

## Release of Electric and Hybrid Vehicle LVV Standard

### **Introduction:**

This information sheet introduces a new standard for electric and hybrid-electric vehicles, and provides some background information in relation to the standard. Over time this document will be updated to include additional guidance notes for LVV Certifiers and vehicle builders.

We expect that in 2012, the 50<sup>th</sup> LVV certification of an electric vehicle in New Zealand will take place. Around half of these certifications have taken place in the last 3 years, indicating a strong increase in interest in this form of motive power for light vehicles. The main driver for this increased uptake of electric vehicles is the advances in battery technology, allowing greater energy storage and thus more powerful motors and greater range than ever before.

### **First issue of the Electric and Hybrid Vehicle Standard 75-00(00):**

#### **Previous technical requirements:**

For some time it has been a desire of the Ministry of Transport to ensure that there were no impediments to the introduction of electric vehicles to New Zealand. This standard brings a set of requirements into legislation that ensures an appropriate level of safety for the creation or modification of electrically powered light vehicles.

The standard has been under development for 2 years, based on a guideline for electric vehicle conversions that was developed by the New Zealand Hot Rod Association in 1997, using expertise from a number of different groups, with particular assistance and expertise provided by the Electric Vehicle Transportation Association of NZ (EVTRANZ).

The 1997 guideline has been the document that LVV Certifiers have used to assess the safety of electric vehicles since its release, and has been adequate, however with the advent of improved battery technology and an increase in interest in electric and hybrid transportation during the past two years, it has been necessary to review and improve the 1997 guideline, and to introduce the requirements as a formal low volume vehicle standard in order to give the document clear legal status.

#### **Development of LVV Standard 75-00:**

The technical review and re-development of the standard has been led by LVVTA's Engineer Dan Myers BEng MSc. Dan first consulted with a small group of individuals and organisations known for having particular expertise in this area, then to a wider collection of key people involved in the electric and hybrid vehicle sector, from within the manufacturing and installation industries, LVV certification regime, electric vehicle modifiers, constructors and users, and Government agencies. This process has enabled LVVTA to get this standard sufficiently developed in a relatively short period.

The standard is released with an unusually long lead time to enable LVV Certifiers to undergo dedicated training, and for the industry to get familiar with the updated requirements. The standard takes effect from May 2012, and while not binding until that date, may be used as a guide for builders and LVV Certifiers.

It is recognised that this standard will be updated as future technologies evolve. LVVTA welcomes any input that will improve this standard.

#### **EV Training for LVV Certifiers:**

LVVTA is planning training session(s) for early in 2012 for all of those LVV Certifiers who either have, or wish to have, one or both EV certification categories. We will be bringing in industry experts to assist with the training. All LVV Certifiers will be advised of the EV training session(s) as soon as a date is set.

#### **Availability of information:**

##### **Availability of LVV Standard:**

The LVV Standard is available on the LVVTA website:

<http://www.lvvtta.org.nz/documents.html#standards>

##### **Authorised LVV Certifiers:**

The number of LVV Certifiers appointed to certify electric and hybrid vehicles will increase in 2012 following a dedicated training session. The current list of appointed LVV Certifiers is available on the LVVTA website – those with category 4 are approved to certify electric vehicles:

[http://www.lvvtta.org.nz/documents/supplementary\\_information/CertifierList-Website.pdf](http://www.lvvtta.org.nz/documents/supplementary_information/CertifierList-Website.pdf)

##### **Inspection Form-set:**

An inspection form-set will be developed in the new year, and issued to the LVV Certifiers before the effect date (May 2012) of the standard.

#### **Contact details:**

If any assistance in the use of this Information Sheet is required, please contact an LVVTA technical team member at the Wellington LVVTA office.

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