



Exhaust Noise Emissions – Recent Developments

Background

The objective Noise Testing regime, for reasons beyond LVVTA's control, was put together in an extremely short time-frame, without the luxury of as much trialling and discussion with LVV certifiers as we would have liked. However, that can't be changed, so we're effectively getting the system right on the run. During the LVV certifier training sessions during July for those LVV certifiers who are ONT-authorized certifiers, we got a lot of good feedback and ideas from you guys (both problems and solutions), especially from the Hamilton and Palmerston North sessions. (Don't feel bad South Islanders – we had the problems pretty much identified and solved by the time we got to you, so you had no need to give us any feedback or ideas!)

To follow are some changes to the system that you need to be aware of. They should all make your ONT work smoother.

Preliminary (quick-check) testing

The biggest concern amongst the Hamilton training session attendees was that because LVVTA needs 'fail' details as well as 'pass' details, each test was going to cost the vehicle owner the full amount (\$114 - \$174), and in the process of getting the exhaust system tuned to a point where it will comply, there might be two or three or even more tests. The ONT certifiers were justifiably unhappy about being put in this position.

It was agreed between LTNZ and LVVTA after the Hamilton session that the ONT certifiers are allowed (in fact they are encouraged) to provide to their customers a 'quick-check' service before carrying out the full test at the full price. This 'quick-check' involves doing a basic test in the driveway to see if the exhaust noise is close to the limit, for which a certifier should charge around the \$20 - \$30 mark. No under-body inspection or form-set or test certificate is required for the 'quick-check'.

If the 'quick-check' indicates that the exhaust is well within the 95 dBA level allowed, the ONT certifier can then go ahead with the full test at the full price, with everyone confident that, for the price of \$20 or \$30, the vehicle should pass.

This process will save your customers from having to pay for the 'full monty' more than once, and will as a result of that, keep you out of the firing line of angry customers thinking that the system is a rip. Make the 'quick check' a standard part of your process – something that you do in every case before carrying out the 'full monty', unless either you're sure the vehicle will fly through the test, or the customer insists he doesn't want to pay the extra \$30 – in the latter case, it becomes his problem if he fails and has to pay the 'full monty' fee twice.

Some of you have already indicated that to help people, you'll knock the 'quick-check' fee off the 'full monty' price at the end of the process. If that's what you want to do, that's fine, but it's not expected.

This 'quick-check' concept was developed as a result of the discussions at Hamilton – so thanks very much to all of you there.

Cheaper meters

By the Palmerston North session two days after the Hamilton session, LVVTA and LTNZ had agreed on the 'quick-check' part of the process, and we explained this to the ONT certifiers at the Palmerston North session. At this session, those present agreed that the 'quick-check' process was of little help for those who would have to get the 10th meter couriered from the LVVTA office each time, as delays were still going to trouble the process, and LVVTA's courier costs were going to rise even further.

We discussed the idea of LVVTA supplying a cheaper good quality meter to those ONT certifiers who didn't have their own meters, and it was thought by those present that this would provide a good help. After the Palmerston session, LVVTA and LTNZ discussed the idea further, and recognised that the use of a cheaper meter for the 'quick-checks' would also have the benefit of saving wear and tear on the expensive equipment, so we agreed to make available a cheaper meter for all ONT certifiers, including those that have one of the 9 flash kits stationed with them.

So, LVVTA is purchasing 27 cheap meters, one for every ONT-authorized certifier, regardless of whether or not he has a permanent flash meter stationed with him. It is hoped that these meters will be purchased and out to the ONT certifiers during the week 31 July – 4 August, dependent on stocks and availability of the unit chosen.

As Dan Myers from LTNZ has a lot more knowledge than us in the noise emission area, he is helping us out by looking at the various options on the market, and selecting the one he thinks will be the most accurate and user-friendly. The meters are middle of the road items, much less expensive than the 10 full monty kits, but better than what you'd typically buy at a retail electronics store.

Thanks to all of you at the Palmerston session for the discussions which got this all going.

Filling in 'fail' sheets

As stated earlier, the 'quick-check' concept and the cheaper meters leave one problem unresolved. In order to make the LTNZ and the MOT aware of the problems with the 95 dBA limit and the spiking, LVVTA needs to gather data on all tests done, whether a fail or a pass is recorded, so that we can present a realistic picture to LTNZ and MoT of what's going on out in the front line. The original idea behind the full monty-only process was so that we could get the data on the fails as well as the passes.

What we need to do, therefore, is to have you record the details of each test you do where no proper Test Certificate is issued, on the accompanying 'Objective Noise Test Fail Record Form'. The form provides space for 5 vehicles. Each time you do a 'quick-check' (where the vehicle fails and no Test Certificate is issued) fill in the details required by the 'ONT Fail Record Form'. When the form is full (after 5 vehicles are done), fax or post/courier the form to the LVVTA office.

This way we're all happy; your client is happy because they've got a process that doesn't sting them, you're not copping flack from unhappy clients, and LVVTA is still getting the information it needs in order to enable us to improve the system long term.

ESMP Data

Since LVVTA set the target engine speeds within the LVV Noise Standard that the test must be carried out at, we've become aware that there is sometimes quite a difference between our 'fall-back' figures, and the actual 75% of 'Engine Speed Maximum Power' (engine speed at which the engine makes its maximum power) figures.

It is still appropriate to apply the figures specified in the LVV Standard when no ESMP data is available, however, it is necessary for you to apply the ESMP figures from the manual supplied to you by LVVTA, wherever possible. We probably did not emphasize the need for this sufficiently at the ONT training sessions. Using the ESMP manual figures will in fact result in some 'fails' which would have been 'passes' if using the figures provided in the LVV Standard, however, as we discussed at the training sessions, we have to apply the requirements properly in order to fix the problems with the system.

The ESMP manual would not apply when the engine has been modified, however if the only modification is the exhaust system itself, the ESMP manual applies.

Rules of the game

So, now, the basic rules of the game are:

- Use the 'quick-check' test before carrying out the full monty every time;
- Always use the cheap meter for the 'quick-check' (flash meter for the 'full monty' test; cheap meter for the 'quick-test');
- Never give the owner anything in writing when doing the 'quick-check' test;
- Always fill out the ONT Fail Record Form when you do a 'quick-check'.

Fee 'band' excludes GST

Just as a clarification, the price band of \$114 to \$174 does not include GST. Add GST onto whichever figure within the price band you apply. Likewise, the LVVTA office levy of \$49 is exclusive of GST. The total GST-inclusive fee to LVVTA for each test is \$55-12.

What you send away after doing a test

After carrying out an Objective Noise Test, you are required to send to the LVVTA office:

- the second copy of the Test Certificate; and
- the Form-set; and

- the fee of \$55-12.

Nothing in relation to Objective Noise Testing is sent to LTNZ, because the service you are providing is not LVV certification.

If you have any queries or require any further clarification relating to this Information Sheet, please feel free to contact Kendall Bradley at the LVVTA office on (09) 268-9550.

Tony Johnson
Chief Executive Officer
Low Volume Vehicle Technical Association, Inc