developed, Maersk Line will continue to ground all reefers that have had a gas repair in Vietnam since the 1st February. This is being done as a precautionary measure the total number of units being involved is 844 whilst the Danish group operate 230,000 reefers in total. Hutchison Ports has also advised its customers to check any containers serviced or repaired in Vietnam recently and there are reports of another similar accident in China earlier this year.

Maersk are in possession of samples from the unit that exploded in Itajai as well as gas samples from containers they have grounded and that have had gas repairs done in Vietnam. Unions are calling for full investigation into the causes and scope of the problem and ITF representative Frank Leys said the unions were pleased to see that big shipping lines like Maersk had reacted so quickly to deal with the situation and urged the US union organisations to ensure companies operating from there acted equally promptly to alleviate any risk. Mr Leys, the ITF dockers' section secretary continued:

"Where there are possibly contaminated containers still at large, we are calling on port authorities and shipping companies to issue clear guidance on how they should be handled. The health and safety of workers is paramount and in no instance should commercial or productivity issues be allowed to supersede the welfare of workers."

Seafarers' section secretary Jon Whitlow added:

"We are extremely concerned for the welfare of those workers on ships who may be unaware that a defective container is being carried on board. Although we acknowledge that the maritime community is moving fast to provide the necessary information and advice on how to handle the contaminated containers in ports, we hope the same approach and priority is given to adequately inform the on board safety officers in order to protect the integrity of seafarers and ships.

"Whilst of course the explosion of a container ashore is a tragic event, we think that a similar explosion on board a vessel could have potentially catastrophic effects on workers, ships and the environment."

Authorities in Vietnam tell us within weeks Tan Cang will begin verifying the gas quality with a specialist machine before recharging reefer containers. Last week neighbouring Cat Lai port held a meeting to review the situation and the implications for the trade in container repairs and inspections which local sources estimate will cost them up to \$20 per box if standard checks are farmed out to other ports en route. A statement said that port bosses agreed to allow the shipping lines to appoint a suitable foreign inspector to oversee repair and inspection procedures.

Vietnam has long provided the essential pre trip inspections (PTI's) required by refrigerated units. Each reefer is subject to either a 20 minute check which is suitable for empty or loaded containers or an extended test which normally takes around 3 hours and is only suitable for empty boxes. In each case the control system for the fridge unit is checked and that there are no odours, gas leaks etc plus the box is clean and trip worthy.

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Union seeking answers over coolstore fire

Tuesday, 29 April 2008

The head of the Firefighters Union says firefighters would have approached the site of the fatal Hamilton coolstore explosion very differently if they thought it was full of flammable propane gas.

The blast and fire at the Icepak coolstore in suburban Tamahere on April 5 killed senior station officer Derek Lovell and injured seven other firemen.

Fire investigators trying to pinpoint the cause of the Tamahere coolstore explosion are checking whether a highly flammable gas was being used at the site.

The Fire Service believes the explosion was caused by propane gas, but had yet to determine if it was being used as a refrigerant in the plant or came from another source, such as an LPG cylinder, Radio New Zealand reported.

Icepak, was granted resource consent to build two coolstores in 2002 on condition that the less volatile gas, freon, was used as a refrigerant.

Firefighters' Union national secretary Derek Best said the size and extent of the explosion meant it could not have come from a gas cylinder on a forklift truck, as had been suggested.

"It was a massive explosion and the rumours have been around for some time that the unknown propellant or refrigerant being used in the coolstore was not what was normally expected," he told Radio New Zealand.

"It had as I understand it some fairly obscure brand name that really no one knew what it was about," he said.

"And now, although obviously the identification is not absolutely complete we're talking about propane, at the very least a highly flammable gas."

It was a legal requirement that any hazardous substances were identified at a site and it was being looked at whether such identification existed.

"My understanding is certainly the firefighters that attended that incident were utterly unaware that there was even the vaguest possibility that the refrigerant in the coolstore would be something as explosive as propane."

Mr Best was concerned that if the gas was not known about in this case then there could be other sites in a similar position.

"That's why there is this situation of identification and people have to be honest, and if people aren't being honest then the authorities need to bring those people to account," he said.

The Herald on Sunday reported that fire investigators had examined Waikato District Council files to see if Icepak had permission to use LPG instead of a less volatile gas.

Icepak director Wayne Grattan said the council did not need to be told of any change and was confident the coolstore complied with regulations.

He said the plant's safety systems were modern and fully compliant with standards. He was reluctant to comment further while the investigation was ongoing.

A number of investigations are under way into the cause of the explosion.

A team of fire experts and investigators was named on April 14 by the New Zealand Fire Service.

Mike Hall, national commander and chief executive of the New Zealand Fire Service (NZFS), said the team would conduct a "comprehensive, independent investigation" and would report within 90 days.

The head of the team, Fire Service director of risk management Paula Beever, declined to comment today on the suggestions that propane gas was being used at the coolstore.

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MARK TAYLOR/Waikato Times

QUESTIONS REMAIN: The scene of the fatal coolstore explosion in Tamahere earlier this month. The head of the Firefighters Union says firefighters would have approached the site very differently if they thought it was full of flammable propane gas.

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"The inquiry team won't make statements until we complete our report," she told NZPA.

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Tamahere Forum

Explosive refrigerant gas revealed

June 30, 2008 · Filed under [April 5 blast and fire](#), [Expert advice](#), [Investigations](#) · Tagged [coolant](#), [Department of Labour](#), [Dr Evan Bydder](#), [Fire Service](#), [hazardous substances](#), [HR22/502](#), [HSNO Act](#), [HyChill-50](#), [Icepak coolstores](#), [incident report](#), [refrigerant](#), [Tamahere fire](#)

A Labour Department report shows that the refrigerant gas used at the Icepak Tamahere coolstores was a highly explosive propane-ethane mix known as HyChill-50 of HR22/502.

The Department of Labour (DoL) is still investigating the April 5 explosion and fire, which killed firefighter Derek Lovell and injured seven others. But Tamahere Forum has obtained an initial incident report after requesting it under the Official Information Act.

The incident report, required to be completed for all significant events involving hazardous substances under the Hazardous Substances and New Organisms Act (HSNO), is dated April 6, the second day of the fire which went on to burn for five more days.

The report shows that initially the DoL believed the refrigerant used was HR12 but in an email to Tamahere Forum a spokesman said “we now know that the product was HR22/502.” The report has been corrected to show the actual refrigerant used. It is a mix of 95% propane and 5% ethane.

The DoL’s incident report is here: [labour-dept-icepak-coolstore-fire-incident-report](#)

The refrigerant is manufactured by Australian company HyChill, which [says on its website](#) that “HyChill HR22/502 is the natural organic solution for low temperature refrigeration and air-conditioning systems previously charged with HCFC R22 or CFC R502.”

The gas is considered more environmentally friendly than the gases it replaces because it is far less ozone depleting and makes a negligible contribution to global warming.

“An air conditioner or refrigeration system charged with HR22/502 uses up to 20% less power than HCFC-based refrigerants. Because hydrocarbon refrigerant is more efficient, it can cool a room down to the temperature set by the thermostat in less time. In hot weather, this can result in substantial energy savings,” says HyChill.

HyChills Material Safety Data Sheet for HR22/502 notes that it is “highly flammable at normal temperatures and pressures.” It is flammable when only 1.9% of the gas is in the air.

“Containers of HR22/502 are explosive hazards, when exposed to excessive heat,” the data sheet notes. The data sheet is here: [hr22-502-data-sheet](#)

There is a significant movement toward so-called natural refrigerants because of their greater environmentally friendly nature but they are also easily ignited by a spark, heat or flames. The risks are clearly set out in HyChill’s emergency procedures document here: [hychill-gas-emergency-procedures](#)

Icepak acknowledged some time after the fire that it was using propane at Tamahere but [without the the required safety certification](#).

The company had gained resource consents on the basis it would use non-flammable freon gas.

Icepak was [trialling propane at its Waharoa coolstore](#) and had got a \$60,800 grant from the Energy Efficiency Conservation Authority to cover the costs of using the refrigerant including safety equipment and gas sensors.

It is unknown whether it had also put new safety measures at Tamahere, which would need to have included isolation of electrical switches and other possible ignition points. The plant would also have needed gas sensors, alarms and warning signs that would have alerted firefighters to the presence of the dangerous gas.

Locals recall that on the morning of the day the fire broke out there was a power failure. Physicist and engineer Dr Evan Bydder advises that there are a number of ways in which the electrical problems could have been related to the explosion and fire.

They include that the power drop-outs and brown outs experienced that day could have been caused by an electrical fault at Icepak, for example a refrigeration compressor motor failing, stalling, catching fire or burning out. Alternatively, a brown-out occurring elsewhere could have caused a motor at the plant to stall and eventually over heat.

Another possibility is that the power interruption could have dropped off some loads and caused the voltage at Icepak to lift, partially saturating the stator of the motors causing excessive current draw, overheating and fire.

Firefighters who had no idea the flammable gas was in the plant could also have provided a spark to ignite leaking gas by axing their way into the coolstore or using their walky talkies.

A number of investigations are looking at such matters including by the DoL, the Fire Service, insurance companies and the Coroner.

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Tamahere Forum

One coolstore burns every month - study

July 22, 2008 · Filed under [April 5 blast and fire](#), [News](#) · Tagged [Tamahere](#), [fire](#), [IPENZ](#), [Icepak coolstores](#), [HyChill-50](#), [Hastings](#), [expanded foam polystyrene panel system](#), [EPS](#), [polypanel](#), [Bob Nelligan](#), [explosion](#), [Katikati](#)

Thousands of coolstores and other industrial buildings around New Zealand are likely to continue to go up in flames at the rate of one a month.

In little more than three months since the April 5 inferno at the Icepak coolstores at Tamahere two more coolstores have caught fire – at Katikati on June 10 and Hastings last week (July 17) – a frequency anticipated by a 2006 study.

Thousands of mostly industrial buildings in New Zealand have for more than 30 years been constructed using polypanel or EPS (expanded foam polystyrene panel system). Smooth, washable EPS, a godsend for any industry needing hygienic workplaces, is the first choice lining material in controlled atmosphere food processing and storage facilities.

More than 750,000 square metres of EPS is estimated to be [produced in New Zealand](#) each year.

And, says consulting [engineer Bob Nelligan](#), “from its earliest days, **the use of EPS created a new and dangerous fire hazard**. Once the expanded foam was exposed to even a moderate heat flux it **ignited and burned with alarming results**.”

Using Fire Service records Nelligan has shown that between October 2000 and December 2004 there were at least 56 fires in buildings using EPS – an average of more than one fire every month for four years.

He notes that in many of the fires the EPS panelling “has directly contributed to losses of the building and its contents.”

The major causes of the fires are consistent: electrical faults, heating from solid fuel equipment, and usually when facilities are being renovated, welding, gas cutting and braising.

An examination of 26 fires showed that an electrical cause occurred twice as much as any other.

In 2006, Nelligan wrote a 79-page report on EPS and its fire risk as part of his studies for a Masters degree in [fire engineering](#) at Canterbury University.

His aim was help designers, builders and facility operators identify fire issues with EPS panels. He suggested a range of guidelines designed to help avoid fires or, should they occur, to limit their potentially devastating effects.

But as he [told the NZ Herald](#) two years later on April 12 - after the Icepak coolstores fire claimed the life of firefighter Derek Lovell and injured seven others - the guidelines were not being adopted as quickly as the Fire Service and insurance industry would like.

Nelligan also notes in his report that “despite the urgings of insurers and the Fire Service, a large number of food factories, cool and cold stores have been built in New Zealand in the past 20 years without sprinkler protection.”

He cited a UK study that concluded that “the plant rooms in cold stores require special consideration, particularly when ammonia refrigerant is used. Ammonia is flammable and can be explosive at 15-28% by volume [in air] ... Explosion venting of plant rooms should be considered.”

At Tamahere, another more highly flammable refrigerant, HyChill-50, was in use. Its flammability occurs at a much lower volume in air – just 1.9%.

Nelligan’s report also includes an example of a fire in the USA that is chillingly similar to the Tamahere blaze.

In 1991 in Madison, Wisconsin, two coolstores in a five building complex were destroyed together with their contents, **13 million pounds of butter, 15.5 million pounds of cheese and other foods**. The loss was estimated at US\$100 million.

All the stores were of polypanel construction, a single ammonia system serviced all the coolers and product was stored on pallets and metal racking.

“Despite arriving on the scene within two minutes of the alarm, and observing that sprinklers were activated, fire officers determined that it was too dangerous to enter the burning freezers due to a layer of heavy black smoke and the sound of creaking metal.

“Plastic strips over doorways could be seen being drawn into the freezers indicating a large inflow of air, suggesting that the fire had vented through the roof but this could not be confirmed because of the smoke. Despite mounting an external attack, fire fighters saw the fire spread to other freezers as the first fire-affected freezer walls collapsed and the ceiling fell. The fire continued to burn for over 24 hours and still contained deep-seated interior burning areas four days later. The fire was finally declared to be out eight days after it was first discovered.

“While the damage was so extensive that a cause could not be established beyond doubt, an electric fork hoist was considered to be a primary suspect.”

In 2006 Nelligan noted that “what is clear is that as it is presently used in New Zealand, EPS presents a far greater fire hazard than is generally appreciated by engineers and architects who specify its use.”

Tamahere, Katikati, and Hastings people could add that it is also a far greater hazard than they appreciated too.

Bob Nelligan’s full report is here (pdf) [rnelligan06](#)

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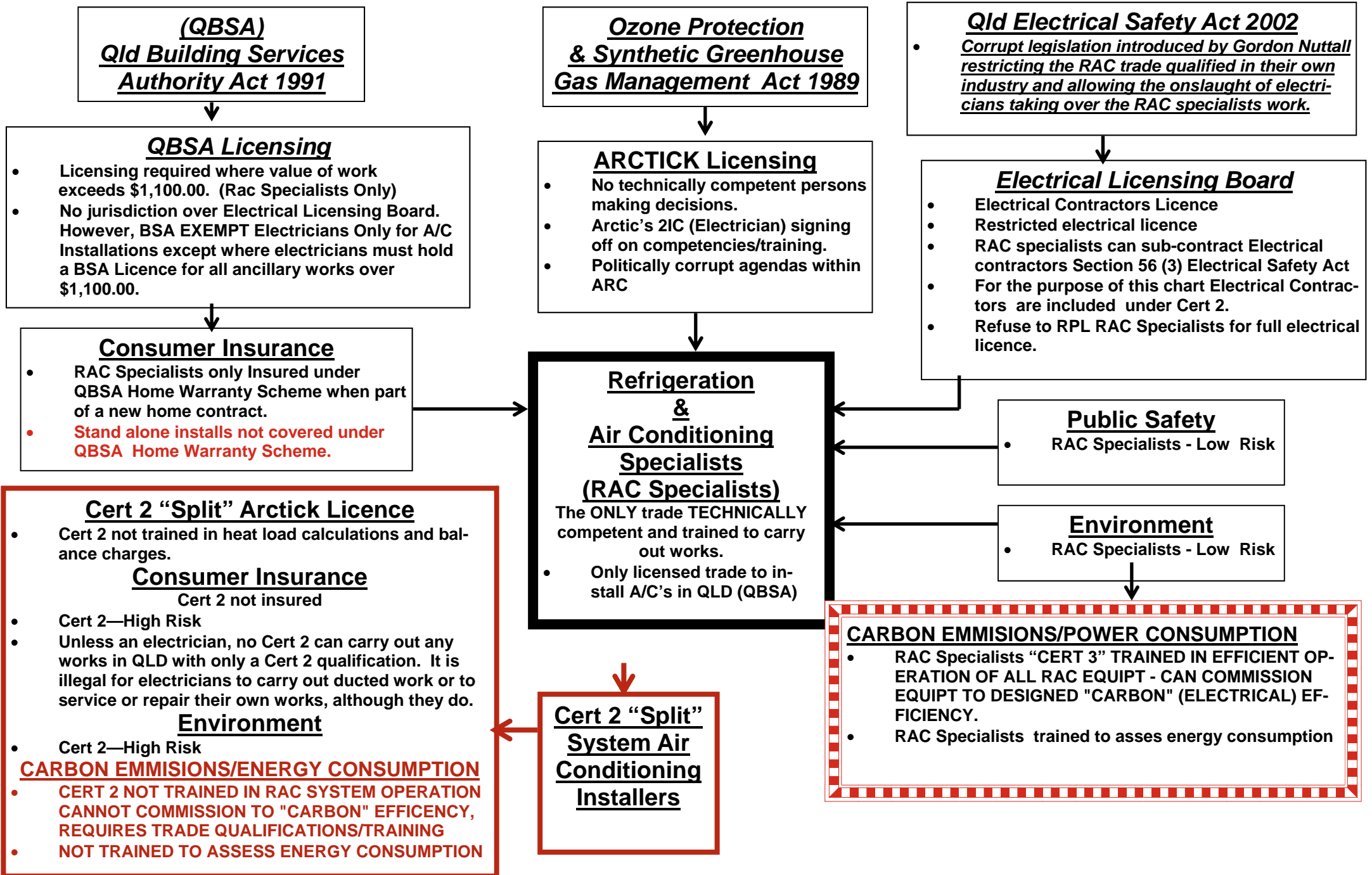


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(RAC) Refrigeration & Air Conditioning Flowchart QLD

Installation of Split System Air Conditioning Units



Notes:

CERT 2

Cert 2 is a requirement for the Installation and Decommission of Domestic Split System Air Conditioner Licence issued by the Department of the Environment, Heritage, Water & the Arts (DEHWAH). Arctick “Authorisation” to purchase any and all refrigerants is also available to Cert 2 trained and competent “Split” installers even though they have no training in or need for, under their licence, for those refrigerants.

Failure of Cert 2:

- Cert 2 holders are not trained to calculate heat loading—This means a Cert 2 person does not have the necessary training to establish the correct size of unit needed to perform the job. Undersized units will ensure excessive drawing of power to compensate. This problem also exists with retailers selling units and no training.
 - Cert 2 holders are not trained in balance charge and therefore are unable to accurately establish the correct refrigerant levels required at installation. The unit will draw excess power to compensate.
 - Contrary to Ministers’ claims, training is significantly flawed in many circumstances but more importantly the outcome of Cert 2 is TOTALLY misunderstood-
 - a. It is not a trade outcome;
 - DOES NOT LICENCE Cert 2 holders to carry out installations in INDIVIDUAL STATES—In QLD only Trade qualified refrigeration technicians hold a BSA licence to install.
 - b. The course, hence training was meant for someone who’s work would be supervised;
 - c. The competency was limited to simple back to back domestic air conditioning type installations—nothing more
- “Assessment” techniques applied by varying RTO’s failed to properly address issues of RPL hence qualified “Similarities” rather than proof of personal competencies, eg:
- i. A plumber silver solders copper pipe but they do it for substance entirely different than refrigerants and in differing engineering circumstances but are GRANTED AN RPL for the refrigerant outcome?
 - ii. An electrician is granted RPL as it is assumed, particularly by the RTO the Electrical Contractors Association of Queensland (ECAQ) that there is a power supply and it is falsely called “AN APPLIANCE” then electricians are trained yet no where is it part of their competencies—a 747 has a power cord yet electricians do not work on the engines!

By offering online studies (Anyone can complete this dishonestly) and secondly, by reducing modules for electrical contractors and allowing the RTO organisation within the Electrical Contractors Association QLD to provide the course. A fallacy exists that electricians have some special recognised prior learning skills, which is in itself a fallacy as electricians supply power from the mains, they have no training of the operations and design. A 3 hour course will not meet the AQTF contrary to Minister Welford’s claims. It is also clear in a letter from Hon. Rod Welford that his office has no understanding of what organisations are offering the Cert 2 courses or the auditing system.

The Hon. P. Garret fails to recognise the lack of real industry consultation that has previously occurred as this, the RAC Industry, is small and largely unrepresented by paid full-time personnel as are other trade organisations eg, Plumbers, Electricians, etc. Thus it is easy to have limited meetings in main areas to satisfy the “Consultation Process” but be “HOODWINKED” by the agendas of those parties with vested interests. It takes an astute, industry and technically knowledgeable person to truly gain a full and proper outcome as distinct to the one that was searched for;

Indeed it must be asked of the Minister “Where is the proposed Industry Technical Board that was trumpeted by his Department but now become a silent issue?” This is especially true when the current ARC Board and staff are considered, as it is our belief that;

- a. The board has only one person from who can be described “Hands On” RAC Contractor/Worker;
- b. The ARC’s new CEO does not come from the ARC Industry and hence has no industry knowledge or experience as a RAC Contractor/Worker;
- c. That ARC second in command also has never been a practicing RAC Contractor/Worker; and
- d. The only person to our understanding that was an apprentice, worker and contractor within the industry has now left due to frustration and lack of competency found within the ARC.

Designed by Reclaim Our Trade 18/11/2008

Consumer Protection

There is no consumer protection within the existing framework of Cert 2 holders, including electrical contractors as they are carrying out works outside the scope of their electrical contractors licence—AS 3000 & Electrical Safety Act QLD 2002.

(QBSA) Queensland Building Services Authority which enforce RAC Specialists to be QBSA licensed do not offer consumer protection unless the installation is part of a larger building project such as a new home. QBSA licensing is required for works over the value of \$1,100 yet fails to provide any service to the licence holder or the consumer, therefore enforcing a licensing regime for no purpose and charging RAC specialists for the privilege, and

The consumer suffers a continuous financial loss due to any inefficient piece of RAC equipment as they have no means to validate that financial loss as it appears on their electricity bill. As the inefficiency of the equipment increases so to does the financial costs creep up. As long as the consumer feels cool or the food does not spoil they are blissfully unaware to the “Rip Off”. Indeed it pays electrical production industry to encourage this continuous wastage as it is “Money in their pockets” for nothing.

The consumer also suffers from the issue of food poisoning which becomes rampant during summer months due to poorly designed, maintained and operating refrigeration plant which is a major factor in food poisoning, ie;

- a. Garibaldi Instance—SA production of Salami; and
- b. Qantas flight Cairns to Osaka—Chocolate pudding

The Consumer also has no longer term protection in regards to installation work of RAC equipment within residences and buildings. This equipment should be considered as a “Fixture” of that structure not as an appliance and therefore totally come under the control of the QBSA and not split as at the present through coverage both by the Electrical contractors board and the QBSA. In this manner the consumer can have long term confidence that any issues of damage to the structure can be treated in an holistic manner.

Ozone Protection & Synthetic Greenhouse Gas Management Act 1989

The failure of the uncontrolled introduction of the Cert 2 licence by DEHWA has ensured the continuation of environmental issues rather than reducing those emissions for the following reasons;

- a. The Cert 2 Licence worker thinks he has an open ticket to undertake any form of RAC work (particularly true of the Electrical Trade within Queensland) the Department did not and has not enforced the limiting nature of the licence. It further has not identified to the Consumer the “Limited nature of that licence”.
RESULT—limited trained personnel undertaking work types not covered within the training package hence the risks of emissions and carbon footprints increases!
- b. The Cert 2 course package does not include the training in understanding the performance criteria, methods of testing for that criteria nor teaching of achieving equipment efficiency. RESULT—high potential for the past installations to affect adversely the environment and carbon footprint BUT also the future units to be installed.

Public Safety

The introduction of highly flammable refrigerants to replace non-flammable refrigerants requires trained persons to carry out the works. Continued ignorance by government in this area places the general public at high risk.

Contrary to Good Design (Codes and Standards) the issue of public health for both the workers and the general public is at risk daily due to the “Cheapness” of installation of Split air conditioners into commercial structures without any regard to fresh air requirements, this has increased by the lack of proper training of Cert 2 for commercial installs—As it was not intended for them to undertake this work hence no need to train for—A properly designed commercial air conditioning installation cannot compete financially against the simplistic throw in mentality generated by the Cert 2 course package.

The commercially designed and installed air conditioning plant can be properly disinfected and cleaned, which should be done minimum of twice yearly, whilst the split air conditioning package offers no simple complete cleaning design. RESULT— poorly disinfected gather of dirt and dust, dirt germs, parasites, etc for redistribution back into the air conditioned space (Major issue during Flu season).

Carbon Emissions

RAC Specialists are in a unique position to reduce carbon emissions by 5+% - Significantly greater results than the current electrical efficiency campaign.

To achieve significant results it is crucial to establish credible Government support and establish supporting enforceable legislation. Ministers have the responsibility to interpret and fully understand the current implications and the necessary/crucial requirements to reduce carbon emissions.

1. ALL RAC equipment by Australian law must be energy efficient guaranteed by the manufacturers this works only if:
 - a. Equipment is wholly manufactured at the engineering premises;
 - b. There are performance indices to gauge the finished performance against the designed performance;
 - c. The installation is completed by thoroughly trained technicians that understand the system and the methodology to achieve the designed (and accepted by Australian Law) performance.
3. FAILURE of the above "1" results in inefficient operation, electrical energy wastage and excessive run time for the equipment hence CARBON FOOTPRINT is excessively high - TOTAL WASTAGE!
4. WASTAGE for the customer, public and Australia as a whole is compounded at the power production for wasted electrical power means more has to be produced - EXPANDING THE CARBON FOOTPRINT!
5. Simple "feeling" (cold air blowing) does not mean the system is working efficiently and an inefficient system can be multiplying its inefficiency just by continuing to operate!!!!
6. Cert 3 have a full 4 years training on all refrigeration system types (the heart of the Air Conditioning Equipment) therefore have the understanding, knowledge and skill base to achieve the demanded manufacturers efficiency standards in the field!
7. Cert 2 training competencies do not include the system understanding nor does it cover efficiency criteria needed to achieve ACCEPTABLE CARBON EMISSION LEVELS as design for.
8. Cert 2 training was only for an interim licence for the purposes of installation under supervision of a fully competent person.

Power Consumption

Seeing 25% of power consumption in Queensland (and 40% projected in 2020) is used to cool or heat buildings and split system air conditioners being a very high contributor to that %

And with incorrectly sized (undersized/oversized) and/or inefficient systems contribute to this – correctly sized and installed systems and correct advice to the customer about opportunities to keep the house/business cool or warm due to other means (insulation, glazing, shades etc.) would decrease the energy consumption.

Skills Shortages

Minister's inability to recognise the impact of skills shortages with the introduction of Cert 2 packages has now ensured long term skills shortages will apply to RAC Specialists, eg;

1. One major retailer has a list of 300 installers, the introduction of Cert 2 saw **"299" RAC Specialists replaced with Cert 2 installers**
2. A second major retailer reduced their number of RAC Specialists — significantly replaced with a minimum of 75% of installers now Cert 2 installers
3. One RAC Specialist was forced to retrench all 4 employees and now operates part time.

Ministers must now address the question of how do these RAC Specialists and the many other RAC Specialists in the same position now offer positions for apprentices?

Some Events To Consider That Are Occurring Within The Industry:

- One small business owner now at risk of losing the family home as he has been undercut when quoting by electricians on several jobs.
- Electricians consistently advertise in their local newspapers for the repairs, services and warranties of split system units, This is illegal works they consistently offer.
- Refrigerant mysteriously disappears from A/C Unit between visits of the contracted RAC Specialist.
- Electrician empties refrigerant from unit directly into the environment.
- Builders fail to hire RAC Specialists, instead hire electricians to pre-pipe a nursing home and the end result was to have pre-piping in the rooms for 7kw units instead of the required 2.6kw units.
- A commercial premise has holes in their firewall to accommodate the split systems (Illegal).
- February 2009, Plumber dies
- October 2009, another non technically competent person loses an eye.

Attachments:

Hon Rob. Swarten MP "Letter dated 20/11/2008

Hon Peter. Garret MP "Letter dated 10/12/2008

Hon Rod Welford MP "Letter dated 09/12/2008

ARCTICK Advertising

Please Note

Reclaim Our Trade are not a policing organisation and had the RAC Specialists themselves been included during the consultation processes, many of these issues could have been avoided.

Designed by Reclaim Our Trade 18/11/2008



Refrigeration and Air Conditioning Mechanics Interim Advisory Committee

Communiqué on Progress

(This paper reflects IAC advice to date and does not purport to outline settled government policy. It is provided for the purpose of communicating progress and responses are not sought at this time.)

Introduction

The National Occupational Licensing System (NOLS) is being developed to remove licensing inconsistencies across state and territory borders and provide for a more mobile workforce. Licence holders will be able to perform work in any state or territory with a single national licence. The NOLS will reduce red tape, improve business efficiency and the competitiveness and productivity of the national economy. Initially, four occupational areas will be covered by the NOLS: electrical, plumbing and gasfitting, refrigeration and air conditioning mechanics, and property occupations.

Interim Advisory Committees (IACs) have been established to provide policy advice to the COAG National Licensing Steering Committee in the development of national licensing for each occupational area. The Refrigeration and Air Conditioning Mechanics IAC (RACMIAC) met on a number of occasions during 2010 to develop a series of proposals in relation to:

1. licence categories, scopes of work and licence types;
2. eligibility requirements, both skill based and non-skill based.

A summary of the advice to date of the RACMIAC follows. Please note that this information is provided on the following basis:

- This advice will inform the policy considerations of the National Licensing Steering Committee and the advice it provides to the Ministerial Council for Federal Financial Relations;
- The policy will be subject to public consultation through a Consultation Regulation Impact Statement (RIS) for this occupation which will be released in the second half of 2011. Following public consultation, a Decision RIS will need to be agreed by jurisdictions through the Ministerial Council;
- The summary represents the majority view of IAC members, noting that a consensus may not have been reached on all policy elements.

Current licence holders

The COAG decision to establish the NOLS agreed that all current holders of state and territory licences would be transitioned appropriately into the new licensing structures, with licence conditions if necessary, to ensure that they continue to be able to undertake their current work. The details of these transitional arrangements are still being developed.

Background

IACs are comprised of members with a wide range of expertise including in the fields of regulation, industry operations and practices (from both a union and employer perspective), safety, consumer advocacy, insurance (where relevant) and training. Each IAC is assisted in its consideration of policy by the views of an occupation-specific Regulator Working Group, comprising regulators from each jurisdiction.

Advice provided by the IACs will inform the Steering Committee and its development of the proposed regulations for the NOLS. In providing advice the IACs were required to take into account:

- the objectives and principles contained in *the Intergovernmental Agreement for a National Licensing System for Specified Occupations* signed by the Council of Australian Governments (COAG) on 30 April 2009; and

- the eight best practice regulation principles set out in COAG's *Best Practice Regulation: A Guide for Ministerial Councils and National Standard Setting Bodies*.

Where practicable a consistent approach to the development of licence policy has been taken across occupations.

Further background on the NOLS as well as future updates can be found at www.nola.gov.au

Progress with legislation and the establishment of the National Occupational Licensing Authority

The *Occupational Licensing National Law Act 2010* (the National Law) was passed by Victoria's Parliament as host jurisdiction on Friday, 17 September 2010, and has so far been applied in Queensland and New South Wales. It is expected that other jurisdictions will pass the legislation by early 2011. The National Law can be found at www.nola.gov.au.

The National Law establishes the framework for the NOLS and a new body, the National Occupational Licensing Authority (NOLA), which will administer the system. The NOLA Chair and Board are expected to be appointed in autumn 2011.

Proposed Licence Structure for Refrigeration and Air Conditioning

1. Licence categories and scopes of work

Following consideration of a range of options for licence categories, scopes of work and licence types for the refrigeration and air conditioning occupations, the RACMIAC has developed a proposal based on 2 licence categories and 1 restricted category. These licence categories and their scope of work are shown in Table 1.

Note that where the licensing structure proposed for the national licensing system includes subgroups not currently regulated in a particular jurisdiction (for example, mechanical services plumbers), the principles of the *Intergovernmental Agreement for a National Licensing System for Specified Occupations* state that that jurisdiction will not be required to extend its licensing to cover that subgroup.

Table 1: Proposed Licence Categories and their Scopes of Work

Licence Category	Scope of work
Refrigeration and air conditioning work	<p>Work associated with the installation, replacement, repair, alteration, and maintenance of refrigeration and air conditioning equipment where work on the equipment involves handling or use of refrigerants or may compromise the integrity of the refrigeration system in relation to the use of refrigerants.</p> <p>This includes the disconnection and reconnection of air conditioning equipment from a water supply other than the disconnection of that equipment from a water supply isolating valve adjacent to a mechanical component of that equipment.</p>
Mechanical services work	<p>Work associated with the installation, replacement, repair, alteration, maintenance, testing and commissioning of mechanical services equipment.</p> <p>This includes the disconnection and reconnection of air conditioning equipment from a water supply other than the disconnection of that equipment from a water supply isolating valve adjacent to a mechanical component of that equipment.</p> <p>Mechanical services equipment means equipment used for a mechanical heating, cooling or ventilation system in a building.</p>

Licence Category	Scope of work
Refrigeration and air conditioning work restricted to heat pump and split systems installation	Work associated with the installation and decommissioning of heat pump systems, where a refrigerant connection is required and single-head split system air conditioners of less than 18 kW cooling capacity. This includes the disconnection and reconnection of air conditioning equipment from a water supply other than the disconnection of that equipment from a water supply isolating valve adjacent to a mechanical component of that equipment.

2. Licence types

The RACMIAC has proposed that the regulations should make provision for issuing three different types of licence as shown in Table 2.

Table 2: Proposed Licence Types

Licence Type	Description
Registered tradesperson	The holder of this licence type will be able to work under the direction of a licensee to perform mechanical services work.
A licensee	The holder of this licence type will be able to do the full scope of prescribed work for the relevant category.
A contractor licence	The holder of this licence type will be able to contract with consumers to perform prescribed work. This licence type can be issued to individuals (operating as sole traders), persons in a partnership or bodies corporate (ie, companies). It would be available for all licence categories.

3. Eligibility requirements

a) Skill-based eligibility requirements

The RACMIAC has proposed that the skill-based eligibility requirements for the licensing of the refrigeration and air conditioning mechanic occupations should be a national training package qualification (UEE07: Electrotechnology training package, MEM05: Metal and Engineering training package and CPC08: Construction, Plumbing and Services Integrated Framework) as indicated in Table 3.

Where possible and appropriate, the qualifications reflect the requirements for the Commonwealth refrigerant handling licences. This provides the opportunity for an administrative process to be put in place by the NOLS to facilitate applications and the issuing of licences.

Table 1: Proposed Skill-based Eligibility Requirements for Licence Types

Licence Type	Skill-based eligibility requirements
Registered tradesperson	Certificate III level qualifications, mechanical services work area only.
A licensee	Predominantly Certificate III level qualifications however to work in the Mechanical Services category, specified Certificate Level IV units of competency may be required, depending on the pathway used. (There were divergent views on this, and on the number of Certificate IV units required.)
A contractor licence	No skill-based eligibility requirements are proposed.

The majority of members have supported an approach that does not include experience requirements, additional to a properly delivered and assessed competency based qualification.

b) Non skill-based eligibility requirements

The RACMIAC has proposed a range of non-skill eligibility criteria that includes personal probity, financial probity, health and fitness, English language and insurance.

4. Exemptions, conditions, endorsements, provisional and restricted licences

The RACMIAC has proposed that there be allowance for a range of exemptions, conditions, endorsements, provisional and restricted licences for the refrigeration and air conditioning mechanic occupations. These will be covered more fully in the Consultation Regulation Impact Statement which will be released in the second half of 2011.

Next Steps

The RACMIAC will continue to provide advice on licensing policy during 2011 including for transitional processes. Draft regulations and a Consultation Regulation Impact Statement for each occupational area will be released for public comment early in the second half of 2011. The public will have 6 to 8 weeks to make comments on the proposals at this time.

Key dates

1 Jan 2011	Establishment of the National Occupational Licensing Authority
Second half 2011	Draft regulations and Consultation Regulation Impact Statement released for public comment
End of 2011	Ministerial Council for Federal Financial Relations to consider finalised regulations and Decision Regulation Impact Statement
Early - Mid 2012	Regulations to be adopted in all jurisdictions
1 July 2012	Commencement of the National Occupational Licensing System for the first four occupational areas: electrical, plumbing and gasfitting, refrigeration and air-conditioning and property occupations.

Reclaim Our Trade



An association established to support all Refrigeration and Air Conditioning Specialists
P O Box 4610 Loganholme DC QLD 4129 Ph/Fax: (07) 3806 1178 Email: kim@resq.net.au

30 November 2011
Australian Federal Police
Coordinator OMC
P O Box 920
Spring Hill Qld 4004

Dear Sir/Madam

Re: Investigation into Arctick- Australian Refrigeration Council Ltd (Commonwealth Agency) Refrigeration & Air Conditioning Industry Advisors to Government and Licensing Body for Refrigerant Handling:

I request your support in initiating an investigation into the operations of Arctick. Industry has significant concerns which are outlined in the submission on the disk provided. Having lodged the submission to State and Federal Ombudsmen, I also submitted the attached to Senator Chris Evans, Minister for Tertiary Education, Skills, Jobs and Workplace; I received a very fast response from the Senator's Chief of Staff, Dr Michael Boyle in which he states;

In relation to your suggestion that the Australian Refrigeration Council Ltd, a Commonwealth agency, operates in a corrupt manner and there are officers within that organisation prepared to testify to this, I would strongly recommend that you provide any evidence to the Australian Federal Police for investigation.

The submission covers many different issues across a number of separate organisations/departments, I have done this to ensure all aspects are covered by the appropriate persons within their individual scope of investigative powers and to ensure the reader understands the broader, far reaching consequences of what is now occurring within the refrigeration and air conditioning industry.

As mentioned in the submission there are Arctick staff past and present willing to testify and I am confident that should board members be questioned they would "If Honest" reveal the efforts former Arctick CEO, Allan Woodhouse undertook to ensure George Thompson became an integral part of the Training packages within Arctick and advisor to Government.

I have many emails accumulated over the past four years including responses to information sent to Malcolm Turnbull, former Minister for Environment.

I look forward to hearing from you.

Sincerely

Kim Limburg
Secretary
Reclaim Our Trade



Spam to RTA holders



As a matter of policy, the details provided to the ARC when businesses and individuals apply for permits are not released to any organisation for marketing purposes.

The ARC and the Department of the Environment, Water, Heritage and the Arts (the department) are aware that many holders of refrigerant trading authorisations (RTA) receive unsolicited emails where the sender appears to know that an RTA is held, offering the services of an on-line business directory.

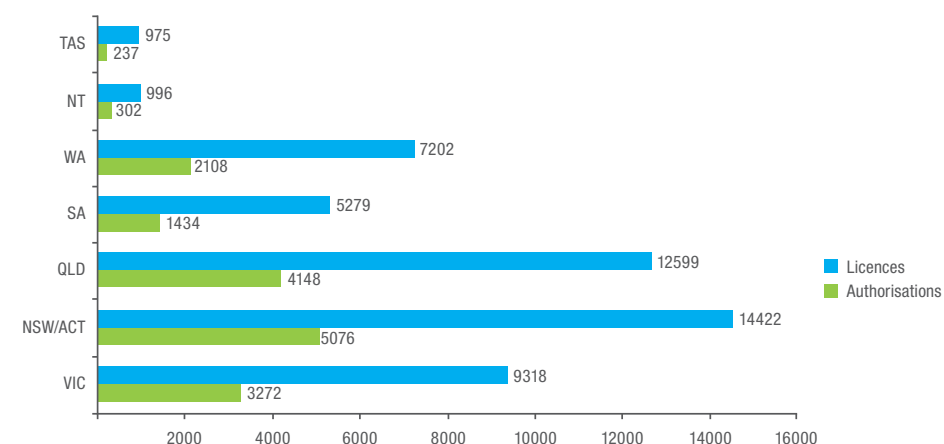
Neither the ARC nor the department have any association with these emails and do not endorse the service advertised therein.

The department and the ARC encourage anyone that has received these emails to refer them to Australian Communications and Media Authority (ACMA) - the department and the ARC cannot do this on your behalf. Log on to www.spam.acma.gov.au and follow the link on the right hand side of the page to lodge a complaint.

If you have any further concerns about this matter, please contact the ARC on 1300 88 44 83. If you would like to know more about the law in Australia relating to spam, please read the information on ACMA's website at www.spam.acma.gov.au

State and territory licence and authorisation numbers

(as at November 2008)



Have you changed address?

To keep you informed of issues relevant to your profession, we need your correct mailing address. Please advise us of any changes to your contact details via email to enquire@arctick.org



Prefer email?

If you would prefer to receive CoolChange via email, please email your details to coolchange@arctick.org

Christmas Close Down

Please be advised the ARC offices will be unattended during the Christmas/New Year period. Offices will close December 19th 2008 and will reopen January 5th 2009. The ARC Team wish you all a very merry Christmas and a safe and happy New Year.



Website: www.arctick.org ARCTick Hotline: 1300 88 44 83



Australian Government
Department of the Environment,
Water, Heritage and the Arts

CoolChange
Newsletter for the
Refrigeration and Air Conditioning Industry



Issue 11 December 2008



Thank you

The causes of this warming are now well known, as are the causes of the depletion of the ozone layer. And it is particularly important that the professionals involved in the refrigeration and air conditioning industry clearly understand the effect that the halocarbon gases they work with can have on our atmosphere, and through this on our entire environment.

Thanks to the efforts of the RAC industry in collaboration with the Australian Government, we are making real progress in stopping the depletion of the ozone layer. The way things are going, the ozone layer will have fully recovered from the damage done to it by halocarbons by 2060. Through its support of government initiatives such as phasing out the use of chlorofluorocarbons (CFCs), improving industry standards of work and establishing a refrigerant reclaim and destruction program, the RAC industry has helped curb this potential environmental disaster.

The fluorocarbon refrigerants you now work with are relatively safe for the ozone layer but are potent greenhouse gases, and so the good work to date in containing these substances in RAC equipment and reclaiming it for destruction at the end of life must continue. Add to that the fact that RAC equipment uses up to 22 per cent of all the electricity generated in Australia and it becomes clear that a supportive, committed RAC industry will continue to be a major contributor to Australia's environmental successes.

The contribution the RAC industry has made to reverse the damage done to the ozone layer confirms this Government's belief that we can achieve a sustainable future for both the environment and the economy. This augurs well not just for the ozone layer, but also the fight against dangerous climate change as Australia prepares for the introduction of a carbon pollution reduction scheme in 2010.

I thank you for your good work. I look forward to working with you closely both on this initiative and on the national challenge to achieve energy efficiency.

Peter Garrett

Minister for the Environment, Heritage and the Arts

December 2008

In this issue

- ✓ Appointment of CEO
- ✓ More support for you
- ✓ Increasing the heat on consumer communication
- ✓ Can I get a licence after three days training?
- ✓ Spam to RTA holders
- ✓ State and territory licence and authorisation numbers

Please recycle
CoolChange and take
care of our environment.

Appointment of CEO



Glenn Evans has commenced as the new CEO of the ARC. Glenn has had extensive experience in the building industry and with legislation and licensing. Industry appointments have included being a member of the Building Appeals Board and Building Regulations Advisory Committee and he has worked both in the private and public sectors.

Upon appointment Glenn said, “The opportunity to lead an organisation which makes such a direct and positive difference to the quality of the environment for the benefit of Australia and Australian citizens is unique.”

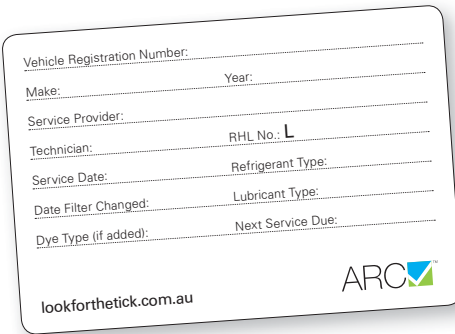
Glenn is excited about future challenges and opportunities. “One of the qualities of the ARC is the positive way we work in partnership with the refrigeration industry and Government, and the way that the industry has accepted the challenge of reducing their collective environmental footprint is a credit to each and every industry operative,” Glenn said.

More support for you

In the last issue of CoolChange we introduced you to some of the items we have developed to help promote your business as being authorised and your technicians as properly licensed. A windshield service sticker for automotive businesses was developed to inform customers of the next air conditioning service date and a swing tag for stationary RAC was designed to record the detail changes required under the Refrigerant Handling Code of Practice 2007.

Since then we have been working on new initiatives which include:

- 1) ARctick external vehicle stickers – you can promote your business as being ARC authorised and committed to reducing fluorocarbon emissions to existing and potential customers whilst out on the road. We have enclosed a free sticker with this copy of CoolChange so you can display it proudly on your car, van, ute or truck.



- 2) Auto under bonnet sticker – this durable sticker is perfect for recording details of the work you’ve conducted on a car air conditioner so you can easily find previous service information at the next service time. The information required to be recorded on the sticker complies with the Australian Automotive Code of Practice 2008. We even had the stickers tested to make sure they hold up to real workshop conditions.

“Thanks for the service labels. I’m happy to report that they are great. Have given them the full treatment, greasy diesels, dusty 4WDs etc. Have tried to rub and even degrease off our writing when vehicles have returned for servicing. Found permanent markers (Artline 853 Fine) best, as using a regular pen tended to smudge and be hard to read at a later date. They look professional, nice and bright. And they stick – amazing! A bit of a brake clean first helps. Again thanks for the samples – will be ordering more in the future.”

- Rob Brotherton, Jervis Bay Automotive

Additional automotive windshield service stickers, stationary RAC swing tags and auto under bonnet stickers are available for your use, on a cost recovery basis. ARC has developed these materials to assist you in your day to day work activities and to help promote your business as doing the right thing by the law and by the environment.

If any copies of either the stationary RAC code of practice or automotive code of practice booklets are required, please let us know and we will send them out to you free of charge.

If you are interested in using any of these items in your business, please contact ARC on 1300 88 44 83 or via email enquire@arctick.org for more information or to place an order.

Full list of items:

- Automotive windshield service stickers
- Stationary RAC swing tags
- ARctick external vehicle stickers
- Automotive under bonnet stickers
- Code of Practice booklets



Increasing the heat on consumer communication

Over the summer, ARC will be actively communicating to consumers to tell them why their home and car air conditioners must be installed, serviced and repaired by an authorised business or licensed technician.

The campaign focuses on both the environmental and financial costs that a leaking or inefficient air conditioner presents. By using businesses and technicians that hold permits issued by the ARC, consumers are minimising the potential damage to global warming and their hip pocket.

The messages have been developed to achieve two main actions:

- 1) to drive consumers to the **lookforthetick.com.au** website so they can seek an authorised business, and

- 2) to educate consumers that they should always look for the ARctick as a sign that a business is authorised and a technician is licensed.

Various media channels have been selected in order to maximise our reach in capital cities and major regional hubs. Advertisements will appear in Better Homes & Gardens, on radio and online across a range of websites.

The summer campaign will support you, businesses and technicians that are doing the right thing, and help inform consumers that they should only employ your services when installing, repairing and maintaining their air conditioner – either at home or in their car.



Don't forget that the campaign is advising consumers to look for the ARctick as the symbol of the legitimate industry. Include the ARctick logo in your advertising and on your signage.

Contact the ARC on 1300 88 44 83 to get a copy of the logo and the conditions of use.

Can I get a licence after three days training?

It is not possible, with no prior training or experience, to get any of the Cert II or Cert III level licences issued by the ARC after completing a three day course.

Two day or three day courses are, from time to time, advertised and cause concern in the industry.

The registered training organisations (RTOs) that offer these courses are often trying to attract students by advertising the best case, that is the shortest possible, course. The only way that someone can qualify for a refrigerant handling licence after a two or three day course is to get recognition of prior learning for a great many of the competencies involved. In effect, for a student to complete a Certificate II course in such a short time, they would have to be fully qualified in an allied trade (such as plumbing or electrical). There is no way that, even for a qualified tradesperson in an allied trade, that the full RAC qualification (Certificate III) could be completed in such a short time.

As an illustration of how the recognition of prior learning process works, the Certificate II

contains competencies; Apply principles of occupational health and safety in the work environment, use hand tools, use power tools/ hand held operations. These competencies are also part of the training for electricians. Electricians who are undertaking the Certificate II course for split-system installation do not have to redo training that they have already done and, so, are given recognition for their prior learning. This recognition process has the effect of shortening the course of training for the Certificate II.

If you have concerns about training which is being advertised as a two or three day course, ask the RTO offering the course if that is for already qualified tradespeople or for absolute beginners. If they are claiming that people with no prior training or experience can become qualified in three days, that may be of concern.

Where you have real concerns that a training provider is not doing their job properly – cutting corners or not conducting appropriate assessments, you can lodge a complaint with your state training authority. The contacts for each jurisdiction are listed on the right.

ACT	Accreditation and Registration Council Ph 132281
NSW	NSW Vocational Education and Training Accreditation Board Ph 02 9244 5335
NT	Department of Education and Training Ph 08 8901 1357
QLD	Training and Employment Recognition Council Ph 07 3237 9955
SA	Training and Skills Commission Ph 08 8226 1164
TAS	Tasmanian Qualifications Authority Ph 03 6233 6364
VIC	Victorian Registration and Qualifications Authority Ph 03 9651 3290
WA	Training Accreditation Council Ph 08 9441 1910

PRECIS OF NOTES ANTA MEETING
24 JUNE 2003 - ANTA OFFICES, AMP HOUSE EAGLE STREET, BRISBANE
10 AM - 12.30 PM

Present *Quaid*

Mike Quaid - ANTA
Graeme Mackrill - AMCA
Mike Gilmore - NRAC/RACCA-IRASE
Doug Braund - IRASE/First Choice
Phil Carruthers - AIRAH
Margaret Underhay - RACCA-IRASE

Bob Cooper - BCA Consultants
John Snare - BCA Consultants
Don Anderson - RACCA President
Peter Moore - Logan TAFE
Unknown - AIRAH (P. Carruthers)

Mr. Mike Quaid opened by thanking everyone for attending. Mr. Mike Quaid then said that it was however a disgrace that we had not been able to sit around a table prior to this to discuss and tell ANTA what was wanted instead of this happening when everyone was assembled and ready to sign the package off. He said he was extremely disappointed that it had come to this at such a late stage of the project. He said that this had happened because of a letter written to the Minister the Hon Dr. Brendan Nelson at this late stage by your group, which was sent to them, and they have decided to act upon it. If they didn't act upon it he said then a response would be done by AMCA who would refute our claims and then it would become a long involved process so it was hoped that by sitting round the table it could be resolved amicably.

Mike Gilmore then responded that their disappointment with us (RACCA-IRASE Qld) could not have been more than the disappointment we felt at not hearing about this training module until the eleventh hour which had resulted in the drastic steps that we took in writing to the Minister Dr. Brendan Nelson. Mike Gilmore said that he had spoken to Mr. Graeme Mackrill on numerous occasions about various different matters but never one had Mr. Mackrill brought this to training package to his attention.

Mr. Mike Quaid then continued that this package had been seven or eight years in the making and that it was still not finalised which was disgraceful as it should be approximately 18 months in the making and 18 months in review at the most. He went on to say that ANTA had terminated all contracts with CTA and had appointed new contractors and he introduced Mr. Bob Cooper and Mr. John Snare of BCA Consultants. He also went on to say that ANTA had approximately 105 staff and a funding of 3.5 billion dollars for training purposes. He said that is was the possibility that with such small staffing they had not been made aware of the existence of RACCA or perhaps RACCA had only newly come into existence.

Don Anderson then responded that RACCA had been formed give or take sixty years ago and was in all States and that it also had a National Association Body. RACCA Queensland has been in existence or many years and that it had joined with IRASE about 10 years ago. RACCA was the Refrigeration and Air Conditioning Contractors Association and IRASE was the Institute for Refrigeration Air-conditioning Service Engineers. AMCA, Don Anderson said was in actual fact a break away from RACCA and had not been in existence anywhere near the time that RACCA had. Don Anderson then asked Mr. Graeme Mackrill of the number of members he represented and Mr. Mackrill did not answer this specifically. Mr Don Anderson said that with the contractors and the technicians that RACCA-IRASE represented our membership base here in

Queensland was certainly more that AMCA Q's and in probability the same applied in all the other States.

Mr Bob Cooper then took the floor and said that it was obvious from the correspondence that there were a number of major issues with the proposed Plumbing and Services Training Package (PSTP). He went on to say that he hoped that we would be able to sit around the table and discuss these problems and come to some sort of agreement where this could proceed to conclusion. He said he was not prepared to go into and discuss the contents of the letter written by RACCA-IRASE Qld, as there were a number of emotive and explosive issues contained therein. He then asked everyone present if they could put forward and discuss a possible way forward for this package to proceed to conclusion and signing off as this had been halted due to the letter we had written to the Minister.

Mike Gilmore then said that it was the RAC (Refrigeration Air Conditioning) component that was under question and that the rest of the training package posed no problems for our RAC Industry. Mike then went on to say that it was impossible to have Air Conditioning without Refrigeration and it appeared and was proposed within the training package and then he went on to expound on this. This was also backed up by Don Anderson, It was also pointed out by Mike Gilmore that under the licensing regime of NRAC those doing the RAC module would possibly only qualify for the NRAC green card which was to be phased out eventually.

The hours of study were questioned by Mr. Doug Braund and Mr. Peter More during the process as to gain RAC qualifications approximately 900 + hours of study had to be undertaken to get to Certificate III level. The question was asked, "if the total time taken to do the complete package require the necessary hours to complete the RAC component and what was the bench mark to measure competency". Mike Gilmore, Don Anderson and Doug Braund considered that the modules in the PSTP to bring into the workforce on partially trained personnel in the fundamentals of the RAC Industry. Mr Don Anderson said that if consultation had taken place this would have been pointed out prior to this and that this problem could have been avoided.

Margaret Underhay said that it was a great pity that the parties here present today could not have been brought round the table to discuss this matter in the very beginning stages of this process. She said that it had become apparent to her that AMCA had been working alone and had not consulted with anyone who had the knowledge to advise on the minimum requirements of the RAC Industry and technicians within the RAC industry. Margaret then went on to point out the many different facets of the industry that RACCA-IRASE Qld had assembled for this meeting which showed that they were prepared to work with other groups, organisations and associations for the good of the RAC industry as a whole. That it was sad to feel that AMCA had not felt the need to consult with those same groups to gain a satisfactory and acceptable outcome to the PSTP. Margaret then went on to say that she hoped that in future this would be avoided by true consultations taking place between all parties so that this sort of confrontation could be avoided in the future.

Mr Mike Quaid then pointed out that if the package was in breach of any regulation then the package could be changed. He said he was aware of the amendments to the

"Ozone Protection Synthetic Greenhouse Act" was before parliament and that this could affect the training package.

It was also pointed out to those present that in the early stages of formulation of this package that CTQ was to be their only contact and that they were not to operate outside of this. This was handed down from a Government Department that was not named. With this knowledge it became apparent to those present that this was where some of the blame could be laid.

Mr Phil Carruthers of AIRAH then said that he felt that the discussion was becoming emotive and confrontational and that he had a dislike of this process. He said that to take the emotion out of everything he said that he would have no problem in accepting the competencies in the package if they demonstrated to him as an engineer the competency of the person carrying out the said work. However, he said that under the existing package this would be difficult for him to do as it would only produce partially RAC trained personnel who had little or no understanding of the very basics of RAC. All parties attending with RACCA-IRASE Queensland Inc agreed this to.

Mr Peter Moore of Logan TAFE then discussed various training issues and was invited along with Mr. Doug Braund to stay after the main meeting was finished to discuss this and that the package would be modified to meet some of the criteria mentioned. One of the areas brought to the attention of the contractors present was that there was no split between the split air systems being installed and that they should be in two categories for safety reasons if nothing else and the demarcation was at around 18kw. Mr. John Snare noted this and he asked that they assist him by staying on to define the two areas for split systems.

Mr Bob Cooper then said that there was possibly two ways of moving forward with this package that the plumbing industry had been waiting for. One was that the RAC component be omitted and the other was to place conditions on it proceeding. His preference was that conditions be placed on it and that they be attached to the package and resubmitted with ANTA's recommendations. Mr Mike Quaid agreed that this would be the preferable way forward. When asked what the conditions to be applied would be, Mr. Bob Cooper said that these conditions would involve a prior review to the formal review of the Training Package or by 2005 to reflect the competencies, and competency requirements of the Ozone Protection Synthetic Greenhouse Act. Mr. Bob Cooper then said that he would assist with drafting the wording for this. Mr Bob Cooper then asked if the RACCA-IRASE party was agreeable to this. Mr Don Anderson said that it would have to be taken to the president of the National RACCA body for his perusal, comments etc., before the final stamp of approval could be given.

Mr. Mike Quaid then asked the AMCA representative Mr. Graeme Mackrill if he was in agreement. Mr. Mackrill answered in the affirmative.

The meeting then closed and the parties then broke into the various groups to proceed with in depth discussions. The draft letter was formulated and was to be typed up and sent to various parties for their perusal, comment and acceptance before the matter could be closed.



RACCA-IRASE Queensland Inc.



Refrigeration Air Conditioning Contractors Association - Institute for Refrigeration Air-conditioning Service Engineers

PO Box 2052, Logan City DC 4114 Queensland
Website Address: <http://www.refrigqld.asn.au>

Telephone/Fax +61 7 3803 5797
e-mail: ennau@bigpond.com

6 January 2004

The Premier of Queensland
The Honourable Peter Beattie MLA
Executive Building
100 George Street
Queensland 4001

Dear Mr. Premier

We seek your intervention and help to correct what is seen by the Queensland Heating Ventilation Air Conditioning and Refrigeration (HVAC&R) Industry as an action by your State Government to exclude our Industry from its rightful work in preference for another industry.

We would ask you to consider the follow headline: -

WORLD GOLD MEDAL SWIMMERS NOT ALLOWED TO SWIM IN QUEENSLAND – Gold medal winning swimmers no longer allowed to swim in Queensland, even though they were trained in Queensland to world beating standard, as they are considered at risk by water safety officials. A state official upon questioning answered with "Look how many people have drowned in water therefore it is for their safety"

Absurd, yes!

Insane, yes!

True - No, not for swimmers.

BUT IS TRUE for Gold Medal winning HVAC&R young men and women within Queensland! Young people trained within this the "SMART STATE" in the HVAC&R trade tasks that defeated the competition in Regional, National and World HVAC&R competitions.

These Gold Medal winners cannot undertake HVAC&R trade tasking without being fined by the very State that trained them to the standard of World Gold Medal winners in this trade. They are now considered incompetent by another entirely different trade/industry from the one in which they work in.

In fact the "Smart State" has now achieved a level of restrictive trade dealings completely contrary to what has been demonstrated and is achieved from its own training program!

The State has achieved this by using one industry licensing criteria to crush another also denying that crushed industry access to viable licensing to cover work for which they are trained and would normally be undertaken by them. This has been completed under the disguise of SAFETY. However, it is a paramount point of safety that only those who are FULLY conversant with the specialised equipment required be allowed to work. For example, would you allow an industrial chemist to work on your motor vehicle - purely because he is the provider of the fuel that the vehicle runs on?

There are many arguments that can be applied both for and against allowing the HVAC&R Industry access to reasonable and viable electrical procedures pertaining to their specialised field. However it would appear that in a sealed environment where HVAC&R knowledge cannot be applied the final outcome will always favour the electrical industry option and can contain unseen safety issues. When an outcome is encapsulated within a "selected" SAFETY envelope and with any dissenting reasoning from another industry being blocked and

totally disregarded leads to unsafe practises. This could in fact also be translated as a restraint of trade for the HVAC&R industry in favour of the electrical industry.

The recent safety review was for the Electrical Industry and contrary to many within that industry the HVAC&R Industry is neither an adjunct, nor an extension of the electrical industry but a separate and distinct specialised industry in its own right. Any dissection of the two industries would show this to be fact thus logic would conclude that there is a need for the HVAC&R Industry to be treated as a separate unique identity. This would then ensure that the unique and specialised disciplines of the HVAC&R Industry are taken into account for the sake of total safety. The HVAC&R Industries input into any review should be taken into consideration when making and applying changes that will effect that industry. This is something that has never happened to date.

Finally we would like to present some specific points in support of the HVAC&R Industry's case:

1. The HVAC&R Industry is the ONLY industry that directly controls and modifies the direct environment in which the used electric motors' windings operate in – not even the Electrical Industry does this! There are other examples of distinction such as this, which indicates the differences between HVAC&R and the Electrical Industry.
2. The HVAC&R Industry requires specialised electrical in excess of the normal electrical training so that it can fulfil the installation, commissioning, repair and maintenance of HVAC&R equipment resulting in the HVAC&R Industry designing and directing the electrical within that area of specialisation. In fact the HVAC&R Industry is a multi trade discipline (electrical is just one of many other disciplines) to fulfil the fifth most important invention to the modern world (TIMES Magazine).
3. The HVAC&R Industry has to and regularly does meet a broad band of safety criteria, not just electrical, in regards to the direct health and well being of the Queensland community, e.g. Food production, preservation, distribution and storage, product manufacturing, biological and health industries, maintenance of safe workplaces, etc. Why is it then considered not capable to carry out manufacturers' specified work?
4. The HVAC&R Industry is the ONLY industry fully trained and capable to work with substances that presently threaten the world's environment. The World Health Organisation states that the death to climate change in the year 2000 was 150,000 people. Whilst it is recorded in Federal Government Hansard that skin cancers and glaucoma of the eyes has now been recorded directly linked to the Ozone Hole. The threat, by allowing incompetent persons to "play" with HVAC&R equipment will and does increase the potential threat to all Queensland children's future as well as themselves – recent accident Scone NSW an electrician working on a refrigeration plant led to the serious injury of the two rescuers (three people into hospital)!

The HVAC&R Industry is a silent, competent industry, fiercely independent, yet directly supports the very standard of life that Queenslanders enjoy. To allow the regression of it's ability to perform and operate successfully and safely will ensure the reduction of that Queensland standard of living.

We seek the opportunity to place our Industry's case against what is seen by our Industry to be an unfair and an unwarranted denial of work practise by a decision taken outside of our Industry by others who appear to have other agendas.

In conclusion a simple verse with great meaning enshrouded within it but rarely understood by the general public – yet!

An Electrician can kill one or two;
A Gas Fitter can kill many more;
But Refrigerant is killing the world;
The other two are licensed;
Why not the third?

Yours faithfully

Margaret Underhay
Secreteray
For and on behalf of



RACCA-IRASE Queensland Inc.



Refrigeration Air Conditioning Contractors Association - Institute for Refrigeration Air-conditioning Service Engineers

PO Box 2052, Logan City DC 4114 Queensland
Website Address: <http://www.refrigqld.asn.au>

Telephone/Fax +61 7 3803 5797
e-mail: ennau@bigpond.com

7 January, 2004

The Hon. G.R. Nuttall MP
Minister for Industrial Relations
GPO Box 69
Brisbane Queensland 4001

Dear Honourable Minister Nuttall

Reference: **Media Release - SUMMER AIR-CONDITIONING WARNING FOR CONSUMERS** - Issued: 9th Dec 2003

There is little doubt that your Ministerial Media Statement was released as a result of the Electrical Safety Message presentation given by your Electrical Safety Office.

RACCA-IRASE once informed also conducted an investigation and has found numerous facts that have not been addressed within the Safety Message that would have given things a very different perspective. (This is covered later in this letter)

Honourable Minister we are not against electrical safety. The HVAC&R (Heating, Ventilation, Air Conditioning and Refrigeration) Industry is in fact very conscious of safety having stood accused as being the major destroyers of the environment and major contributors of greenhouse pollution etc. This has come about due to the lack of understanding of the true situation. A major contribution factor in Queensland has been the "free for all" situation that has encouraged untrained and unskilled persons from any background to "meddle" with HVAC&R equipment and gasses. This has been to the detriment of the environment and also a major concern for safety of every Queenslander. The deaths and injuries due to the "free for all" situation are not made known nor flagged to the general public. In the past month one accident with refrigeration plant has led to three serious injuries, one so serious that he may never talk again.

We feel that our industry is a target for further attack by a bias based on the lack of proper knowledge in regard to the HVAC&R Industry. It is felt by our Industry that if a full and open enquiry was to be held it would be seen that the responsible persons has failed. Failed by denying the Industry that does have the training, the specialised equipment and the equipment knowledge the right to carry out the work for which they are fully and competently trained to do. The HVAC&R training given in Queensland has led to "Gold Medal" winners by young Queenslanders at the World Titles in HVAC&R discipline. Does this not speak for itself as to the competence within this industry?

This "free for all" attitude has been allowed to develop within Queensland in ignorance and against all the advice being offered by this Association and this Industry over the past eighteen years.

With reference to the Press Release we would respectfully like to ask questions and make responses to your Media Statement on a paragraph by paragraph basis and ask that you please afford us the time to hear the Heating Ventilation, Air-conditioning and Refrigeration Industries voice on this matter.

With reference to Paragraph 1 and I quote: -

"Queenslanders seeking to escape the summer heat have been warned to only use a qualified electrical contractor when installing air-conditioning"

Why does the Honourable Minister completely and totally exclude and neglect the only fully trained industry, with the necessary refrigeration air conditioning expertise, in his ministerial in favour of electricians?

Does the Honourable Minister understand his Portfolio, which is "Industrial Relations" hence, includes the Refrigeration Air Conditioning (RAC) Industry not just the Electrical Industry?

Does the Honourable Minister comprehend that in his Portfolio he is representing the RAC Industry along with other industries in Queensland?

Is the Honourable Minister aware that his announcement is contrary to every other Australian State's with regard to the contents of the first paragraph of this statement?

Is the Honourable Minister aware that this statement is contrary to the Federal Australian Government standing on this issue?

Is the Honourable Minister aware that a "qualified electrical contractor" is not deemed sufficiently qualified in any other state in Australia to undertake the work he is advising the Queensland public to utilise when installing air-conditioning systems?

With reference to Paragraph 2 and I quote

"Industrial Relations Minister Gordon Nuttall issued the warning today after department inspectors recently issued fines over several cases of unsafe installation work. (see picture attached and details below)

Is the Honourable Minister aware that there was no specialist Refrigeration Air Conditioning (RAC) personnel associated with these inspections?

Is the Honourable Minister aware that RACCA-IRASE Queensland Inc., the association that represents the interests of the RAC Industry within Queensland was not made aware of these inspections yet they involved our Industry?

Is the Honourable Minister aware that an approach had been made to the Electrical Licensing Board by RACCA-IRASE Queensland to assist in "Restrictive Electrical Licensing" and other issues that affected both parties? Though we were met with cordiality at the time in the ELB offices nothing more was heard and our Association offer to assist has been left in abeyance?

Is the Honourable Minister aware that it was only on the morning of Friday, 12th December 2003 that a meeting was held between RACCA-IRASE Queensland the RAC Industry Association and the Electrical Safety Office? This was our first meeting with the ESO where assistance was asked to advise the RAC Industry of the changes to Legislation and Regulations affecting our industry?

Is the Honourable Minister aware that at no time have we RACCA-IRASE who represent a majority of RAC Industry ever been requested to comment on or give advice to your various departments in regard to our Industry?

Is the Honourable Minister aware that the RAC Industry is not an adjunct to the Electrical Industry and is indeed and is also in many basic and diverse ways directly the opposite of the electrical industry?

Is the Honourable Minister aware that inspections have been carried by the Association on the "unsafe installation work" since being made aware of them (2 Off) at the 12th Dec 2003 meeting? Our findings after carrying out inspections and investigations into them place our findings at odds with the conclusion drawn and stated in this statement.

Is the Honourable Minister aware that the Ministerial Statement made refers to one such "unsafe installation work" that was actually done under the supervision and control of a qualified electrical contractor?

Is the Honourable Minister aware that his Ministerial Statement refers to another "unsafe installation work" that appears to have been carried by a builder and not by a RAC trained person?

Why is the RAC industry singled out within your Ministerial whilst other industries are not?

With Reference to Paragraph 3 and I quote

"At least one case of unsafe work could have resulted in severe injuries to the homeowner concerned, " Mr Nuttall said."

Is the Honourable Minister aware that this case of potential "severe injuries for the homeowner concerned" was in fact the result of work done by a fully licensed electrical worker?

Why is the Honourable Minister denying the RAC Industry as a whole throughout Queensland the right to their Industry, in favour of the Electrical Industry, on this failed work of a fully qualified electrical worker?

Is the Honourable Minister aware that this "case" if looked at from a total industry perspective, including the RAC Industry, and based on OH&S standards indicates the opposite view to that taken by the Minister?

With Reference to Paragraph 4 and I quote

""Queensland's new Electrical Safety Act is very clear on who can perform this sort of work""

Is the Honourable Minister aware that the Queensland Refrigeration Air Conditioning Industry was not consulted to take part of the development of the Electrical Safety Act?

Is the Honourable Minister aware that the Queensland RAC Industry is not a part of nor can it be represented by the Electrical Industry?

Is the Honourable Minister aware of just what is the Queensland RAC Industry?

Is the Honourable Minister aware that the Queensland RAC Industry not only supports the goals and objectives of the "Electrical Safety Act" but by reason of specialised technical knowledge demands that the Act's application should be "Complete Industry Based" for the greatest OH&S effect.

Is the Honourable Minister aware that by denying the Queensland RAC Industry the right to it's own work he is seen to be increasing the potential problems that he desires to overcome?

Is the Honourable Minister aware that the Electrical Safety Act was advertised for the Electrical Industry, it concerned that industry? Therefore other industries stayed out till the Electrical had overcome perceived problems and then the Queensland RAC Industry could and would be given access to address those issues that may be raised through the Act.

With reference to Paragraph 5 and I quote

"Mr Nuttall said the Electrical Safety Office (ESO) within the Department of Industrial Relations regularly investigated reported cases of unsafe electrical work relating to air-conditioning installations."

Is the Honourable Minister aware that the "regularly investigated reported cases of unsafe electrical work relating to air-conditioning installations" have never been advised to the Queensland RAC Industry Association RACCA-IRASE Queensland? Nor have any approaches previously been made to us until the meeting that took place on the 12th Dec 2003 which was arranged the week prior to that date?

Is it not logical then Honourable Minister to ensure a rapid and continuous conduit of the problems/cases by the addressing of the associations whose members are directly involved and for whom it is often their only form of income?

With reference to Paragraph 6 and I quote

""Some of the work found in breach of the new Electrical Safety Act was carried out by restricted licence holders or people with no licence whatsoever""

Is the Honourable Minister aware that in the case of the "restricted electrical license holders" they had never been told that they could not undertake work that they have always seen to be "Manufacturers' Equipment Installation"?

Is it fair and reasonable Honourable Minister to have the work taught, the work encapsulated historically, the work that is a defined as part of an installation denied to the Queensland RAC Industry? In the main due to Legislation that the RAC industry was not a part and neither was their input into this process ever sought?

Is it fair and reasonable Honourable Minister to call it a "breach" when the Queensland RAC Industry was not approached nor were they included in the introduction and application of any new legislation?

Is it fair and reasonable to now place an impost onto the Queensland RAC industry because of unlicensed holders undertaking work when that industry was denied "Licensing" some eighteen years ago? In reality if that industry had been listened to then this would not be a problem today!

Is it fair and reasonable to penalise the Queensland RAC Industry within the Queensland RAC marketplace, because of the lack of control by this Government and previous Governments, when compared to other States within Australia (particularly Western Australia)?

With reference to Paragraph 7 and I quote

""In a recent case a person was fined \$2,500 and ordered to pay more than \$3,000 in costs for performing unlicensed electrical work.""

Is it not preferable Honourable Minister that all cases of "unlicensed electrical work" found and fined should be advertised for the industry involved? However no attempt was undertaken to address the Queensland Refrigeration Air Conditioning (RAC) Industry until the 12th December 2003.

Why was the offer from the RACCA-IRASE Queensland on behalf of the Queensland RAC Industry NOT taken when it was made at the meeting held at the Electrical Licensing Board on the 15 July 2002?

With reference to Paragraph 8 and I quote

"Mr Nuttall said restricted electrical licence training was developed to help specific trades people performing simple electrical maintenance tasks incidental to their trade."

Is it fair and reasonable to change the basis for the issuing of the "Restrictive Electrical License" after it has been issued?

Is it fair and reasonable to have people trained to "World Standards" within expertise directly related to their work yet disallow them to undertake that work?

Do you as the Honourable Minister for Industrial Relations understand or comprehend the dynamics, technical breadth, training of and the interaction with the Queensland general public by the Queensland RAC Industry?

Do you Honourable Minister understand the "simple electrical maintenance tasks incidental to" Queensland RAC Industry?

Who and what level of specialised RAC Industry knowledge does the person/s hold who advises you on the issues affecting both the Queensland RAC Industry and it's interface with the Queensland populace?

Do you understand Honourable Minister that many "electrical maintenance tasks" are in fact specific to the RAC Industry and no other trade including the Electrical Industry undertakes them nor receives training in them?

Have you been advised on the history of the restrictive license from the other Queensland trade industries in regard to the "developed to help" issue? Honourable Minister the problem is more far reaching than you have been made aware of.

Reference Paragraph 9 and I quote

"Restricted electrical licence training does not include a range of other work that can only be carried out by a qualified electrical contractor."

Have you been advised Honourable Minister that the "Restricted licence training does not include a range of other work" is an incorrect statement in regards to the issues raised within your ministerial media release? The interconnecting electrical cable as specified by the manufacturer has and is taught to Restricted Electrical License holders within the Refrigeration Air Conditioning (RAC) training package.

There is work that is necessary to be carried out by "a qualified electrical contractor" and this is fully supported by the Queensland RAC Industry? - But the need to define that point and have it adhered to was the point of the meeting which took place between RACCA-IRASE on behalf of the Queensland RAC Industry and the ELB on the 15 July 2002.

Honourable Minister, the Queensland RAC Industry holds to the issue that there must be a defined, but technically logical point between the responsibilities of any sets of industries!

Is it not reasonable and technically logical that to achieve the defining point of responsibility between the two trades that both industry trades be consulted to achieve a logical and reasonable dividing point? Not just one of the industries as has been the case.

Is it not logical Honourable Minister, that for safe air-conditioning installations and for safe OH&S reasons, the work to be carried out is undertaken by the industry that is fully trained and skilled in the use the specialised equipment and component parts which are specified by the manufacturer, by codes and standards and industry practice, etc.

Reference paragraph 10 and I quote

"Electrical safety inspectors have on numerous occasions found problems with air-conditioning installations," Mr Nuttall said."

Why is it Honourable Minister that the Queensland Refrigeration Air Conditioning Industry is being penalised when this very point was brought to your Electrical Licensing Board's attention at the meeting held with them on the 15 July 2002?

Is it reasonable or fair Honourable Minister that the very industry that on many occasions has attempted to flag this very problem is now denied reasonable access to fulfil what we were trained to do and is our very livelihood?

Honourable Minister what you have stated here is exactly what the Queensland RAC Industry has to face every day. It is the RAC Industry that must "clean up" after various other industries, including the Electrical industry, have wrought their untrained or partially trained "expertise" onto the unsuspecting Queensland public.

Are you aware Honourable Minister that an RAC system can run at 40% inefficiency and it would be difficult to detect? Other industry cannot "get" away with this type of inefficiency and not be detected. E.g. Leave 40% of the electrical wiring out of a house and the house owner will soon complain!

Are you aware that as the Industrial Relations Minister that inefficient air-conditioning leads to the greatest wastage of electrical power, this in turn leads to environmental pollution from production of electrical power which just goes to waste through inefficient RAC equipment?

Do you realise as a Minister of State that the environment is being damaged and Australian weather is being effected whilst deaths and disease (skin cancers, glaucoma, etc.) are being directly attributed to the uncontrolled RAC industry particularly within Queensland? Yet those trained to do the work and have the correct equipment to do this type of work are being denied that right?

Is it right Honourable Minister that the consumers are the ones that pay and pay for incompetent work done by untrained personnel whilst those trained are denied the rights to save the consumer money by your comments?

Reference paragraph 11 and I quote

"A refrigeration mechanic with a restricted electrical licence may perform minor electrical maintenance on existing air-conditioners, but cannot do electrical installation work. The running of cables between the inside and outside unit and the circuit supplying the air-conditioner is installation work and should only be done by a licensed electrical contractor."

Are you aware Honourable Minister that the Queensland Refrigeration Air Conditioning Industry has never been asked nor associated with this "regulation"?

Are you aware Honourable Minister that the cables between the inside and the outside units are a part of the manufacturers' specified equipment and cannot be changed without the agreement of the manufacturer?

The incorrect wiring installation is a continuing problem that is encountered by the RAC repairers of air-conditioning equipment when incorrect operation is encountered. Often the incorrect cabling found installed is not the original specified cable supplied by the manufacturer and has been installed by the electrician doing the installation. The installation of incorrect cabling is invariably found by the very persons who according to the ESA, the ESO and the ELB "are not trained to do so" who are then not permitted to correct the fault.

Is it therefore not logical Honourable Minister that the trained specialist who can detect wrongly sized and incorrect wiring that has been used at installation in the first place cannot then replace it nor in fact place the manufacturers specific wiring loop into the installation in the first place? This is a recipe for disaster.

Do you or your advisors Honourable Minister, understand that the "minor electrical maintenance" is very specialised and technically challenging requiring a deep knowledge of not only the Refrigeration system, it's physics, it's chemistry, it's mechanics, it's electronics but also the specialised electrical system?

Do you or your advisors Honourable Minister, understand that the installation of RAC equipment, particularly within the Queensland environment requires specialised knowledge not taught in any other trade but Refrigeration and Air-conditioning yet you deny that trade their right to their specialised work?

Do you or your advisors Honourable Minister, understand that RAC equipment affects the structure that it is built into both the external as well as its internal environment (Sick Building Syndrome). That the equipment can and has lead to many cases of building structural damage all due to the lack of building engineering expertise on the behalf of the installer. Those that can do this safely and have the expertise, experience and training are being denied this right by your ministerial?

Reference paragraph 12

Nil

Reference paragraph 13 and I quote

Picture Details: Inspectors at a home in Brisbane found a cable connecting the air-conditioning to the mains power has been incorrectly installed, leaving a "live" plug in the ducting. The work had been carried out by an unlicensed person.

Are you aware Honourable Minister that your accusation within this paragraph is biased, to the point of being incorrect in that a fully licensed electrical worker had been the last person to be involved with the installation and it was that fully licensed electrical worker who is responsible?

Have you been informed Honourable Minister that the cable had been run for the express purpose of aiding the fully licensed electrical worker who was late to the job site?

Have you been informed Honourable Minister that cabling had been left unconnected, it had simply been placed through walls along with other conduits?

Have you been informed Honourable Minister that the fully licensed electrical worker was the one who actually connected the mains power to the unit?

Have you been informed Minister that the ""live" plug in the ducting" was in actual fact left there by the fully licensed electrical worker?

Why Honourable Minister if a fully licensed electrical worker was the last person on the job site is the Refrigeration Air Conditioning Industry in Queensland being punished by being denied their right to undertake their work by your Ministerial?

If, Honourable Minister the issue is "safety" then surely the "covering" of facts or the deliberate "non inclusion or non disclosure" of all the facts relating to this matter is misleading. This then leads to the wrong conclusions being drawn, conclusions that have no bearing within the realm of "safety" but are about other issues?

We realise that this is a lengthy submission but there is no short way of addressing the problems being encountered by the RAC Industry. We look forward to your response in the near future.

Sincerely and with respect

Margaret Underhay
Secretary
For and on behalf of
RACCA-IRASE Queensland Inc.



RACCA-IRASE Queensland Inc.



Refrigeration Air Conditioning Contractors Association - Institute for Refrigeration Air-conditioning Service Engineers

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8 January, 2004

Mr Mark Dearlove
Electrical Safety Office
GPO Box 69
Brisbane Qld 4000

Dear Mr Dearlove

We wish to bring to your attention the following two matters.

Firstly, RACCA-IRASE Queensland having undertaken to advertise your Electrical Safety Message as requested during a meeting with yourself and the officers of the ESO have done so in recent weeks. We have however received the following questions from several of our members throughout Queensland. These questions we feel are legitimate and warrant answers from the ESO office. With this objective we place these questions below for you to answer, the answers once received will be relayed to our membership. The questions are as follows: -

- 1.0 Why has the Industry never been informed about this problem before now?
- 1.1 It was stated during the meeting that the work of placing the interconnecting cable was not to be done by a restricted Electrical License holder yet; HVAC&R (Heating, Ventilation, Air Conditioning and Refrigeration) engineers who hold restricted Electrical Licenses are trained in the connection of interconnecting cables. Why is this done if you state that we cannot do this work on a restricted Electrical License?
- 1.1.1 It is common practice on construction sites for untrained, unlicensed workers to run cables for electrical circuits. Our question to you is that why then are HVAC&R trained persons not permitted carry out work for which they are trained?

Secondly, since you brought to our attention the two problems covered in our meeting, we have looked into these issues. With reference to the "Live Plug" and the "Taped Earth" issue our investigations indicate the following in this regard, and the Electrical Safety Message issued by your office - in that"

- a) A fully Licensed Electrical Worker was the last person to handle this installation – why was this not mentioned in your message?
- b) No power was placed into the installation until the fully Licensed Electrical Worker connected the power supply from the circuit board. The unit was safe when it was left in the hands of the fully Licensed Electrical worker. Why was this not mentioned in your report?
- c) Only cabling completed by the installer was that specified by the manufacturer and was under the direction of the fully Licensed Electrical Worker and Contractor. This was a work practice developed over numerous installations. Why was this not mentioned in your report?
- d) That cabling piece was inserted through the wall penetration to satisfy the fully Licensed Electrical Worker's requirements because they were late coming to the job site. Why was this not mentioned in your report?
- e) The cabling was only connected at the internal evaporator whilst the other end was not connected but left for the fully Licensed Electrical Worker to make the necessary checks and

- f) then decisions on what form of connection should be done. Why was this not mentioned in the report?
- g) The fully Licensed Electrical Worker could easily have checked the connected cable end both physically and electrically at the time he performed his work. Good work practices suggest that this should have been carried out, as there was no reason that it could not have been done. Why was this not mentioned in your report?
- h) The tree pin plug was left attached because any competent fully Licensed Electrical Worker would have carried out an inspection of all the wiring, seen the obvious and then made the decision as to the method of connection to be used as per the manufacturer's installation specifications. The ultimate decision upon the method of connection to be used was the choice of the fully Licensed Electrical Worker. If he was not competent to make that decision in accordance with the manufacturer's specifications why was he the fully Licensed Electrical Worker employed to do the work? Why was this not mentioned in your report?
- i) The only connection made by the air conditioning installer was to carry out the clamping of the interconnecting cable (which was manufacturer supplied). This had to be performed so that the cable would not pull through the wall and also to allow the internal unit to be finished off as per the customer's request.

Yours sincerely

Margaret Underhay
Secretary
For and on behalf of
RACCA-IRASE Queensland Inc.

Cc. The Hon. Mr. Gordon Nuttal MP MLA – The Minister for Industrial Relations.



RACCA-IRASE Queensland Inc.



Refrigeration Air Conditioning Contractors Association - Institute for Refrigeration Air-conditioning Service Engineers

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23 December, 2003

The Sunday Mail

Reference: **HOMEFRONT** Renovator Sunday 21 December 2003

We are writing in response to the **HELP WANTED** column written by Michelle Collins and the Question relating to the installation of an airconditioner. I am not sure where this answer was obtained from but it does contain a majority of misconceptions and anomalies which we would like to have corrected. The most disturbing statement and anomaly that should be addressed urgently is and I quote: -

" Pass up anyone on a restricted licence. For example, a refrigeration mechanic without proper accreditation is legally constrained to tackle only minor electrical maintenance on existing airconditioners and cannot install them."

The correct answer is to this is quite the opposite in reality. We do not dispute that the connection between the isolator and the main electrical board should be done by an open ticketed electrician but we do not recommend that an electrician carry out an airconditioning system in entirety.

In the interest of safety, for the protection of the environment and the consumer we wish to make the following points with regard to the answer given to the question: -

- a) Does the open ticketed electrician have the necessary knowledge and qualifications to carry out a heat analysis to ensure the correct sized equipment is installed for the purpose?
 - ◆ Failure to install the correct sized equipment results in the use of unnecessary resources resulting in additional damage to the environment and added unnecessary costs to the consumer.
 - ◆ This can also void the manufacturers warranty if the incorrect sized equipment is installed.
- b) Does the open ticketed electrician have the necessary safety and refrigerant specific equipment to safely carry and correctly installation of an airconditioning system?
 - ◆ It has become a major problem with persons carrying out the repairs and installations purging the refrigerant directly into the atmosphere resulting in the depletion and damage to the environment and causing death etc.
 - ◆ Incorrect sizing results in costly running costs and the quicker depletion of our world resources.
 - ◆ Installation warranty can be voided by not having the equipment correctly installed by the properly trained refrigeration and airconditioning technician.
- c) Does the open ticketed electrician understand the principle of airconditioning thus enabling them to correctly advise the end user on the correct sizing, maintenance etc. for an airconditioning system installation?

d) The correct answer should have read:-

♦ The person most qualified to install an airconditioning system safely and correctly and in accordance with the manufacturer specifications is a Refrigeration & Airconditioning (RAC) Technician holding a Certificate III in refrigeration and airconditioning.

The technicians we represent have sound principles and the necessary specialised equipment to handle the refrigerants safely and correctly. This is something, which is lacked by many licensed electricians who portray that they are qualified to install airconditioning systems. Our RAC technicians are qualified to install the complete system with the exception of the wiring from the switchboard to the isolation switch for the airconditioning system. The installation and connection of this circuit which is less than two percent of the whole installation is the only part of the installation is the only part of the whole job that requires an open ticketed electrician. This part of the installation is subcontracted out to an open ticketed electrician if the RAC technician is not already the holder of an open ticket. The electrician is in most instances is not qualified to work with the refrigerants used in airconditioners. These refrigerants are a danger to our environment and the general public and are in part responsible for the deaths of many Australians each year due to environmentally related illnesses due to irresponsible work practices carried out by those not qualified or trained in this area. The ozone layer today is in its present state due to the mishandling of refrigerants by those who are not qualified to carry out this work.

I trust that this clarifies the correct answer that should have been printed and in all honesty should be corrected as soon as possible. If you would like any further information with regard to the Refrigeration and Air Conditioning Contractors and the Institute for Refrigeration Air-conditioning Service Engineers Association please do not hesitate in contacting us.

Yours sincerely

Margaret Underhay
Secreteray
RACCA-IRASE Queensland Inc.



Office of Senator Chris Evans
Leader of the Government in the Senate
Minister for Tertiary Education, Skills, Jobs and Workplace Relations

Ms Kim Limburg
Proprietor
RESQ
38 Ceduna Street
LOGANHOLME QLD 4129

Dear Ms Limburg

Thank you for email of 28 September 2011 to Senator Chris Evans, Minister for Skills, Jobs and Workplace Relations, on behalf of Mr Brian and Mrs Linda Hensel, concerning Energy Skills Australia (ESQ) and the refrigeration and air conditioning industry in Queensland. The Minister has asked me to reply on his behalf. I apologise for the delay in responding.

I understand from your letter that you are concerned that refrigeration and air conditioning tradespeople are being pushed out of the industry through the actions of various Queensland agencies, including ESQ, and the lack of support for recognised prior learning by the Queensland industry. You raise particular concerns regarding the cancellation by ESQ of user choice funding for apprentices employed by an organisation run by Mr and Mrs Hensel.

It is regrettable that your experience of ESQ and other Queensland agencies appears not to have been satisfactory. Unfortunately, the Australian Government is not in a position to resolve these issues.

State and territory governments are responsible for the delivery of vocational education and training in their jurisdictions, including the policy, operational and administrative aspects of the apprentice and traineeship system. As your complaint relates to the Queensland Government's management of funding for apprentices and the actions of Queensland agencies, your concerns are best directed to the Queensland Government by contacting training@deta.qld.gov.au or Training Queensland on 1300 369 935.

If you are not satisfied with the outcome of your complaint to the Queensland Government, you may wish to seek a review from an independent organisation such as the Queensland Ombudsman, which can be contacted on telephone 1800 068 908 or (07) 3005 7000. The Queensland Ombudsman investigates complaints about the actions and decisions of Queensland public agencies and their staff that may be unlawful, unreasonable, unfair, improperly discriminatory or otherwise wrong.

I note from your correspondence that you have contacted the Office of the Training Ombudsman in Queensland. As a free, impartial and independent public office, the Training Ombudsman is best placed to deal with your complaint about apprentice issues in Queensland. The Training Ombudsman's role is to review and resolve, where possible, complaints from apprentices, trainees, employers and other interested parties about the Queensland apprenticeship and traineeships system.

The ElectroComms and Energy Utilities Industry Skills Council, known as EE-Oz Training Standards, may also be able to assist you with your concerns about the supervision of apprentices. EE-Oz Training Standards is the body responsible for developing and maintaining the national qualifications within the National Training Packages under its coverage, including eletrotechnology industries such as refrigeration. EE-Oz have issued a National Supervision Policy to provide guidance for persons involved in providing direct or indirect supervision to eletrotechnology apprentices in training. I have attached a copy for your information. EE-Oz Training Standards also has a specific Refrigeration and Air Conditioning Technical Advisory Committee which may be able to provide assistance to you. EE-Oz Training Standards can be contacted on (02) 6154 5180 or through their website www.ee-oz.com.au.

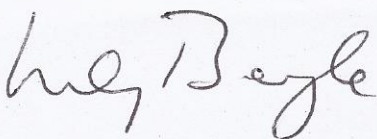
As your correspondence also raised issues about funding, you may be interested in future funding options for skills training. On 21 September 2011, Senator Chris Evans announced Australian Government Skills Connect, a new 'one-stop-shop' service for employers and industry bodies seeking funding to address their skills needs. The objective of Skills Connect is to make it easier for eligible organisations to access Australian Government assistance for training and workforce development, which will in turn support growing sectors and businesses, and assist people who risk losing their jobs because of structural changes in the economy.

One program that is part of Skills Connect is the National Workforce Development Fund (NWDF). Through the NWDF, the Government will provide \$558 million over 4 years to support training and workforce development in areas of current and future skills needs. The NWDF builds on the successful Enterprise Based Productivity Places Program and utilises Industry Skills Councils as a broker to assist organisations develop enterprise-based training proposals. Eligible training under this program includes Certificate III, IV, Diploma, Advanced Diploma, Vocational Graduate Certificate and Vocational Graduate Diploma. New workers are eligible to apply for Certificate II qualifications. Funding can also be used to support training in skill sets provided the participant has a prior qualification at the Certificate III level and above. The first round of funding has closed, however a new round is expected soon. Further information on the NWDF including eligibility requirements is available at www.deewr.gov.au/nwdf.

In relation to your suggestion that the Australian Refrigeration Council Ltd, a Commonwealth agency, operates in a corrupt manner and there are officers within that organisation prepared to testify to this, I would strongly recommend that you provide any evidence to the Australian Federal Police for investigation.

I trust that this information is helpful and thank you for bringing your concerns to the Minister's attention.

Yours sincerely



Dr Michael Boyle
Chief of Staff

22 NOV 2011



TRAINING STANDARDS
AUSTRALIA

National Supervision Policy -Electrotechnology

V2 – October 2009

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National Supervision Policy

Developed By	EE-Oz Training Standards
Version 1	Endorsement by EE-Oz Board December 2002 Released, printed and published – January 2003
Version 2	Revised October 2009

1. Related Documents

This National Supervision Policy Guideline augments the “National Code of Good Practice for New Apprenticeships” released December 2000, by the Commonwealth Government. It has been developed to assist both parties (employers and apprentices) entering into a “Training Contract/Contract of Training” to understand each others obligations and expectations. The code is available from the Australian Apprenticeships website www.australianapprenticeships.gov.au or phone 1800 639 629.

This guideline should be read in conjunction with any relevant Commonwealth, State or Territory legislative requirements. It does not replace or override any obligations whatsoever, whether legislative, under duty of care, or other dominant rulings that apply to the respective parties.

Obligations of employers supervising apprentices.

2. Purpose

This Supervision Policy Guideline has been produced as advisory information for industry stakeholders, practitioners, and workers who are involved in providing direct or indirect supervision to Electrotechnology apprentices in training. It covers a number of Electrotechnology allied apprenticeship vocations, which are included in the nationally endorsed National Electrotechnology Training Package. It specifically deals with the electrical apprenticeship vocation of “Electrician” as it pertains to electrical licensing.

3. Scope

This policy applies to employers of electrotechnology apprentices and trainees.

4. Background

Entry into Electrotechnology Trade vocations in the Electrotechnology industry is typically through State/Territory approved Apprenticeships. Electrotechnology Apprenticeships utilise an on-and-off-the-job training regime to developing an apprentice's full range of competencies. The appropriate level of supervision that should be applied to an apprentice during the on-the-job component should consider the welfare of the apprentice in terms of safety and competency development.

The well-recognised tapering (direct-general-broad) pattern of supervision, which includes instructions dispensed to an apprentice throughout their apprenticeship is a proven model in developing a competent Tradesperson.



Determining the appropriate level of supervision to apply is generally dependent on the balance between assuring safety of the apprentice and the work to be carried out, and the experience of the apprentice. The level and pattern of supervision to be applied is not one that is time based but takes into account a range of factors such as:

- knowledge and skills (on-and off-the-job technical training/learning) attained, and
- previous experience/learning and training/practice and repetition the apprentice has had relative to each particular task, skill or work function to be performed.

This Guide was developed through extensive consultations with key stakeholders. It is a second version release and, will thus be amended from time to time to take account of changes in line with legislation, regulations, standards, technology, and/or key stakeholder views. Feedback on suggested changes is welcomed and, should be directed to EE-Oz Training Standards in the first instance for further consideration.

The Policy Guideline presents a model of best practice supervision and suggested safe work practice for Supervisors responsible for supervising apprentices during their period of competency development. Importantly, it is hoped that in publishing this policy guide more sound supervision and safe work practices will emerge, leading to reductions in danger to life/property and, the development of quality tradespersons for the industry.

Disclaimer: It should be noted that this Policy Guideline does not in anyway replace any Commonwealth, State or Territory legislative and/or regulatory requirements; and does not override any duty of care responsibilities, codes of practice and other relevant codes or regulations pertaining to the respective parties.

5. Policy Guideline

During the course of an apprenticeship it is expected that an apprentice would have worked across a representative range of equipment, consistently and to requirements in the industry with supervision ranging from direct to general to broad. They will also have concurrently attained the relevant essential knowledge and skills to support workplace performance.

The apprentice having worked under these conditions would have the opportunity to develop the relevant competencies and, accordingly been certified as a Tradesperson by a Registered Training Organisation (RTO). This should assure prospective employers that as a Tradesperson, they have attained sufficient depth and breadth to be able to perform across a variety of contexts, and respond and manage a number of contingencies not previously undertaken.

This policy guideline puts forward a suggested best practice model of supervision that may be applied to apprentices in the Electrotechnology industry, with particular emphasis on the “Electrical Apprenticeship” given its interrelationship with Electrical Licensing requirements.

Supervisors can use it as a guide when planning their supervision responsibilities and allocating a range of work functions and activities in the workplace to apprentices.

In providing advice relating to the supervision of apprentices, it is suggested that an entity/business or person employing an apprentice should:

- take all reasonable steps to ensure supervision is carried out by a person that is appropriately licensed (where appropriate) and competent to carry out the work in question unsupervised;
- take into consideration (see below) issues related to the use of apprentices as Competence Assistants/Safety Observers, prevailing legislation, the obligations of employers supervising apprentices and, where applicable, Regulator Requirements for Electrical Vocations, Testing for System integrity and operability whilst energised, and Working near live parts; and



- take into consideration the kind of work being undertaken, particularly where regulated (e.g. electrical) work applies and especially with regard to whether live parts are being tested or are in the vicinity of the work area/environment; and
- have regard to the level of competence of the apprentice being supervised for the particular task, skill or activity to be performed, with the goal of supervision progressively diminishing to broad in the fourth stage – with the exception of “first time” work and testing.

In determining the level and pattern of supervision to discharge to an apprentice in relation to the work whilst in training several factors are taken into account. These are knowledge attained and, previous experience and training the apprentice has had relative to each particular task, skill, or work function to be performed. The pattern of supervision will typically range from direct, general to broad (see attached Supervision Policy Guideline Table for detailed information on each). Time served is not a determinate but a factor for consideration.

Competent Assistant/Safety Observer

Apprentices who are new entrants into the industry and who have not acquired relevant skills and knowledge are not to be used as Competent Assistants/Safety Observers in their initial period (first 6 months) of training. Thereafter, they may be appropriately utilised as a competent assistant/safety observers, but only if they have been suitably trained and have attained an adequate level of knowledge and skill as required by legislation and/or any prevailing industry guideline/s.

Legislation

Employers are responsible for supervising the development of an Apprentice. In discharging supervision, Supervisors should have the appropriate and comparable technical competencies for given work. Additionally they should have an understanding of supervision related to apprentices, such that they are familiar with the level of supervision that should be applied for the given work and how this should be varied dependent upon the knowledge, skill, and experience of the apprentice.

Note: The following information is a guide only:

- a) A “person in training” under a “Training Agreement/Contract of Training” is a person who is undertaking, but has not completed:
 - I. an approved apprenticeship and, for electrical licensed areas, a relevant electrical apprenticeship; and/or
 - II. a training program approved by the relevant State/Territory Training Authority and, in relation to Electrical Licensing with the respective Electrical Regulator
- b) Employers should take all reasonable steps to ensure that “persons in training”:
 - I. are not placed in the immediate vicinity of an exposed live high voltage conductor or apparatus, and/or
 - II. are not required to work where there is a risk of coming into contact with an exposed live low voltage conductor or apparatus
- c) Employers should prohibit “persons in training” from working at a place where there is a risk of contact with exposed live conductors or apparatus unless the “persons in training” have been adequately trained and skilled in all the prevailing safe working procedures for the work activity and work environment
- d) Employers should take all reasonable steps to ensure that “persons in training” who are required to perform electrical work are appropriately supervised by a licensed electrical worker able to perform the work, to take all reasonable steps to ensure electrical safety at all times

- e) The level of supervision to be discharged to apprentices should be in accordance with any prevailing regulatory requirement and, appropriate for:
 - I. the type of regulatory (e.g. electrical) work performed; and
 - II. the adequacy of the “person in training”; and
 - III. an assessment to confirm relevant knowledge, skill and experience of the “person in training” is evident
- f) Apprentices should be advised and instructed in CPR and rescue techniques; and the correct use of personnel protective equipment (PPE), safety equipment; and testing equipment. Appropriate use of protective work clothing, insulated work footwear (sole), safety glasses and other safety essentials are a necessary part of accident prevention practices and also should be advised. Included are insulating gloves, mats, covers, and similar safety equipment, where appropriate, CPR, recovery apparatus and; correct use of testing equipment/instruments.
- g) Employers/supervisors should take all reasonable steps to ensure apprentices record their workplace activities using an approved workplace recording system (logbook, Profiling data entry cards/web base entry) that covers work exposure/practice undertaken against industry standards, the level of supervision provided, equipment worked on, dates, and other relevant important information.

Regulator Requirements for Electrical Vocations

It is a common requirement of electrical regulatory authorities in each State/Territory that all electrical work be performed in accordance with the respective regulations and AS/NZS 3000. A person carrying out unsupervised electrical work is to be appropriately licensed. With the relevant licence a person may carry out a range of work without supervision. Apprentices however, provided they are engaged under a “Contract of Training” and are appropriately supervised are generally permitted to perform relevant electrical work.

The supervising electrical worker is obligated in taking all reasonable steps to ensure that all electrical work is checked, tested and complies with appropriate Acts, Regulations and Australian Standards.

Employers of electrical workers and electrical workers themselves, (which includes apprentices/trainees) must be aware of, and comply with, the requirements of any local State/Territory Electricity Act, local supply authority requirements, Common Law requirements (duty of care), Codes of practice, permit systems, and/or any other relevant code or regulation. Information regarding applicable requirements should, in the first instance, be directed to such bodies.

Testing for System integrity and operability whilst energised

Testing for System integrity and operability whilst installations, equipment or articles are energised should not be carried out by apprentices. Where absolutely necessary, it must be undertaken under the strictest of direct supervision and according to any prevailing regulation or code/standard. Notwithstanding, any such work to be performed should always include:

- compliance with any legislation, regulation(s), standard(s) or code(s) of practice
- the establishment and use of safe systems of work, including safe work practices
- the development and use of a written risk assessment, and Job Safety Analysis (JSA)
- use of appropriate tools and equipment, and
- work processes are in place to assure safety of the installation, personnel, and property.



Working near live parts

Apprentices should not, in their training program work near or in the vicinity of exposed live parts consistent with the following:

- work in the vicinity of exposed live high voltage conductors, apparatus and/or accessories, or
- work where there is a risk of coming into contact with an exposed live low voltage conductor, apparatus, and/or accessories, and
- then only according to legislation, regulation(s), standard(s) or code(s) of practice; including AS/NZS 4836 – Safe Working on low voltage electrical installations, and with the appropriate level of skills held and relevant supervision applied for the particular work, and
- “Testing for System integrity and operability – energised” as defined and outlined in this document.

The table “Supervision Policy Guideline - Electrotechnology Apprentices” is for use as a guideline to supplement and further clarify the suggested supervision requirements included in this guide. The Supervision Tables should be read in conjunction with this part of the Supervision Policy Guideline. It should be acknowledged that the level of supervision will vary dependent upon the knowledge, and level of skill and experience of the apprentice, as pointed out above. The decision is a matter for the Supervisor to determine on a case-by-case basis.

The degree of supervision, direct, general or broad to discharge requires continual assessment of an apprentice’s knowledge, skill and experience relative to the nature of the task, skill or activity to be undertaken. The degree of supervision may vary from direct to general, to broad, depending on the type of work being carried out on a particular occasion and a particular point in time. Supervisors need to exercise appropriate duty of care and judgement in this regard, and take all reasonable steps to ensure that such judgements are not made solely on the bases of the apprentice’s, time served.

It should be noted that Electrical Regulators generally consider that there are two levels of supervision applying to apprenticeship training when performing electrical work: ‘direct’ or ‘indirect’. General and Broad supervision combined corresponds with the second level of supervision (indirect) generally recognised by Regulators.

The supervising registered electrical worker is obligated in taking all reasonable steps to ensure that all electrical work is checked and tested and complies with the appropriate Acts, Regulations and Australian Standards, particularly AS/NZS 3000 Wiring Rules.



6. Typical Pattern of Supervision – Electrical Apprentices Only

Competency function**	Time Served - notional	General Level/Pattern of Supervision
Install support and mechanical protection	Less than 6 months More than 6 months to 12 months More than 12 months to 2 years More than 2 years to 4 years	Direct Direct/General, after skill demonstrated General Broad
Install & terminate cables exceeding <i>extra-low</i> voltage	Less than 6 months More than 6 months to 12 months More than 12 months to 2 years More than 2 years to 3 years More than 3 years to 4 years	Direct Direct/General, after skill demonstrated General General Broad
Install apparatus & equipment	Less than 6 months More than 6 months to 12 months More than 12 months to 2 years More than 2 years to 3 years More than 3 years to 4 years	Direct Direct Direct/General, after skill demonstrated General Broad
Maintain apparatus & circuits	Less than 6 months More than 6 months to 12 months More than 12 months to 2 years More than 2 years to 3 years More than 3 years to 4 years	Direct Direct Direct/General, after skill demonstrated General Broad
Commission apparatus & circuits	Less than 6 months More than 6 months to 12 months More than 12 months to 2 years More than 2 years to 3 years More than 3 years to 4 years	Direct Direct Direct Direct/General, after skill demonstrated Broad
Test apparatus & circuits (Verification of installation circuits and equipment)	Less than 6 months More than 6 months to 12 months More than 12 months to 2 years More than 2 years to 3 years More than 3 years to 4 years	Direct Direct Direct Direct/General, after skill demonstrated Broad (after successful completion of the electrical installation safety testing knowledge and skills component of training)
Note: All electrical apprentices are to be competent in testing a full installation at the point of becoming a Tradesperson.		

Competency function**	Time Served - notional	General Level/Pattern of Supervision
Testing for System integrity and operability – energised (see definition and main document)	Less than 6 months More than 6 months to 12 months More than 12 months to 2 years More than 2 years to 3 years More than 3 years to 4 years	* * * * Direct
Isolation of Installations and Equipment to verify isolation from all sources of supply (proving de-energisation)	Less than 6 months More than 6 months to 12 months More than 12 months to 2 years More than 2 years to 3 years More than 3 years to 4 years	* * * * Direct ¹
Find and repair faults associated with apparatus & circuits (non energised)	Less than 6 months More than 6 months to 12 months More than 12 months to 2 years More than 2 years to 3 years More than 3 years to 4 years	Direct Direct Direct Direct/General, after skill demonstrated Broad
Install & maintain explosion protect equipment	Less than 6 months More than 6 months to 12 months More than 12 months to 2 years More than 2 years to 3 years More than 3 years to 4 years	Direct Direct Direct Direct/General, after skill demonstrated General (supervised by qualified person after appropriate training)
Other work related activities and tasks	Less than 6 months More than 6 months	Direct Level to be determined according to work environment, and nature of activity or task demonstrated developing to Broad.

* Should not to be carried out.

** Competency functions are mainly derived from the index of competency standards used in the National Electrotechnology Training Package (UEE07 or any successor National Electrotechnology Training Package) for the qualification of Certificate III in Electrotechnology Electrician.

Note: Testing for System integrity and operability whilst installations, equipment or articles are energised should not be carried out by apprentices. Where absolutely necessary, it must be undertaken under the strictest of direct supervision and according to any prevailing regulation or code/standard. Notwithstanding, any such work to be performed should always include:

- compliance with any legislation, regulation(s), standard(s) or code(s) of practice
- the establishment and use of safe systems of work, including safe work practices
- the development and use of a written risk assessment, and Job Safety Analysis (JSA)
- use of appropriate tools and equipment, and
- work processes are in place to assure safety of the installation, personnel, and property

¹ Persons required to work in association with electrical equipment shall be competent in procedures providing de-energisation and in the use of relevant instruments.

7. Supervision Policy Guideline - Electrotechnology Apprentices

Type of Work Functions	Typical Apprentice Stage	Typical Level/Pattern of Supervision
Assembling non-electrotechnology associated hardware and/or equipment	One Two Three Four/Final	Direct Direct/General General/Broad Broad
Installing cabling/wiring support and protection systems	One Two Three Four/Final	Direct Direct/General General/Broad Broad
Lay wiring/cabling and terminate accessories for <i>extra low voltage</i>	One Two Three Four/Final	Direct Direct/General General/Broad Broad
Installing apparatus	One Two Three Four/Final	Direct Direct/General General Broad
Maintaining and repairing apparatus and associated circuits	One Two Three Four/Final	Direct Direct/General General Broad
Undertaking commissioning procedures of apparatus and associated circuits	One Two Three Four/Final	Direct Direct Direct/General Broad
Testing apparatus and circuits****	One Two Three Four/Final	Direct Direct Direct/General Broad
Diagnosing and rectifying faults in apparatus and associated circuits (<i>non energised</i>)	One Two Three Four/Final	Direct Direct Direct/General General/Broad
Disconnecting and reconnecting fixed wired electrical equipment connected to supply up to 1000 volts a.c. or 1500 volts d.c.	One Two Three Four/Final	Direct Direct Direct General/Broad
Attaching flexible cords and plugs	One Two Three Four/Final	Direct Direct/General General/Broad Broad
Monitoring Energy Usage	One Two Three Four/Final	Direct Direct/General General/Broad Broad
Working on Electrical Equipment in Hazardous Areas (EEHA)	One Two Three Four/Final	Direct Direct Direct General/Broad

Type of Work Functions	Typical Apprentice Stage	Typical Level/Pattern of Supervision
Following safety procedures	One Two Three Four/Final	Direct Direct/General General/Broad Broad
Using information systems	One Two Three Four/Final	Direct Direct/General General/Broad Broad
Protecting the environment	One Two Three Four/Final	Direct Direct/General General/Broad Broad
Documenting activities	One Two Three Four/Final	Direct Direct/General General/Broad Broad
General tasks – housekeeping, transporting, etc.	One Two Three Four/Final	Direct Direct/General General/Broad Broad

Notes:

1. Types of work functions are mainly derived from the index of competencies used in the National Electrotechnology Training Package (UEE07 or any successor National Electrotechnology Training Package) that make up Certificate III (Tradesperson) qualifications. Not all may apply, and will be dependent on the particular qualification the apprentice is developing their competency in.
2. Testing apparatus & circuits (installation) includes performing, for data communications, where appropriate, extra-low voltage testing to data standards, conformity to integrity, & safety requirements
3. In relation to work related to Data Communications, all work and in particular supervision, is to take account of the Australian Communications Media Authority (ACMA) Registration requirements.