



Date: 03rd July 2018

Dear Mr.Srinivasan

Sub; Testing of Fuel Efficiency Enhancer (Wondersave) From Portoworld

We are in receipt of the above mentioned device Wondersave for testing in our Diesel Engine Generators. Diesel generators, like all machines, require to be taken proper care of to ensure its efficiency and safety of people & environment.

The following Test were performed in two stages one without the Device (Wondersave) and the second with Device (Wondersave)

1. **Stack monitoring:** This is to check whether the DG stack emission levels are appropriate and are under the limits into the atmosphere. the air through these sources might be organic, inorganic, solid, liquid or gas. The Material emitted to pollutant emitted can contain many different pollutant materials, which can harm the environment eventually. According test condition after using the device in our engines the pollution levels were found significantly low up to 70% low in terms of emission
2. **Noise:** Too much of noise can create noise pollution into the environment. Noise should always be according to the limits prescribed by the standards. Noise testing should always be done to follow the Industry best standards. This can also be taken care of by companies who are more interested in reducing carbon footprints. The testing should ensure that all protection and metering functions are working and responding to abnormal situations. According to CPCB, noise limit of DG (1000KVA) shall be 75 db (A) at 1 meter from enclosure surface, which shall be regulated by State Pollution Control Board and State pollution Control Committees. The noise level achieved without Device was 72 db and with Device it was 68 db.
3. **DG Oil test :** The most frequent cause of diesel generator failure is antifreeze. There are several ways coolant can get into the oil, head seals, pin holes in wet liners etc. By the time we see discolored oil, the problem has very likely progressed beyond a point of economical repair. Bad injectors and fuel pumps can dump serious levels of fuel into the oil sump affecting the oil's ability to function properly. If it is left undetected, a fuel system problem can cause catastrophic Diesel generator failure. Hence, This test was carried out and with Device inside the engine for continuously for more than 170 hours and in running mode the Oil state was found satisfactory.

Thanking you,

Yours truly,
For Cummins India Limited

Ajay Nawale
BR Leader - ITO Corporate Functions

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