Introduction

Pursuant to RSMo. 643.337.2, the Missouri Department of Natural Resources (Department) and the Missouri State Highway Patrol (MSHP) are issuing a joint annual report on the status of the vehicle emissions inspection program, known as the Gateway Vehicle Inspection Program (GVIP). This report summarizes GVIP compliance and incidents of fraud during the 2020 Fiscal Year (July 1, 2019-June 30, 2020) and provides recommendations to improve oversight measures. Additional reports related to GVIP are available at: https://dnr.mo.gov/gatewayvip/AnnualReports.htm.

Background

The GVIP is a federally required air pollution control strategy in the St. Louis area. Currently, the 2015 ozone nonattainment area includes St. Charles and St. Louis counties, the Boles Township of Franklin County, and the City of St. Louis. Historically, all of Franklin and Jefferson Counties were nonattainment for previous ozone standards and therefore both counties, in entirety, are currently part of the GVIP. Although the Department has requested to remove the requirement of vehicle emissions testing in Jefferson and Franklin counties, testing is still required pending approval by the Environmental Protection Agency.

Since the 1980s, the Department has overseen an inspection/maintenance program for vehicles located in the St. Louis area.
The Missouri Air Conservation Commission promulgated 10 CSR 10-5.381, “On-Board Diagnostics Motor Vehicle Emissions Inspections,” effective August 30, 2007. This rule established state regulations that the Department and MSHP currently use to oversee and enforce the emissions testing requirements of GVIP. The Department is the lead agency for emissions inspections and the MSHP is the lead agency for safety inspections.

Worldwide Environmental Products, Inc. (WEP) has held the GVIP contract for the State of Missouri since June 12, 2017.

Station Licensing

As of June 2020, Missouri had 796 public and 27 private or government owned active licensed GVIP stations and 4,568 active licensed inspector/mechanics. A current directory of licensed GVIP stations is available at: http://www.missourigvip.com/Stations.

Vehicle Inspection Data

Each licensed GVIP station performs vehicle inspections using a Missouri Decentralized Analyzer System (analyzer system). This analyzer system sends real-time inspection information from inspection stations directly to the GVIP Vehicle Inspection Database (VID). The Department, MSHP, Department of Revenue (DOR), and DOR contract license offices have access to the database through secure Internet connections. During Fiscal Year 2020 (FY2020), GVIP stations conducted 829,629 initial emissions inspections.

The goal of the GVIP is to identify and address vehicle emission related problems thereby contributing to air quality improvements in the St. Louis region. Only 17,965 vehicles in FY2020 failed their initial emissions test. This yields an initial compliance rate of 97.8%. Of the 829,629 vehicles that completed initial emissions inspections, 823,849 eventually passed, resulting in a final compliance rate of 99.3%.

Emissions Waivers and Exemptions

10 CSR 10-5.381(3)(K), enables the Department to issue waivers and exemptions from GVIP requirements. Just like inspection results, waivers and exemptions issued by the Department are available for real time verification by DOR, DOR contract license offices, and the DOR plate renewal website via the VID.

- Cost-Based Waivers – granted by the Department if motorists spend a specified amount on emissions-related repairs after the vehicle fails an initial emissions inspection and still are unable to pass the emissions test. During FY2020, the Department received 395 repair and estimate of repair waiver requests. Staff issued 115 cost-based repair related waivers and issued 31 denials or close-outs due to inadequate repairs or responses. Staff issued 158 estimate based waivers, which provide motorists two years to bring their vehicle into emissions compliance. The Department denied or otherwise closed out another 23 requests. In addition, 8 vehicles passed a post-waiver application emissions inspection after owners were told by the Department that a retest was required as part of the waiver process. Staff also investigated and approved 79 ‘Technical Waivers’ for vehicles unable to pass the emissions inspection due to inspection software issues.
· **Out-of-Area Waivers** – granted by the Department for vehicles that are registered within the ozone nonattainment area but not driven in the area during the registration period. During FY2020 the Department received 444 applications. The Department issued 375 Out-of-Area waivers, primarily for businesses such as AT&T and Spire Energy. Of these applications, 34 were either denied by the Department or determined unnecessary.

· **Reciprocity Waivers** – granted by the Department for vehicles registered within the ozone nonattainment area but located in another state. These vehicles must pass an equivalent emission inspection in that state. During FY2020, the Department issued 19 reciprocity waivers.

· **Mileage Based Exemptions** – granted by the Department for vehicles documented to meet mileage waiver criteria as specified in the rule. During FY2020, the Department received 2,285 applications, 696 of which came from motorists who visited the Department’s St. Louis Regional Office. Department staff issued 2,049 Mileage-Based exemptions. Of these applications, Department staff denied 40 applications and deemed 23 unnecessary for various reasons (e.g. such as already passing an emissions test).

**Data Oversight Methods**

*Real Time Inspection Data/Paperless Inspection Verification*
Analyzer systems connect to the GVIP VID using an Internet connection, uploading the data immediately for inspection verification. Entities that use the VID for inspection verification include the Department, the MSHP, WEP, DOR, DOR contract license offices, and the DOR plate renewal website. This allows license offices to quickly identify fraudulent vehicle inspection reports, deny vehicle registrations, and report issues of concern so that investigations can begin immediately. These investigations entail some, if not all, of the following: determining the source of the fraudulent inspection reports, mandating legitimate inspections for the vehicles, and prosecuting parties in criminal court.

*Bulletin Messaging and Documents Menu*
Each analyzer system contains a messaging program that allows the Department, MSHP, and WEP to contact GVIP stations, individually or collectively, to inform inspectors and mechanics about inspection procedures, billing reminders, and software updates. WEP has equipped each analyzer system with a “Document” menu, which will store and print GVIP regulations and fact sheets, as well as forms for comments, waivers, and exemptions. This has simplified the distribution of public information to inspection stations and to vehicle owners.

*Technical Service Centers for Consumer Protection*
Cost-based waivers allow a vehicle to be registered and operated for up to two years following a failed emissions inspection after receiving qualifying repairs. Therefore, the Department strives to ensure repairs made to vehicles receiving a cost-based waiver are appropriate and beneficial. Through negotiated contracts, the Department retains the services of approximately 13 vehicle repair facilities to serve as Technical Service Centers. These Technical Service Centers employ Missouri Recognized Repair Technicians who are certified by the National Institute for Automotive Service Excellence in specific areas, specializing in diagnosing the cause of a failing emissions test.
These Technical Service Centers:

- Diagnose readiness monitor issues with specific makes and models. This helps identify vehicles requiring special testing circumstances and smooths the path for future testing.
- Diagnose vehicles that received repairs, but show no signs of improvement.
- Review work performed on vehicles and examine receipts to determine if repairs performed were necessary and performed as billed.
- Provide motorists with accurate diagnostic information on how best to repair their vehicle to pass an emissions test.

The Department can deny cost-based waiver requests if reviews show repairs were not appropriate for correcting the emissions failure. Many times the Department works with shops that performed the initial repairs to reimburse the motorist or provide additional free repairs. Using Technical Service Centers reduces the number of cost-based waivers, thereby minimizing emissions from waived vehicles while also maximizing the number of fully repaired vehicles.

Equipment Oversight Methods and Tools

*Laptop Audit Computers with Wireless Internet Access*
Department and MSHP auditors use laptop computers with both analyzer system software and customized auditing software. These allow auditors to securely access the VID to conduct audits and review inspection records for all stations and inspector/mechanics while in the field. Once the auditors complete an audit, staff managers can immediately review audit results and generate summary audit reports from the inspection database. This allows for a quicker Department response when identifying fraudulent inspections and procedures.

*Digital Cameras*
Each inspection system includes a digital camera. The analyzer system’s software requires licensed inspector/mechanics to photograph the rear license plate, the dashboard vehicle identification number, and the odometer. The inspector/mechanics attach these photographs to the vehicle inspection reports on the VID where they are available for review and comparison to previous inspection reports. Using the VID, the Department and MSHP are then able to identify inspector/mechanics taking improper or no photos prior to inspections.

*Fingerprint Readers*
Each inspection system includes a digital fingerprint reader. The software requires licensed inspector/mechanics to scan one finger before beginning inspections. Fingerprint readers in combination with the trigger reports described below have dramatically improved enforcement efficiency by documenting and pinpointing inspector/mechanics conducting inspections improperly.

**Enforcement**

*Station Audits*
The Department and MSHP conduct overt and covert audits of GVIP stations. During covert audits, the Department uses a fleet of four vehicles altered to fail. These vehicles help the Department assess the effectiveness of emission tests and prevent fraud at test stations. The
MSHP also has a vehicle with defects to help MSHP staff evaluate safety inspections at stations. During FY2020, the Department conducted 182 overt analyzer and inspector audits and 615 data audits of GVIP stations. Overt and covert audit numbers have decreased in FY2020 due to the COVID-19 pandemic physical distancing measures. Neither, the Department nor MSHP conducted covert vehicle inspections, due to staffing and distancing measures. MSHP conducted approximately 2,274 overt audits.

Trigger Reports
Once uploaded to the inspection database, inspection data becomes available to the Department, MSHP, DOR and the state’s contractor via an Internet-based reporting software suite.

The Department and MSHP are working with WEP to create the ability to run “trigger reports” to identify patterns in emissions or safety inspections that indicate deviations from state regulations. The trigger reports will provide evidence to initiate an investigation.

Clean Scanning
Fraudulent inspection activities, such as clean scanning (the illegal act of connecting an analyzer system cable to a different vehicle than the one identified on the inspection report in order to bypass the required test), violate the Clean Air Act. Fraudulent inspections are prosecutable by the U.S. Attorney’s Office. The Department and MSHP collaborate with the criminal investigation division of the U.S. Environmental Protection Agency and the U.S. Attorney’s Office on investigations of vehicle inspection fraud and inspection document falsification.

The Department finalized four enforcement cases with monetary penalties during this reporting period.

Equipment Lockouts and License Suspensions/Revocations
The MSHP and WEP have the ability to apply an electronic “lockout,” which prevents an individual inspector/mechanic or a GVIP station from using their analyzer system(s). Lockouts can be implemented for a variety of reasons. Some common reasons for lockouts include completing an inspection without photos, performing excessive offline testing, failing an audit, using unauthorized equipment, or for lack of payment. During FY2020, the MSHP and WEP initiated 166 lockouts. The removal of a lockout occurs upon the completion of the license suspension or the correction of the violation.

The Department and MSHP continuously investigate additional GVIP stations and inspector/mechanics for improper inspection activities.

Oversight Results

The GVIP prevents registration fraud by investigating and identifying individuals producing fraudulent inspection reports. The Department and MSHP continuously investigate additional GVIP stations and inspector/mechanics for improper inspection activities.

When implemented in 2007, GVIP introduced an improved auditing system, streamlining the Department and MSHP oversight of safety inspections and testing of emissions-control systems. These oversight methods empower the Department and MSHP to produce cost-effective audits,
detect fraud, and enforce state regulations regarding safety inspections and emissions testing.

**Recommendations for the Future**

The Department and MSHP continually strive to improve our ability to detect fraud and ensure accuracy of data. The Department continues to move forward by identifying areas of possible improvement to the GVIP, including:

- Continue evaluating the ability for GVIP inspection facilities to authorize mileage-based exemptions through the VID. This process would use data already in the inspection system. The motorist would not pay an additional fee, and the shop would not pay associated emission inspection fees.

- Continue efforts to seek and prevent fraudulent inspection procedures and clean scanning. With ongoing improvements to the reporting system, and varied covert audit techniques, the Department and MSHP will continue to improve our ability to identify improperly conducted inspections.

- Continue working with DOR to improve the registration process through identifying and preventing invalid registration obtained with counterfeit inspection reports, ensuring individual licensing offices conduct proper verifications, minimizing problems or confusion with GVIP exempted vehicles, and minimizing issues associated with online registrations.

- Continue efforts to coordinate with DOR and the Missouri Attorney General’s Office Consumer Protection Division to bring enforcement action against used car dealers who fail to meet the requirements of RSMo. 643.315.4.

**Conclusion**

The Department and MSHP oversight has elevated GVIP to stand among the top vehicle inspection programs in the country. Thanks to GVIP and other efforts to control air pollution in the St. Louis area, design values for ozone continue to be at historic lows. In an effort to achieve higher compliance, the Department and MSHP will continue working with WEP to refine the oversight tools needed to identify violations and improve enforcement capabilities. Both agencies will continue to ensure compliance with state statutes and rules, remove violators from the program, and work for the public health and safety by overseeing an inspection program that has proven value and integrity.

The Department is proposing an amendment to 10 CSR 10-5.381, to reduce the size of the area where the motor-vehicle inspection and maintenance requirements of the GVIP apply by removing Franklin and Jefferson Counties from the rule. Eliminating these counties from the requirements of this rule corresponds with Missouri’s State Implementation Plan (SIP) revisions addressing changes in designations to the St. Louis area of Missouri for the 2015 8-hour ozone National Ambient Air Quality Standards (NAAQS). The Department’s tentative schedule for a rulemaking public comment period is Summer 2021. If the Missouri Air Conservation Commission adopts the rule amendment, it could become effective in early 2022. However, the proposed removal of the inspection and maintenance requirement for Franklin and Jefferson Counties will not be implemented until July 1, 2022.