

The Corrective Violation Ticket: A Realistic Approach to Smoke-Belching

Air pollution in Metro Manila is dangerously high and, according to a recent study, 65% of this pollution comes from vehicle emissions.

All fuel-burning vehicles, even those in the best condition, produce harmful exhaust, which causes a certain amount of unavoidable pollution. This will remain to be a consequence of urban living as long as internal combustion engines are used to power vehicles.

But, while it is true that some pollution is unavoidable, excessive pollutants emitted by vehicles which are not in good working order can be controlled. Philippine law has already established a measurable limit for vehicle exhaust emissions, and all vehicles are required to undergo annual testing to ensure they are in compliance. For a variety of reasons, however, the existing testing program is not effective. Properly managing the testing centers would be the easiest way to solve this problem, but government is either unable or unwilling to do this.

Law enforcement agencies, therefore, have resorted to conducting random testing, through the use of checkpoints set up at temporary sites along Metro Manila roadways.

At a typical checkpoint, spotters identify smoke-belching vehicles visually, and relay their description to flaggers, who stop the vehicles for on-the-spot testing. A device called an *opacimeter* is then used to analyze the vehicle's exhaust. After testing, vehicles found to be in violation have their license plates removed, and the operator is issued a citation and instructed to make necessary repairs.

Confiscated license plates are turned over to the Land Transportation Office (LTO). To reclaim his plates, a violator must obtain an Emissions Clearance certificate from an accredited emission-testing center. Then he must present the clearance certificate, and pay the fine, at the LTO. This is intended to ensure that non-compliant vehicles are repaired before being allowed to return to the road.

The checkpoint method has been used in Metro Manila for several years, but has produced no noticeable reduction in pollution. This point alone warrants reconsideration of the program. And, as with traffic control in general, the answer lies in very simple enforcement.

Weaknesses of the current procedure

A typical checkpoint involves more than a dozen enforcers, often including representatives from multiple agencies, and a single testing device. As described in the recently published ordinance of one city in Metro Manila, a single Anti-Smoke Belching Unit typically consists of:

- 1 Team Leader
- 2 Apprehending Officers
- 1 Machine Operator
- 1 Prober
- 1 Standard Team for Detection and Recording of STDR (optional)
- 3 Flaggers
- 2 Spotters
- 2 Plate Detachers
- 1 Plate Keeper

Despite the mind-boggling size of these teams, only one vehicle can be tested at a time, and it is unlikely that more than 10 vehicles can be tested per hour. This is an estimate based on personal observation, but it strongly suggests that the total number of smoke-belching vehicles identified during a full day of work at any one checkpoint is insignificant. In my own informal survey, conducted on a Friday afternoon at the intersection of EDSA and Ayala Avenue in Makati, I counted exactly 100 vehicles emitting clearly visible exhaust over a 1-hour period. That is 10 times

the number I estimate a single checkpoint can process in the same period.

Based on information presented at the Clean Air Summit recently held in Quezon City, it appears that there are fewer than 20 opacimeters in service throughout the whole of Metro Manila (and the presentation did not mention whether all of those devices are actually in working order). Given the number of personnel required to man a typical checkpoint, it is unlikely that more than a few checkpoints are ever in operation at the same time throughout the metropolis. In addition, these checkpoints are set up and remain at the same location for several hours. Drivers who know their vehicles are not in compliance simply avoid the area.

Considering the best possible results this method could produce, even operating aggressively, it is safe to say that the checkpoint program is simply the wrong answer to the problem. The incredibly small scale of the program renders the approach nearly useless against the huge number of smoke-belching vehicles on Metro Manila roadways. The cost, in terms of equipment and manpower, combined with the absolutely insignificant impact this method can possibly have on pollution, strongly suggests that a new approach is needed.

A new approach: The Corrective Violation Ticket

Whether testing is done at the annual inspection phase or at a random roadside checkpoint, the objective of emission-testing is not to "catch violators" per se. The actual purpose is to ensure that only properly maintained vehicles (i.e. those that do not belch smoke) are allowed to operate on the roadways. When a vehicle falls below that standard, it must be identified and the owner required to make the necessary repairs. As described above, compliance with emission-control laws is determined by chemically analyzing vehicle exhaust.

In the United States, all regular traffic enforcers are authorized to issue citations to the operators of suspected smoke-belching vehicles. Probable cause for issuing the citation is based, not on chemical analysis, but rather on the premise that any vehicle which emits visible exhaust can be reasonably assumed to be not in proper working order. The enforcer uses visual observation as justification for stopping a suspect vehicle, which is exactly the same justification used by Anti-Smoke Belching Unit spotters in Metro Manila.

After stopping a suspect vehicle, the American traffic enforcer issues a standard traffic citation, for a 'corrective violation'. Corrective violation tickets are more commonly known as 'fix-it tickets', since they are typically issued for violations involving repairable vehicle equipment. Upon receipt of a fix-it ticket, the violator has a window of time, perhaps 3 days, in which to correct the violation (i.e. to get the vehicle repaired). Before the end of that grace period, the owner must present the vehicle at an accredited testing center for actual chemical analysis (using the standard emission-testing device).

If, after testing, the vehicle is found to be in compliance (regardless of whether it has been repaired or if it was not in violation all along), the citation is voided and no penalty assessed. If the vehicle is found to still be in violation after testing, the citation remains valid and appropriate penalties are applied. In addition, if a violator fails to present his vehicle for testing within the allowed period, the citation also remains valid. There is no second chance for no-shows.

Legally speaking, there are only a few minor differences between the Metro Manila checkpoint system and the American 'fix-it ticket' system. Both methods involve 2 stages: *identification* and *testing*. Under the checkpoint system, large specially-organized and equipped teams are used, and both stages happen at the same time and place. In the American system, individual traffic enforcers are used, and there is a roughly 3-day gap between the identification stage and the testing stage. In the checkpoint system, violators who do not happen to pass by a checkpoint face little risk of being caught, while in the American system, enforcers are able to detect and cite violators throughout the city.

With this in mind, I suggest the following modification to the Metro Manila Anti-Smoke-Belching

strategy:

Authorize all ordinary traffic enforcers to identify and ticket suspected smoke-belchers at any point along the roadway and at any time during the performance of their routine duties, based solely on visual observation. This should not be considered a special authority. Enforcers already have the power to issue citations for a variety of violations. Smoke-belching can simply be added to the list. The standard for identification at this point is quite simple, and non-technical: *“Any vehicle emitting visible exhaust, whether standing or accelerating, can be considered in violation”*. If necessary, the Department of Science and Technology (DOST) can be consulted for technical guidance and the drafting of specific criteria, but it should be safe to assume that visible exhaust is a valid preliminary indicator that the vehicle is not in proper working order. Again, this is exactly the same criteria that the Anti-Smoke-Belching Unit spotters are using now. This is simply the identification stage.

Of course, it will be necessary to craft the appropriate rules/laws to implement the “fix-it ticket” system, including provisions to ensure that those found to be in compliance after the formal testing stage are not required to pay any fines or fees. The procedure should also ensure that those who fail to report for testing are identified and penalized.

The 'fix-it ticket' method offers a number of advantages over the current checkpoint system:

- Rather than using a large number of enforcers to test a small number of vehicles at a roadside checkpoint, the fix-it ticket method turns all enforcers into 1-man 'checkpoints'. Of course, abuse will have to be managed, but a single observant enforcer with a ticket book can easily identify a large number of violators in a very short time.
- With all enforcers authorized to cite violators, smoke-belching vehicles will no longer be able to remain on the road simply by avoiding checkpoints.
- The cost-to-benefit ratio will improve significantly. Aggressive enforcers, citing violations as they encounter them, can channel large numbers of smoke-belching vehicles to existing accredited emission-testing centers, where a single device can be used to its fullest potential. As always, fraud will have to be managed.

This strategy focuses on repair and maintenance rather than on the violation aspect of pollution control. In effect, the initial ticket offers a second chance, allowing an owner to avoid a penalty by repairing his vehicle, while at the same time using the fear of that penalty to motivate him to keep his vehicle compliant. This supports the overall goal of reducing pollution by encouraging repairs.

Since many local government units already own opacimeters, they can and should continue to operate checkpoints as they currently do. Eventually, however, this method should be phased out.

Legal and administrative issues

The average traffic enforcer, of course, is not technically qualified to test the chemical content of a vehicle's exhaust, and therefore not qualified to determine definitively whether that vehicle is in violation of emission-control laws. However, if properly trained, that enforcer could be legally qualified to make a preliminary assessment, based on DOST-approved criteria, without the need for any special certifications or authorizing orders beyond those that already allow him to detect and cite traffic violations. This is reinforced by the fact that a fix-it ticket only becomes final once the vehicle fails testing at an accredited testing center.

Administratively, fix-it tickets must be tracked, and followed up, as with all other traffic tickets. Although most drivers do pay their fines under the current system, many others simply report their license plates lost, and apply for replacement plates. This is a very large, and reportedly commonly-exploited, flaw in the current system. Effectively managing traffic tickets will add an increased workload to those already tasked with this responsibility, but this is something we should

already be doing.

Summary

Law enforcement is a very simple thing. It does not always require specialized teams, specialized equipment, or complex operations. And the battle against smoke-belchers is no different. All it really requires is simple law enforcement. Violations must be detected and penalized. As mentioned above, the annual inspection method and the checkpoint method simply do not work. The time has come to seriously consider a different approach. This paper offers such an approach which, if implemented properly, will result in a dramatic improvement in air quality in a very short time.

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