



High nitrogen oxide emissions in tests on an Opel Zafira Diesel

The Deutsche Umwelthilfe (Environmental Action Germany, DUH) presents the results of exhaust gas measurements on a Euro 6 diesel car – Compliance of the car tested with the nitrogen oxide (NOx) emissions in the EU exhaust gas test cycle depends on the rear wheels not turning – The DUH calls on the Federal Motor Vehicle Authority (KBA) to check the vehicle type – More vehicle tests on German and foreign model diesel cars have been commissioned

Berlin, 10.23.2015: On behalf of the DUH, the exhaust emission test laboratory of Bern University of Applied Sciences in Switzerland examined the nitrogen oxide (NOx) emissions of an Opel Zafira 1.6 CDTi (first registered in August 2015, front wheel drive, mileage 6,000 km, Euro 6b). In the process, the NOx emissions measured in certain driving situations were up to 17 times higher than the Euro 6 limit value permits. The tested Opel Zafira emitted in the official test cycle (NEDC) with rotating rear wheels in three tests between 2 to 4 times more NOx than allowed. In three additional tests under 'normal' test conditions and thus with non-rotating rear wheels, however, the NOx values were below the legal limit of 80 mg/km in each case.

The exhaust emission control laboratory of Bern University of Applied Sciences works mainly for Swiss authorities. In its test report, it comes to the following conclusion: *"The measurement results show that the vehicle behaves differently when the dynamometer is operated in the 4- or 2-wheel drive mode."* Moreover, another feature has been observed with non-rotating rear wheels: with a continuous increase in the speed to 150 km/h, NOx emissions increased abruptly and exceeded the measuring scale of the analysis instrument. The test report states: *"The behaviour could be explained by a shutdown of the AdBlue (Urea) dosing unit. Similar behaviour was not detectable when operated in the 4-wheel drive mode."*

The report of the Bern-based emission test laboratory comes to these conclusions:

"The measurements carried out show the following trend: The NOx emissions in the NEDC cycle depend on the test mode of 2WD/ 4WD. In the 2-wheel drive mode the vehicle met the NOx regulations. At low speeds, NOx emissions are not always identical, and are likely to depend on the activity or the storage effect of the SCR system. The behaviour of the SCR system seems to be dependent on the test mode, since the NOx trends are different in the two test stand modes of operation."

In a letter dated 21 September 2015 – right after the start of its "Diesel fumes kill" campaign – DUH asked Adam Opel AG detailed questions regarding possible defeat devices and non-compliance with licensing requirements. The company responded on 25 September, stating: *"The technology developed by GM Software has no features that can detect whether a vehicle happens to be in emission test cycles or not."*

On 19 October 2015, after the first preliminary test results from Switzerland had come in, DUH again asked more detailed. Thereupon, the company stated, on 21 October 2015, that it had reconstructed and documented its own tests using an appropriate vehicle in accordance with legal regulations, *"both on a two- and a four-wheel roller dynamometer. The emission behaviour determined in each case does not differ from one another."* Adam Opel AG reiterated: *"The software developed by GM does not contain any features that can detect whether the vehicle is being subjected to an emission test."*

"The emissions regulations have not the goal to clean the laboratory air but air that people breathe. I see no technical reason why the NOx emissions increase drastically when the rear wheels rotate. I have no normal, technically plausible explanation for the emission behaviour of the Opel vehicle," says Axel Friedrich, International Transport Advisor.

Jürgen Resch, DUH Executive Director, states: *"We decided to start our exhaust emission tests with the Opel Zafira because we have received particularly detailed information about this vehicle regarding inconsistencies in exhaust gas treatment. We have today submitted the report to the Federal Motor Vehicle Authority which is responsible for type approval and demanded that it check the model."* Resch announced further emission tests of current Euro 6 diesel vehicles produced by German and foreign manufacturers.

"DUH had already lodged an application with the Federal Motor Vehicle Authority (KBA) for an order that binding measures be imposed in the matter of VW. Had the KBA ordered no mandatory recall, proceedings would have been instituted. In the meantime, we have sought to obtain a copy of the order pronounced vis-à-vis Volkswagen. There has as yet been no response from the KBA," Remo Klinger, a Partner with law firm Geulen & Klinger, who represents the DUH in official proceedings, stated.

The report issued by the exhaust emission control laboratory at the Bern University of Applied Sciences concerning the NOx emission measurements of the Opel Zafira Diesel Euro 6b can be found here: <http://l.duh.de/p231015a>. Press photos are available here: <http://l.duh.de/pmozpics>. Please state the copyright of the images ("Holzmann/DUH") when using them.

Environmental Action Germany (DUH) is responsible for the content of this press release.

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