

# 桃園市政府環境保護局計畫成果中英文摘要

一、中文計畫名稱：

107 年度桃園市柴油車檢測計畫

二、英文計畫名稱：

Taoyuan City Diesel vehicle inspection Program for 2018

三、契約編號：

107020224

四、執行廠商：

茂迪環境有限公司

五、計畫主持人（包括共同主持人）：

林忠宏

六、執行開始時間：

107/3/1

七、執行結束時間：

107/12/31

八、報告完成日期：

107/12/28

九、報告總頁數：

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十、使用語文：

中文、英文

十一、中文摘要關鍵詞：

粒狀污染物、柴油車動力計檢測

十二、英文摘要關鍵詞：

Particulate pollutants, Diesel Vehicle Dynamometer Sampling and Testing

十三、中文摘要

柴油引擎因引擎輸出馬力大，油耗相對於汽油引擎來的少，被廣泛地運用在乘客或貨物的運送、工程機械等用途上。由於經濟的快速成長，使用柴油車輛也急遽增加，但柴油車輛所排放的黑煙污染物經研究顯示，對人體健康會產生嚴重影響。因此，在車輛污染管制上，除新車審驗逐步加嚴排放標準外，亦針對使

用中車輛加強管制，並宣導車主按時保養定期檢驗，以避免自身車輛成為污染元凶。

為配合環保局柴油車管制策略的運作，達成「空氣污染防治法」之目標，本計畫主要執行柴油車動力計及廠站稽查檢測，就使用中柴油車的現況，透過不定期檢驗促使車輛維修，降低污染，以有效改善桃園市空氣污染，達成環境保護之成效。

## 執行成果

本計畫依據環保署公告之「柴油汽車黑煙排放不透光率檢測方法及程序」針對柴油車進行排氣煙度試驗，統計期程自107年3月1日至107年12月31日止動力計檢測2,790輛次，馬力比不足退驗率2.0%，本市通知到檢，占了整體來源之5.7%，而代驗外縣市及自動到檢分別占了3.5%及88.8%。

扣除馬力比不足退驗，有2,735輛次執行檢測，僅驗無負載的有220輛次，執行全負載檢驗的有2,515輛次，共260輛次不合格。

統計自107年3月1日至107年12月31日止，路邊攔檢2,612輛次，依不透光率檢測程序測試，不透光率不合格753輛，其中577輛次選擇污染度檢測程序之車輛，共165輛次不合格，最終判定不合格341輛次，不合格率為13.1%。

## 十四、Abstract：

Diesel engine is widely used in passenger / cargo transportation and heavy engineering machines thanks to its significant power output and relatively less fuel consumption than gasoline-fueled engine. The rapid growth of economy in turn drives the booming increase of diesel vehicles. However, studies have shown that the emission of diesel vehicles has great impact to human health. As a result, when it comes to the control of vehicle pollution, in addition to more rigorous emission criteria for new vehicle inspections, it is necessary to have tighter control over vehicles in use and educate the owners of these vehicles for regular vehicle maintenance and on-time emission inspection in order to prevent their vehicle from becoming mobile source of pollution.

As an effort to work with the diesel vehicle control strategy of the Environmental Protection Bureau to reach the objectives of the “Air Pollution Control Act,” this project is focused on the inspections of diesel-powered vehicles and facilities using dynamometer. For diesel vehicles in use, random inspections are introduced to encourage vehicle servicing and reduce pollution in order to achieve the goal of improving air pollution and environmental protection in Taoyuan City.

### **Implementation results**

For the purpose of this project, emission smoke test was performed on diesel vehicles based on the “method and procedure for the emission smoke test on diesel-fueled vehicles.” During the period from March 1 to December 31 2018, 2,790 vehicles were tested on dynamometer and 2.0% of the tested vehicles were rejected for insufficient specific power. 5.7% of the tested vehicles reported in for testing on the notification of the city Hall. 3.5% and 88.8% of the tested vehicles came from other counties/cities and were brought to inspection stations by the owners, respectively.

With those of insufficient specific power rejected from testing, 2,735 vehicles were tested, including 220 tested at no load and 2,515 tested at full load. 260 vehicles failed the test.

A total of 2,62 vehicles were pulled over for the opacity test from March 1 to December 31 2018. 753 failed the opacity test and the owners of 577 of them chose the pollution test and 165 failed the test. The final ruling was that 341 vehicle failed all tests for a failure rate of 13.1%.