

Salt Lake County Health Department

Health Regulation

#22

VEHICLE EMISSIONS CONTROL PROGRAM

Adopted by the Salt Lake County Board of Health

September 5, 1996

Revised Amended:

March 5, 1998,

April 6, 2006

May 1, 2014

XXXXX XX, 2024

**Under Authority of Utah Code Ann. ~~§§ Section~~ 26A-1-109(8), 26A-1-114,
26A-1-121(2)**

1. PURPOSE & APPLICABILITY OF REGULATION

- 1.1 The Purpose of this Regulation is to reduce air pollution levels through the implementation of a motor vehicle Inspection/Maintenance Program (I/M Program) by performing inspections, as required, of in-use motor vehicles and by requiring emissions related adjustments/repairs for those vehicles that fail to meet prescribed standards so as to: protect and promote public health, safety and welfare; improve air quality; comply with ~~F~~ederal ~~R~~egulations, including the Clean Air Act, and its amendments and regulations; comply with the Utah State Implementation Plan; and comply with Utah ~~S~~tate ~~L~~aw governing Salt Lake eCounty emissions inspection programs.
- 1.2 This Regulation applies to owners of motor vehicles in Salt Lake County; publicly owned vehicles operated in Salt Lake County; owners, operators, and managers of I/M Stations within Salt Lake County, I/M Inspectors, suppliers of analyzer equipment, and gas calibration.

2. DEFINITIONS

For the purposes of this Regulation, the following terms, phrases, and words shall have the meanings herein expressed:

- 2.1. “Accuracy” ~~shall~~ means the degree by which an instrument ~~is able to determine~~ determines the true concentration of pollutants of interest.
- 2.2. “Air Intake Systems” ~~shall~~ means systems that allow for the induction of ambient air, including preheated air, into the engine combustion chamber for the purpose of mixing with a fuel for combustion.
- 2.3. “Air Injection Reaction system” or “AIR” ~~shall~~ means a system for providing supplementary air into the vehicle's exhaust system or cylinder head(s) to promote further oxidation of HC and CO gases and to assist catalytic reaction.
- 2.4. “Analyzer” ~~shall~~ means a computerized OBD analyzer or OBD/engine exhaust gas analyzer and associated inspection equipment. The analyzer includes the OBD scanner, the gas cap tester, the enclosure cabinet and may include the engine exhaust gas analyzer and the sample handling system.
- 2.5. “Audit” ~~shall~~ means an onsite investigation or collection and analysis of data by an Auditor for the purpose of determining I/M Station and Inspector compliance with this Regulation.

- 2.6. “Auditor” shall mean an employee of the Department with specific responsibilities to ensure that I/M Stations and Inspectors or automotive repair technicians are in compliance with this Regulation.
- 2.7. “Basic Engine Systems” shall mean parts or assemblies that provide efficient conversion of a compressed air/fuel charge into useful power, including but not limited to, valve train mechanisms, cylinder head to block integrity, piston-ring-cylinder sealing integrity and pre/post-combustion emissions control device integrity.
- 2.8. “Bench” shall mean the main sample processing assembly of an engine exhaust gas analyzer including detectors, sampling tubes, processor boards, infrared sources and power supply.
- 2.9. “Board” means the Salt Lake County Board of Health.
- 2.10. “Calibration” shall mean the process of establishing or verifying the accuracy of the analyzer to perform an accurate and consistent evaluation of engine exhaust using calibration gases.
- 2.11. “Calibration Gases” or “Span Gases” shall mean gases of accurately known concentration that are used as references for establishing or verifying the calibration curve and accuracy of an engine exhaust gas analyzer which are approved by the Department.
- 2.12. “Catalytic Converter” shall mean a post-combustion device that oxidizes HC and CO gases and/or reduces oxides of nitrogen gases.
- 2.13. “Certification” shall mean assurance by an authorized source, whether a laboratory, the manufacturer, the State, or the Department, that a specific product or statement is, in fact, true and meets all specified requirements.
- 2.14. “Certificate of Compliance” shall mean means an electronic record document used in the Vehicle Emissions Inspection/Maintenance Program to certify that a vehicle meets all applicable requirements of the program.
- 2.15. “CO” means carbon monoxide.
- 2.16. “Compliance Assurance List” shall mean a list created and maintained by the Department that identifies vehicles for specific enhanced inspections, including which include vehicles identified as smoking vehicles; vehicles determined of being, or suspected of being, fraudulently inspected; and vehicles known or suspected of emissions device or system tampering. Vehicles placed on this list shall be inspected at either the I/M Technical Center or Certified I/M Stations. Upon inspection at the I/M Technical Center, these vehicles may be removed from the list.

- 2.17. "County" shall mean Salt Lake County, Utah.
- 2.18. "Curb Idle Test" means an exhaust emissions test sampling and analysis performed while the vehicle engine is operating at or approximately at the vehicle manufacturer's recommended normal curb idle speed.
- 2.19. "Cutpoints" shall mean the maximum allowable concentration of carbon monoxide (CO), and hydrocarbons (HC) for a given weight, class, and model year of a motor vehicle, as determined by the Department, consistent with federal and state authority, using an approved exhaust gas analyzer system.
- 2.20. "Department" shall mean the Salt Lake County Health Department.
- 2.21. "Director" shall mean the Director of the Salt Lake County Health Department or his or her authorized representative.
- 2.22. ~~"Drift" shall mean the amount the analyzer readings change, expressed as a percentage of full scale, over a period of time. Zero Drift refers to no change of the zero reading in the zero mode. Span Drift refers to the amount of change in reading hydrocarbons and carbon monoxide when the analyzer is in the span mode.~~ "Electronic Compliance Record" means a passing emission test record transmitted electronically to Utah Division of Motor Vehicles (DMV).
- 2.23. "Emissions Control Systems" shall mean parts, assemblies or systems originally installed by the manufacturer in or on a vehicle for the sole or primary purpose of reducing emissions.
- 2.24. "Engine Switching" means when an Environmental Protection Agency (EPA) certified engine is replaced with an engine that does not meet the EPA "certified configuration".
- 2.25. "Evaporative Control System" or "EVAP" shall mean an emissions control system that prevents the escape of fuel vapors (HC) from the fuel tank, air cleaner, or carburetor float bowl and stores them in a charcoal canister to be burned in the combustion chamber.
- 2.26. "Exhaust Gas Recirculation System" or "EGR" shall mean an emissions control system that recycles or re-circulates a portion of the exhaust gases back to the engine combustion chambers to reduce the formation of oxides of nitrogen.
- 2.27. "Fleet Station" means a corporation or other business entity permitted by the Department to perform the functions of the inspection program for a privately owned fleet of ten or more motor vehicles.

- 2.28. “Fuel Control Systems” shall mean mechanical, electromechanical, galvanic or electronic parts or assemblies that regulate the air/fuel mixture in an engine to provide a combustible charge.
- 2.29. “Fuel filler Neck Restrictor” or “FNR” shall mean the obstruction, installed by the vehicle manufacturer, in the gas tank filler neck.
- 2.30. “Gas Calibration Check” shall mean a procedure using known concentrations of HC₇ and CO span gases to verify the accuracy of an analyzer in measuring HC₇ and CO.
- 2.31. “Hang-up” shall mean a condition in which hydrocarbons HC remain in the sampling system from a previous inspection or contaminated ambient air which contact the exhaust gas sample stream of the present vehicle resulting in erroneous HC readings.
- 2.32. “Heavy Duty Diesel” shall mean any diesel-powered vehicle with a gross vehicle weight rating (GVWR) of 14,001 pounds or greater.
- 2.33. ~~“Heavy Duty Diesel Inspector Certificate of Qualification” or “Certificate of Qualification” shall mean a document, issued by the Department, to verify that a person has met the requirements for becoming a Heavy Duty Diesel Inspector.~~
- 2.34. ~~“Heavy Duty Diesel Vehicle Emissions Inspection/Maintenance Program” shall mean the program operated by Salt Lake County and the Department, pursuant to Utah Code Ann. § 41, to ensure that diesel vehicles are not emitting excessive amounts of pollution in Salt Lake County.~~
- 2.33. “Hexane Equivalency Value” shall mean the value derived from multiplying the propane equivalency factor (P.E.F.), as labeled on the analyzer, by the concentration of propane recorded on the calibration gas cylinder that is used to determine the HC reading when calibration/span gas is introduced into the analyzer bench.
- 2.34. “High Altitude Specifications” shall mean tune-up specifications that have been provided, by the manufacturer, to the Environmental Protection Agency for vehicles operating four thousand (4,000) feet above sea level or higher.
- 2.35. “HC” shall mean hydrocarbons.
- 2.36. “Ignition Systems” shall mean parts or assemblies that are designed to cause and time the ignition of a compressed air/fuel charge.
- 2.37. “I/M Test and Repair Station” shall mean a Department certified and permitted and authorized by the Department where a certified emissions inspector performs vehicle emissions inspection, maintenance business permitted by the Department which engages in emissions testing and emissions related repairs to motor vehicles, and which meets the requirements of this Regulation for test and repair facilities.

- 2.38. "Inspection/Maintenance Station" or "I/M Station" shall mean a facility permitted and authorized by the Department where a eCertified eEmissions Inspector performs vehicle emissions inspection and maintenance.
- 2.39. "Inspection" shall mean a vehicle emissions inspection measuring TSI emissions levels, opacity or OBD status, and visually verifying the presence and apparent operability of emissions control systems to ensure that motor vehicles in Salt Lake County are complying with the Vehicle Emissions Inspection/Maintenance Program.
- 2.40. "Inspection Area" shall mean the area that is occupied by the analyzer, and/or opacity meter, sample hose, and the vehicle being inspected.
- 2.41. "Inspector" shall mean a person of at least 18 years of age who has successfully completed all certification requirements, who possesses a current, and valid Certificate of Qualification issued by the Department and who performs emissions inspections at an I/M Station pursuant to this Regulation.
- 2.42. "Inspector Certificate of Qualification" or "Certificate of Qualification" shall mean a document, issued by the Department, to that verifies that a person has met the requirements for becoming an Inspector.
- 2.43. "Kit Vehicles" shall mean vehicles originating from an assembly kit or specially constructed vehicles.
- 2.44. "Light and Medium Duty Diesel" shall mean any diesel-powered vehicle with a gross vehicle weight rating up to 14,000 pounds.
- 2.45. "Malfunction Indicator Light" or "MIL" shall mean a light on the vehicle's instrument panel dedicated to emissions related failures. The MIL may be a Check Engine, Service Engine Soon, or an International Standards Organization symbol.
- 2.46. "Motor Vehicle" shall mean a self-propelled motorized vehicle with an internal combustion powered engine which that is licensed for operation on public roads and/or streets. Motor Vehicles exempted from the inspection requirements of this Regulation are listed in Part 4.1.8 of this Regulation.
- 2.47. "Motorcycle" shall mean any motor vehicle having a saddle for the use of the rider and designed to travel with not more than three wheels in contact with the ground, but excluding a tractor.
- 2.48. "Non-certified Inspector" shall mean any person who has not been certified or qualified by the Department to perform inspections.
- 2.49. "Not Ready" shall mean the vehicle has not completed the associated self-test for the monitored system and is not ready to return test results for those monitored systems. It does not mean that the vehicle has failed the inspection.

- 2.50. “On-board Diagnostics” or “OBD” or “OBD II” shall mean an electronic monitoring and fault detection system installed by the manufacturer on a motor vehicle to monitor and control the vehicle’s emission controls and engine/transmission operation. For the purposes of this Regulation, the OBD II system is used for emission inspection communication purposes.
- 2.51. ~~“Out of State Deferral” shall mean a temporary emission testing exemption for a vehicle that is out of state for a department approved reason such as military, school, work, etc.~~
- 2.51. “Positive Crankcase Ventilation System” or “PCV” shall mean an emissions control system which returns crankcase vapors and blowby gases to the combustion chamber.
- 2.52. ~~“Opacity” shall mean the percentage of light obstructed from passing through the exhaust plume of a motor vehicle.~~
- 2.53. ~~“Opacity Meter” shall mean an instrument that is capable of measuring the opacity of the smoke emanating from a motor vehicle. The instrument shall be approved by the Department for this use in accordance with this Regulation as an official test instrument.~~
- 2.52. “Person” shall mean any individual, public or private corporation and its officers, partnership, association, firm, trustee, executor of an estate, the State or its departments, institution, bureau, agency, municipal corporation, county, city, political subdivision, or any legal entity recognized by law.
- 2.53. “Publicly-Owned Vehicle” shall mean a motor vehicle owned by a government entity, including but not limited to the Federal Government, any agency or bureau thereof, and the State of Utah, any agency, bureau, or political subdivision thereof.
- 2.54. ~~“Repeatability” shall mean the analyzer’s capability to provide the same value, within specified tolerances, for successive measurements of the same sample. “Renewal Course” shall mean a Department approved course that is taken by emission inspectors prior to the renewal of their Certificate of Qualification annually.~~
- 2.55. ~~“Retraining Course” shall mean either course work or hands on training required after performance deficiencies are identified by the Department. Retraining course participation will be required prior to renewal.~~
- 2.56. “Salt Lake County Board of Health” shall mean the Salt Lake County Board of Health as authorized by Utah Code ~~Ann.~~ § 26A-1-109.
- 2.57. ~~“Snap Idle” shall mean an emission inspection procedure approved by the U.S. Environmental Protection Agency for inspecting heavy duty diesel vehicles. The inspection procedure includes snapping the vehicle throttle to the maximum governed RPM while opacity readings are taken from the engine exhaust plume. “Tampering”~~

means the intentional or accidental altering of or removal of emission control systems, software and/or emissions-related equipment. It also means the use of fuels other than those required by the manufacturer's specification as found in the motor vehicle's owner's manual. It also means engine modification which may include, but is not limited to, exhaust systems, air intake systems, ignition systems, internal engine modifications, engine switching, etc.

- 2.58. "Technical Bulletin" shall mean a document, issued to Certified Emissions Inspectors and/or I/M Stations by the Department, to update, clarify or establish policies and/or procedures for their implementation in the Vehicle Emissions Inspection/Maintenance Program.
- 2.59. "Training course" shall mean a formal program, administered, conducted, or approved by the Department, for the education of Certified Emissions Inspectors in basic emissions control technology, inspection procedures, diagnosis and repair of emissions related problems, I/M Program policies, procedures, and this Regulation.
- 2.60. "Two Speed Idle" or "TSI" shall mean testing a vehicle's tail pipe emissions during an inspection for hydrocarbons (HC) and carbon monoxide (CO) using the analyzer at curb idle and 2500 RPM.
- 2.61. "Vehicle Emissions Inspection/Maintenance Program" or "I/M Program" shall mean the program operated by Salt Lake County Health Department and the Department pursuant to Utah Code Ann. § 416a-1642 to ensure that motor vehicles are not emitting excessive amounts of air pollution in Salt Lake County.
- 2.62. "Vehicle Inspection Report" or "VIR" shall mean the report printed by the analyzer at the conclusion of the inspection and indicates if the vehicle passes, fails, or is not ready for the I/M inspection.
- 2.63. "Waiver Certificate of Compliance" or "Waiver" shall mean a document, issued by the Department, used to verify that a vehicle has met the repair or adjustment requirements of the Vehicle Emissions Inspection/Maintenance Program Regulations even though specific emissions standards have not been met.
- 2.64. "Zero Air" shall mean a purified gas that has an impurity concentration below the maximum of the analytical instrument. This gas is used for both instrument calibration and component testing.

3. GENERAL PROVISIONS

3.1. Jurisdiction of the Department.

- 3.1.1. This Regulation is promulgated by the Salt Lake County Board of Health as authorized by Utah Code Ann. Section § 26A-1-121(1) and Chapter 9.04, Salt Lake County Code of Ordinances.

- 3.1.2. The Department is empowered to enforce this Regulation in all incorporated and unincorporated areas served by the Department, as authorized by Utah Code ~~Ann-~~ ~~Section~~ § 26A-1-114(1)(a) and Chapter 9.04, Salt Lake County Code of Ordinances.
- 3.2. Except as otherwise provided ~~for~~, it shall be unlawful for any person not to comply with any regulation promulgated by the Department and adopted by the Salt Lake County Board of Health.
- 3.3. Compliance with this Regulation does not constitute a defense if charged with any environmental crime or violation of any local, state, or federal law.
- 3.4. Legal ~~A~~ction taken by the Department under this Regulation does not preclude prosecution for any environmental crime that may have been committed or violation of any other local, state, or federal law.
- 3.5. Nothing in this Regulation affects or modifies in any way the obligations or liability of any person under any other regulation or provision thereof issued by the Department, any ordinance issued by Salt Lake County or any municipality located within Salt Lake County, or any state or federally issued law, including common law. However, Departmental regulations supersede other existing local and ~~e~~County standards, regulations and ordinances pertaining to similar subject matter that are inconsistent.
- 3.6. Verbal or contractual obligations shall not diminish or remove the owner's or other responsible person's obligation to comply with this Regulation.
- 3.7. "Phase out" of testing procedures no longer required by EPA or Utah State Implementation Plan allows the Department to cease portions of this Regulation.
- 3.8. The Department may limit testing facility participation for TSI through a competitive process.
- 3.9. **Severance.** If any section, subsection, sentence, clause, or phrase of this Regulation is for any reason held to be invalid or unconstitutional by a decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this Regulation.

4. SUBSTANTIVE PROVISIONS

4.1. Requirements and Exemptions for Owners, Operators, and Dealers of Motor Vehicles.

- 4.1.1. Vehicle Idling Limitation. No owner or operator of a motor vehicle shall allow or permit such vehicle to remain in an idling mode or condition for a period ~~of time~~ exceeding two (2) minutes.

(i) **Exemption to Idling Limitations.** Vehicles may be exempted from the idling limitation requirements of ~~section~~ 4.1.1 under the following conditions:

- a. For traffic conditions for which a driver has no control, including, but not limited to; stopped in a line of traffic, stopped at a railroad crossing or stopped at a construction zone;
- b. To supply power to a refrigeration unit for the purpose of cooling the contents of the cargo area of a truck or trailer;
- c. When idling is necessary for non-commercial repair or diagnostic purposes conducted by a vehicle owner or operator in a residential area;
- d. When idling the engine is required to power auxiliary equipment other than a heater or air conditioner, e.g. hoist, lift, safety or emergency lighting;
- e. When idling is necessary to cool down a turbo-charged vehicle in accordance with the manufacturer's recommendation;
- f. Emergency vehicles; and
- g. Vehicle idling is necessary for the health and/or safety of a driver or passenger, including police K-9 or other service animals.

4.1.2. **I/M Program Compliance Required.** Unless otherwise provided for in ~~Part section~~ 4.1.8, the following motor vehicles of model years 1968 and newer that are or will be registered in Salt Lake County, shall be subject to an inspection as otherwise provided for in Utah Code ~~Ann.~~ § 41-6a-1642 and performed by an Inspector at an I/M Station or approved by Department:

- (i) Gaseous or liquid petroleum powered vehicles;
- (ii) Light and medium duty diesel powered vehicles of model years 1998 and ~~newer; and~~ newer.
- (iii) ~~Heavy duty diesel powered vehicles as specified in Appendix D.~~

4.1.3. ~~A Certificate of Compliance verification will be~~ issued upon the successful completion of an ~~inspection or~~ ~~Waiver~~, or evidence that the motor vehicle has passed an ~~inspection~~ or is exempt from the I/M Program requirements as provided for in ~~Part~~ 4.1.7 of this Regulation shall be presented to the County Assessor or the Utah State Tax Commission and the Air Pollution Control Fee stated in ~~Sub-section~~ 5.1 paid as conditions-precedent to annual registration or annual renewal of registration of a motor vehicle. Certificates of Compliance from other EPA approved I/M Programs outside of Salt Lake County may be

accepted, if approved by the Department, provided those I/M Programs are as equally effective in reducing emissions.

4.1.4. Emissions Standards for Motor Vehicle Exhaust Gases.

- (i) In order to obtain a valid ~~emissions Certificate of Compliance~~ passing test record, exhaust emissions from a motor vehicle shall not exceed the maximum concentrations for carbon monoxide (CO), and hydrocarbons (HC), as specified in Appendix C, or pass an OBD inspection as established by the Department and specified in Appendix A.
- (ii) Maximum concentration cutpoints shall be determined by the Department as needed to meet the National Ambient Air Quality Standards established by the ~~United States Environmental Protection Agency (EPA)~~. The established cutpoints shall remain in effect until changed by the Department to maintain consistency with federal and state authority. Any change in the cutpoints shall be effective upon the first day of any calendar month designated by the Department. The Department shall establish cutpoints by considering the following factors:
 - a. The stringency required to meet air quality standards;
 - b. The existing ambient air quality;
 - c. The requirements for air quality programs currently in effect as promulgated by the EPA, the Utah Department of Environmental Quality, and the Department. The cutpoints established shall be part of an overall program, in accordance with EPA guidelines, to achieve the required tailpipe reductions of CO and HC from motor vehicles measured from the date this program is implemented;
 - d. The general level of emission control technology on vehicles registered in the eCounty;
 - e. The population growth and other factors which may reasonably be expected to impact air quality;
 - f. The likelihood of a particular cutpoint to achieve desired air quality goals; and
 - g. The ability to ensure compliance with the requirements of Utah Code ~~Ann.~~ § 41-~~6a-~~1642.

4.1.5. Certificate Validity Period. Unless otherwise provided, the Certificate of Compliance for Motor Vehicles shall be valid for two months from the month

issued for the purposes of obtaining vehicle registration as required under ~~Part~~ 4.1.2 of this Regulation.

4.1.6. **Publicly Owned Vehicles.** Owners of publicly owned vehicles shall comply with the I/M Program requirements in accordance with this Regulation. Federally owned vehicles and vehicles of employees regularly operated on a federal installation, located in the County, that do not require registration in the State of Utah shall comply with the emissions inspection requirements on an annual or biennial basis, pursuant to a schedule determined by the Department and as required by ~~Section~~ 118 of the Clean Air Act, 1990 Amendments.

4.1.7. **Vehicle Exemption.** The following vehicles are exempt from these Vehicle Emissions Inspection/Maintenance requirements:

- (i) Any vehicle of model year 1967 and older or that qualifies for the exemption as required by Utah Code ~~Ann. Section~~ § 41-6a-1642(4)(i);
- (ii) Any diesel vehicle of model year 1997 and older with a GVWR of 14,000 lbs. or less;
- (iii) All agricultural implements of husbandry and any motor vehicle that qualifies for an exemption as required by Utah Code ~~Ann. Section~~ § 41-6a-1642(4)(a);
- (iv) Any vehicle used for maintenance or construction and not designed or licensed to operate on the highway;
- (v) Any motorcycle or motor driven cycle;
- (vi) Any vehicle that operates exclusively on electricity; and
- (vii) Any new vehicle being sold for the first time that has a valid Manufacturer's Statement of Origin form.

4.1.8. **Compliance Assurance List**

- (i) Vehicles observed by Department staff that are suspected to be emissions device or system tampered may be placed on a Compliance Assurance List requiring inspection at the I/M Technical Center.
- (ii) Smoking vehicles observed by Department staff or I/M eCertified Inspectors may be placed on the Compliance Assurance List.
- (iii) Vehicles with an engine other than the original or an engine not offered as optional equipment from the vehicle manufacturer will be placed on the Compliance Assurance List. Upon inspection at the Salt Lake County I/M

Technical Center, vehicles with engine changes may be issued an Engine Change Verification Form provided by the Department. Vehicles issued an Engine Change Verification Form may be removed from the Compliance Assurance List and may be inspected, as required on the form, at any I/M Station.

- (iv) Initial emission tests required to be performed at the I/M Technical Center shall be charged a fee except for recalled vehicles.
- (v) Kit vehicles and specially constructed vehicles must be inspected at the I/M Technical Center to verify emissions system components and may be placed on the Compliance Assurance List.

4.2. Equipment, Manufacturer, and I/M Station Requirements.

4.2.1. Types of Permitted Stations.

- (i) I/M Station.
- (ii) I/M Test and Repair Station.

4.2.2. Permit and Plan Review Requirements of the I/M Station Permitted Stations.

- (i) It is a violation of this Regulation to own or operate a facility where inspections are performed without obtaining a valid I/M Station Permit station permit issued by the Department ~~and obtaining a Utah State Safety Inspection Station license.~~
- (ii) **Permit Application, Duration, and Renewal.**
 - a. Application for an ~~I/M Station Permit~~ a station permit shall be made upon a form provided by the Department.
 - b. ~~An I/M Station Permit~~ A station permit applicant shall ensure that the ~~I/M Station~~ station complies with all the terms stated in the permit application and all the requirements of this Regulation.
 - c. An ~~I/M Station Permit~~ approved station permit is not valid if the permit expires or if the ~~I/M Station~~station moves to a new location. The station permit ~~for an I/M Station~~ shall expire one year from the date of issuance and is not valid unless it is renewed annually, before expiration by paying the Annual I/M Station Permit Fee stated in ~~Part~~ 5.1.2 of this Regulation. If ~~an a I/M Station~~ station moves to a new location, the ~~Permit~~ is not valid until the Station has paid the I/M Station Plan Renewal Fee stated in ~~Part~~ 5.1.1 of this Regulation. It is the responsibility of the owner or operator of

the I/M Station to pursue permit renewal through appropriate channels. The permit shall be renewable within sixty (60) days prior to the date of expiration.

(iii) ~~I/M Station~~ A Permitted Station To Hold Department Harmless. In making application for an ~~I/M Station~~ permitted station repair permit or for its renewal, such action shall constitute a declaration by the applicant on behalf of the station's owner or operator that the Department shall be held harmless from liability incurred due to action or inaction of any I/M Station owner or his or her employees.

(iv) As a condition for permitting all I/M Stations, the following tools shall remain on the facility's premises for performance of the inspection and maintenance of motor vehicles unless specifically exempted by the Department:

a. A Department-approved exhaust gas and/or OBD analyzer system including an approved gas cap tester;

b. Department approved calibration/span gas for the exhaust gas analyzer;

c. ~~Department approved vehicle exhaust removal equipment;~~

c. ~~The analyzer manufacturer's instruction manual and maintenance and calibration manual which must be retained in the inspection area; and~~

c. All forms, Technical Bulletins, and other information materials issued by the Department; and

d. A Department approved emission system application guide that is at least two years current.

(v) The I/M Station Permit shall be posted on the premises, in a conspicuous location within the public view.

(vi) ~~A new I/M Station Permit applicant shall be required to submit to the Department properly prepared plans and specifications for review and approval.~~

4.2.3. ~~Free Re-Inspections:~~ Air Quality information required by the Department shall be distributed at the I/M Station to the public.

(i) ~~If a 1968 to 1995 model year non-diesel vehicle fails the initial emissions inspection, the owner or operator shall have thirty (30) days in which to~~

~~have repairs or adjustments made and return the vehicle to the I/M station that performed the initial inspection for one free re-inspection.~~

~~(ii) If a 1996 and newer non-diesel, or a 1998 and newer light or medium-duty diesel vehicle fails the initial OBD inspection, or is rejected for a not ready status, the owner or operator shall have thirty (30) days to have repairs or adjustments made and return the vehicle to the I/M station that performed the initial inspection for up to two free re-inspections.~~

~~(iii) The I/M Station shall extend the thirty (30) day free re-inspection time to accommodate the vehicle owner or operator if the I/M Station is unable to schedule the re-inspection of the vehicle within the thirty (30) day time period. The emissions inspection fee shall be the same whether the vehicle passes or fails the emission inspection.~~

4.2.4. ~~At the request of the Department, the I/M Station shall extend the free reinspection time for vehicle owner or operator who were unable to complete emissions repairs because of the unavailability of parts to make the necessary repairs. Informational pamphlets required by the Department shall be distributed at the I/M Station to the public.~~

4.2.4. An I/M Station premises shall be kept in good repair, free of obstructions and hazards, and in a safe condition for inspection purposes.

4.2.5. Station Location Permanent. To provide for the inspection of vehicles, the I/M Station shall be a permanent location which meets all applicable zoning requirements unless specifically exempted by the Department to facilitate inspections of special duty fleet or commercial vehicles.

4.2.6. **Standards and Specifications for Exhaust Gas Analyzer Systems, and Span Gases.**

(i) Approval of Engine Exhaust Gas Analyzer Systems. No inspection required by this Regulation shall be performed unless the type of system used for measuring engine exhaust gases or inspecting the OBD system of motor vehicles contained in the list of approved analyzer systems as provided by the Department.

(ii) The analyzer shall meet the requirements of the analyzer specifications referenced in Appendix A to this Regulation.

(iii) The analyzer shall be certified by the manufacturer as meeting the criteria determined by the Department.

(iv) All exhaust gas analyzer systems shall be covered by a repair warranty approved by the equipment manufacturer and the Department.

- (v) The electrical supply to the analyzer shall be able to meet the analyzer manufacturer's requirements for voltage and frequency stability.
- (vi) The analyzer shall be kept in an area that provides adequate protection from the weather, wind, moisture, extreme temperatures, or any other abuse.
- (vii) The gas analyzer printer shall be maintained in such a manner that the printing of the Certificate of Compliance and vehicle inspection report shall be clearly legible on all copies. If the printer fails to properly function, the I/M Station shall discontinue inspecting until printer function is restored.
- (viii) It shall be unlawful for any person to alter or modify the hardware or software associated with the inspection or with an approved analyzer without written application and formal written approval by the Department.
- (ix) Propane Equivalency Factor (P.E.F.). Each gas analyzer shall be identified with a valid propane equivalency factor, shown with an accuracy of at least two decimal places, (e.g., 0.52). P.E.F. confirmation shall be made on each assembled analyzer by measuring both N-hexane and propane values on assembly line quality checks. If a bench is changed in an analyzer and it results in a P.E.F. change, the manufacturer is required to update the software accordingly.
- (x) Analyzer Maintenance. ~~Exhaust gas~~ All analyzer systems shall be maintained by a Department-approved business or person. The instruments shall be in good working condition, capable of meeting calibration requirements of the Department, and operated according to manufacturer's specifications and operating procedures.
- (xi) Running Changes. Any changes to the design characteristics or component specifications that may affect the performance of an inspection instrument to be used for an official inspection in the Vehicle Emissions Control Program shall be approved by the Department. It shall be the instrument manufacturer's responsibility to verify that the changes have no detrimental effect on the performance of the analyzer.
- (xii) Calibration of Exhaust Gas Analyzers. Calibrations shall be completed in accordance with procedures and specifications set forth by the Department. A low range gas and a high range gas shall be used to perform analyzer calibration. Zero air shall be used prior to calibrations and each TSI emission inspection. Only gas blends supplied by Department approved blenders shall be used.
- (xiii) Span Gases Generally. For gas analyzers, the instrument manufacturer and its designated marketing vendors shall, on request, supply at a reasonable

cost, span gases approved by the Department to any purchaser of the analyzer. Each new or used analyzer sold by the manufacturer or designated marketing vendor shall have approved full span gas containers installed and operational at the time of delivery.

- (xiv) Any analyzer manufacturer or its authorized representative who repossesses or otherwise removes an approved I/M analyzer from an I/M Station, shall immediately notify the Department.
- (xv) Instruction Manual. A printable instruction manual shall be supplied by the analyzer manufacturer or its authorized representative for each exhaust gas analyzer sold or leased by the analyzer manufacturer and shall contain at least the following information for the analyzer:
 - a. A complete technical description;
 - b. The functional, mechanical, and electrical schematics;
 - c. The accessories and options that are included and/or available;
 - d. The model number, identification marking, and location;
 - e. Operating maintenance including daily, weekly, and monthly accommodations and procedures for maintaining sample system integrity including, but not limited to leaks, hang-up, calibration and filters. The services to be performed only by the manufacturer shall be clearly identified;
 - ~~f. Information concerning the nearest service facility where equipment can be serviced; and~~
 - f. The warranty provisions for the analyzer, including a list of warranty repair stations by name, address and telephone number. The station shall use the Department approved vendor for equipment repair or replacement.

4.2.7. Official Signs.

- (i) All I/M Stations, except fleet ~~those stations authorized to inspect only their own motor vehicles~~, shall display in a conspicuous location, in public view, on the premises an official sign provided or approved by the Department.
- (ii) The fees charged by the I/M Station for the performance of the emissions inspections, shall be posted on a clear and legible sign, and in a conspicuous location in public view. ~~Block lettering shall be a minimum size as determined by the Department.~~

4.3. Requirements for Certified Emissions Inspectors.

4.3.1. Testing and Certification of Applicant for Emissions Inspector Certification.

- (i) No person shall perform any part of the inspection for the issuance of a Certification of Compliance unless the person possesses a valid Inspector Certificate of Qualification issued by the Department.
- (ii) The Inspector shall not test their own vehicle for the purpose of registration.
- (iii) The Inspector Certificate of Qualification shall be valid only at the I/M Station where the Inspector is employed at the time of application. If the Inspector requests certification at another/additional station(s), an Inspector Transfer or Multiple Station Certification fee stated in ~~Part~~ 5.1.9 shall be required prior to performing any emissions inspections at the new location. The certificate shall expire on the same expiration date as identified on the initial Certificate of Qualification.
- (iv) Certification Application, Duration, and Renewal.
 - a. Applications for an Inspector's Certificate of Qualification shall be made upon a form prescribed by the Department.
 - b. An Inspector shall comply with all terms stated in the Certificate Application and all requirements of this Regulation.
 - c. Certificate Duration and Renewal. The Inspector Certificate of Qualification shall expire one year from the date of issuance. If the ~~C~~ertificate is renewed before expiration, the applicant shall pay the ~~A~~nnual ~~F~~ee for an Inspector's Certificate of Qualification as provided for in ~~5.1.6~~ 5.1.5. If the Inspector Certificate of Qualification has been expired longer than six months, the inspector shall be required to enroll in and complete the Department approved training course. It is the responsibility of the inspector to pursue the renewal of the Inspector Certificate of Qualification. The certificate shall be renewable sixty (60) days prior to the date of expiration.
 - d. The renewal applicant may be required to take a certification renewal course prior to expiration of Certificate of Qualification.

4.3.2. Certification Requirements.

- (i) As a condition for issuing an Inspector's Certificate of Qualification, the applicant shall demonstrate knowledge, skill, and competence of:

- a. Visual inspection and knowledge of the function of the required emission control equipment;
 - b. Operation and purposes of emission control systems;
 - c. Inspection procedures as outlined in this Regulation;
 - d. The proper use, care, maintenance, calibration and leak checking of approved analyzers;
 - e. The ability to safely conduct inspections using the analyzer, and;
 - f. The provisions of this Regulation and the Department policies and procedures.
- (ii) ~~Successfully pass a prequalifying exam prior to completing a Department-approved training course which may include a performance exam. The Performance Exam may include a hands-on performance worksheet to be signed by the applicant and instructor or other person approved by the Department and shall test skill and competence of the following: At the discretion of the Department, other I/M qualifying training or certifications may be used in lieu of the prequalifying exam;~~
- (iii) ~~Successfully pass a written exam testing knowledge, skill, and competence of:~~
- a. Operation and purposes of emission control systems;
 - b. Inspection procedures as outlined in this Regulation;
 - c. Operation of the Department-approved emission inspection instruments; and
 - d. The provisions of this Regulation and the Department policies and procedures.
- (iv) ~~Successfully pass a Performance Exam. The Performance Exam shall include a hands-on performance worksheet to be signed by the applicant and instructor or other persons approved by the Department and shall test skill and competence of the following:~~
- a. ~~Visual inspection and knowledge of the function of the required emission control equipment;~~
 - b. ~~Demonstration of skill in the proper use, care, maintenance, calibration and leak checking of approved analyzers; and~~

e. ~~Demonstration of ability to safely conduct inspections using the analyzer.~~

4.3.3. Re-qualification Requirements for Inspectors. Upon determination by the Department, Certified Emissions Inspectors shall be required to re-qualify, within a specified time period, for program updates. The notice of the re-qualification requirement shall be mailed first class mail, hand delivered by a Department representative, or sent through the messaging function of the analyzer. Failure to re-qualify shall result in the suspension or revocation of the Inspector's Certificate of Qualification.

4.3.4. I/M Station and Inspector's Duty to Inform.

- (i) If a vehicle exempted from the inspection by ~~Part 4.1-8~~ 4.1.7 of this Regulation is brought to the I/M Station for an inspection, it shall be the responsibility of the I/M Station and/or Inspector to inform the owner or operator that the vehicle is not required to have an inspection for vehicle registration purposes.
- (ii) It shall be the responsibility of the I/M Station, where feasible, to explain any information regarding the emissions inspection, or any related information that the Department may require. This includes, but is not limited to, explaining the VIR and ~~the pollution report~~ air quality information.

4.3.5. All procedures of the Vehicle Inspection/Maintenance Program shall be performed by an Inspector including:

- (i) Analyzer preparation, calibrations, and leak checks;
- (ii) Exhaust gas sampling and analysis for purposes of an official emissions inspection for issuance of a Certificate of Compliance;
- (iii) Accessing the official emissions inspection section of the analyzer; and
- (iv) All other aspects of the inspection, including but not limited to, the tampering inspection, inserting the exhaust probe, OBD connection, entering data into the analyzer, verifying that the engine is at normal operating temperature, ensuring that all accessories are off, preconditioning the vehicle, and signing certificates and inspection forms unless otherwise approved in writing by the Department.

4.3.6. Inspection Procedures and Specifications.

- (i) When a vehicle owner requests an inspection, the Inspector shall perform an official inspection on the approved analyzer as specified in Appendix A.

Performing a screening inspection in the manual mode of the approved analyzer or on a non-approved analyzer, or checking OBD readiness shall be a violation of this Regulation if the vehicle owner requested an inspection. Turning a vehicle away from an inspection with an illuminated MIL constitutes performing a screening inspection on a vehicle.

- (ii) The entire inspection shall be performed by a Certified Emissions Inspector who has been certified at the I/M Station where the inspection is being performed.
- (iii) The Inspector shall not inspect any motor vehicle with a condition which may cause injury to inspection personnel or other person or damage to the I/M Station or inspection equipment or which may affect the validity of the inspection until such condition is corrected. Such conditions include, but are not limited to: coolant, oil, or fuel leaks; low oil or low fluid levels; and carburetor gas ~~overflow~~ overflow.
- (iv) All vehicles shall be inspected according to the sequence as detailed in the design and equipment specifications referenced in Appendix A.
- (v) On vehicles that require a gas cap test as specified in Appendix A, the Inspector shall follow procedures in accordance with the analyzer specifications as referenced in Appendix A of this Regulation.
- (vi) On vehicles that require an OBD inspection, the Inspector shall follow procedures in accordance with the analyzer specifications as referenced in Appendix A of this Regulation.
- (vii) On vehicles that require a TSI inspection, the Inspector shall follow procedures in accordance with the analyzer specifications as referenced in Appendix A of this Regulation.

4.3.7. Free Re-Inspections:

- (i) If a 1968 to 1995 model year non-diesel vehicle fails the initial emissions inspection, the owner or operator shall have thirty (30) days in which to have repairs of adjustment made and return the vehicle to the I/M sStation that performed the initial inspection for one free re-inspection.
- (ii) If a 1996 and newer non-diesel, or a 1998 and newer light or medium duty diesel vehicle fails the initial OBD inspection; or is rejected for a not ready status, the owner or operator shall have thirty (30) days to have repairs or adjustments made and return the vehicle to the I/M station that performed the initial inspection for up to two free re-inspections.

(iii) The I/M Station shall extend the thirty (30) day free re-inspection time to accommodate the vehicle owner or operator if the I/M Station is unable to schedule the re-inspection of the vehicle within the thirty (30) day time period. The emissions inspection fee shall be the same whether the vehicle passes or fails the emission inspection.

(iv) At the request of the Department, the I/M Station shall extend the free reinspection time for vehicle owner or operator who were unable to complete emissions repairs because of the unavailability of parts to make the necessary repairs.

4.3.8. Repair Procedures. For purposes of this Regulation, repairs performed on a vehicle that failed the inspection shall be done according to manufacturer's specifications, following manufacturer's procedures, and directed towards the problem causing the excessive emissions.

4.3.9. Engine ~~Changes~~ Switching ~~Vehicles qualifying for inspections under this part shall not be eligible for a repair waiver.~~

(i) 1995 and older model year vehicles are allowed engine switching only if they meet the cutpoints for the vehicle model year. ~~If a vehicle has an engine other than the original, the vehicle owner or operator must have the vehicle inspected by the Department and must demonstrate to the Department that the emission control systems on that engine are equally or more effective in controlling emissions as those systems originally manufactured on the vehicle before a Certification of Compliance is issued.~~

(ii) 1996 and newer vehicles will not be allowed engine switching per EPA Engine Switching fact sheet (Memo 1A) ~~Tampering Enforcement Policy~~ and will be considered tampered vehicles under ~~section 203(a)(3) of the Clean Air Act (Act), 42 U.S.C. 7522(a)(3). section 203(a)(3)(A). Kit vehicles must be inspected by the Department and may be inspected according to the year of the engine provided that the owner or operator can provide appropriate documentation.~~

(iii) At the discretion of the Department, a letter may be issued to the vehicle owner or operator which would allow the inspection to be conducted at any permitted I/M Station during normal business hours. The Inspector would be required to call the I/M Technical Center and verify that the kit vehicles or engine change vehicle had been authorized for an alternative inspection procedure.

(iv) Kit vehicles must be inspected by the Department and may be inspected according to the year of the engine provided that the owner or operator can provide appropriate documentation.

- (v) ~~Certificates of Compliance and Waiver Certificate of Compliance. At the discretion of the Department an engine emission device label and letter may be provided to the vehicle owner or operator which would allow the inspection to be conducted at any permitted I/M Station during normal business hours. The Inspector would be required to call the technical center and verify that the kit vehicle or qualified engine switch had been provided an Electronic Compliance Record, vehicle inspection report (VIR) Compliance Waiver, and Out of State Deferral.~~

4.4. ~~Certificates of Compliance. Electronic Compliance Record.~~

4.4.1. ~~No Person shall make, issue, or knowingly use any imitation, altered, or counterfeit of an official Certificate of Electronic Compliance documentation, VIR, or waiver.~~

- (i) ~~Electronic Compliance Documentation Certificates of Compliance shall be issued through the analyzer after successful emissions test ~~or Out of State Deferral requirements are met.~~~~
- (ii) ~~Duplicate Certificates of Electronic Compliance Documentation may shall be issued to a vehicle owner or operator within the validity period of the original Certificate of Compliance. An I/M Station may not charge more than \$2.00 for a Duplicate Certificate of Compliance electronically to the Utah Department of Motor Vehicles database.~~
- (iii) ~~Vehicle Inspection Report shall not be issued to an owner or operator until an inspection has been performed as required by this Regulation. Certificates of Compliance shall not be issued to an owner or operator until an inspection has been performed as required by this Regulation.~~

4.5. ~~Waiver Certificate of Compliance Waiver, Emissions Compliance Waiver. Prior to referring the vehicle owner or operator to the Department for a Waiver Certificate of Compliance the Inspector shall verify that the repair and eligibility requirements have been met. If a vehicle owner or operator qualifies for a waiver pursuant to this Regulation, a waiver may be issued and the owner or operator shall have until the expiration of the time period, specified by the Department, in the waiver to complete the necessary repairs or replacement. After repairs are made, the owner or operator shall submit the vehicle to the Department to verify the repairs and that the vehicle is in compliance with all provisions of this Regulation.~~

4.5.1. ~~If a vehicle qualifies for a waiver pursuant to this Regulation, a waiver may be issued, and the owner or operator shall have until the registration is due for renewal to have the vehicle professionally diagnosed and to complete the recommended repairs. After repairs are made, the owner or operator shall submit repair information and receipts to the Department to verify the repairs and determine that the waiver requirements have been met and the vehicle complies with all~~

~~requirements of this Regulation. A waiver shall be issued by the Department only after the Department determines that the vehicle complies with the requirements of this section.~~

4.5.2. The Department is under no obligation to issue waivers.

4.5.3. A waiver shall be issued only under the following conditions:

- (i) The motor vehicle requires a Certificate of Compliance for registration purposes and continues to exceed applicable emissions standards after acceptable emissions related repairs, directed towards the area of failure, have been performed.
- (ii) An application for waiver has been submitted to the Department.
- (iii) An initial failing emissions test.
- (iv) Documentation submitted to the Department of a passing Utah Safety Inspection issued to the applicant vehicle within the previous sixty (60) days.
- (v) The emissions-related diagnostics and repairs, as required by this Regulation, have been performed at a certified and permitted I/M Test and Repair Station. Proof of repair costs for that specific vehicle shall be provided to the Department in the form of an itemized bill, invoice, work order, manifest, or statement in which emissions-related parts and labor are specifically identified. The repairs as required by 4.3.8 have been performed by a licensed automotive repair facility and proof of repair costs for that specific vehicle have been provided in the form of an itemized bill, invoice, work order, manifest or statement in which emissions related parts are specifically identified.
- (vi) A second failing test no older than 2 weeks prior to waiver application. The emissions control devices that were originally equipped on the vehicle from the manufacturer are in place and apparently operable regardless of the model year. Pollution control devices that have been removed or rendered inoperable shall be replaced or repaired before a waiver is issued.
- (vii) ~~The minimum spent on repair costs is at least or the Federal Consumer Price Index (CPI) whichever is greater. The vehicle is not within the time and mileage requirements of the Federal emissions warranties. Any vehicle that is within the time and mileage requirements of the Federal emissions warranties shall not be eligible for an emissions repair waiver, but shall be repaired to pass the emissions standards.~~
- (viii) ~~The minimum spent on repair costs is at least~~ Minimum repair costs are determined from grown in Consumer Price Index (CPI) from the program 1989 base year and must be at least; The 1989 \$450 waiver amount shall be adjusted

annually to the consumer price index in January of every year pursuant to 40 CFR 51.360(a)(7).

- a. ~~\$250.00 \$325.00 for 1980 model year non diesel vehicles and older;~~
 - b. ~~\$350.00 \$450.00 for 1981 to 1995 model year non diesel vehicles;~~
 - c. ~~\$450.00 \$550.00 for 1996 and newer model year non diesel vehicles;~~
 - d. ~~\$750.00 \$925.00 for 1998 and newer Light and Medium Duty Diesel model year vehicles; and~~
 - e. ~~\$1,500.00 for Heavy Duty Diesel vehicle.~~
- (ix) The emissions control devices that were originally equipped on the vehicle from the manufacturer are in place and apparently operable regardless of the model year. Pollution control devices that have been removed or rendered inoperable shall be replaced or repaired before a waiver is issued. Repairs made by the vehicle owner or operator, or by someone who does not possess a valid business license for automotive repair, may not include the cost of labor for waiver repair cost requirements.
- (x) Acceptable emissions related repairs; The vehicle is not within the time and mileage requirements of the federal emissions warranties. Any vehicle that is within the time and mileage requirements of the federal emissions warranties shall not be eligible for an emissions repair waiver but shall be repaired to pass the emissions standards.
- a. ~~Refer to those expenditures and costs associated with the adjustment, maintenance, and repair of the motor vehicle which are directly related to the area of failure and the reduction of exhaust emissions necessary to comply with the applicable emissions standards, cutpoints, and procedures;~~
 - b. ~~May include adjustments, maintenance, or repairs performed within sixty (60) days prior to the official emissions inspection;~~
 - c. ~~Do not include the fee paid for the inspection;~~
 - d. ~~Do not include costs associated with the repairs or replacements, and/or repair of air pollution control equipment on the vehicle if the need for such adjustment, maintenance, replacement, or repair is due to disconnection of, tampering with, or abuse of the emissions control systems;~~
 - e. ~~May include repairs performed to the vehicle's exhaust system to correct problems with excessive exhaust dilution or other emissions systems functionality; and~~

- f. ~~Refer to repairs and maintenance, if done according to manufacturer's specifications and following manufacturer's procedures, to the extent that the purpose is to reduce exhaust emissions to the following systems:~~
 - i. ~~Air Intake Systems;~~
 - ii. ~~Ignition Systems;~~
 - iii. ~~Fuel Control Systems;~~
 - iv. ~~Emissions Control Systems, except as noted in Sub part 4.4.2 (iv);~~
 - v. ~~Basic Engine Systems; and~~
 - vi. ~~Repair of problems identified by on-board diagnostic (OBDII) fault codes.~~
- (xi) ~~TSI emission Inspected vehicles that experience an increase in overall emissions levels from the first inspection to the final inspection shall not be eligible for a waiver regardless of the amount spent in attempting to repair the vehicle. Repairs made by the vehicle owner, or by someone other than a certified and permitted emission test and repair station, shall not include the cost of labor for waiver repair cost requirements.~~
- (xii) Acceptable emissions related repairs;
 - a. Refer to those expenditures and costs associated with the adjustment, maintenance, and repair of the motor vehicle which are directly related to the area of failure and reduction of exhaust emissions necessary to comply with the applicable emissions standards, cutpoints, and procedures;
 - b. May include adjustments, maintenance, or repairs performed within sixty (60) days prior to the official emissions inspection;
 - c. Does not include the fee paid for the inspection;
 - d. Does not include costs associated with the repairs or replacements, and/or repair of air pollution control equipment on the vehicle if the need for such adjustment, maintenance, replacement, or repair is due to disconnection of, tampering with, or abuse of the emissions control systems;
 - e. Does not include repairs performed to the vehicle's exhaust system to correct problems with excessive exhaust dilution;

- f. Refer to repairs and maintenance, if done according to manufacturer's specifications and following manufacturer's procedures, to the extent that the purpose is to reduce exhaust emissions to the following systems:
 - i. Air Intake Systems;
 - ii. Ignition Systems;
 - iii. Fuel Control Systems;
 - iv. Emissions Control Systems, ~~E~~except as noted in ~~Section~~ 4.5.3(xi);
 - v. Basic Engine Systems; and
 - vi. Repair of problems identified by on-board diagnostic (OBDI) fault codes.
 - vii. TSI emission ~~I~~nsp~~e~~cted vehicles that experience an increase in overall emissions levels from the first inspection to the final inspection shall not be eligible for a waiver regardless of the amount spent in attempting to repair the vehicle.
- g. If a part or parts is/are not available, the owner or operator may obtain a signed form to that effect from a manufacturer, dealer, or automotive repair technician who has verified the non-availability of the part(s). The owner or operator may then take such proof to the Department and request a waiver so that the vehicle may be registered.

5. LICENSES, PERMITS, CERTIFICATES, & REGULATORY FEES

- 5.1. The Department may establish and collect appropriate fees for licenses, certificates and permits as set out in this Regulation. The Department may collect appropriate fees as set out in this Regulation for the performance of services, including training courses and examinations. If information on a license, certificate, or permit application changes, the applicant shall notify the Department in writing within twenty (20) calendar days.
 - 5.1.1. I/M Station Plan Review Fee. Any applicant who applies for a new ~~I/M Station Permit~~ station permit as required by ~~Sub-part~~ ~~Chapter~~ 4.2.1 (vi) of this Regulation shall be required to remit a Plan Review Fee of an amount as provided for or as approved by the Director in the Department's Fee Schedule upon application for a new I/M Station or relocation of an existing I/M Station.
 - 5.1.2. Annual I/M Station Permit Fee. Any applicant who applies for a valid ~~I/M Station Permit~~ station permit as required by ~~Chapter~~ 4.2.1 (ii) c of this Regulation shall be required to remit a fee of an amount as provided for or as approved by the Director in the Department's Fee Schedule upon application. If the I/M Station

Permit has been expired longer than six months, the Station Permit shall be revoked.

- 5.1.3. ~~I/M Inspector Prequalifying Exam Fee.~~ Inspector Training Course and Certificate of Qualification Fee. Any qualifying applicant who registers for the Inspection Training Course and Qualification Examination applies for ~~valid~~ an I/M Inspector ~~Prequalifying Exam~~ as required by ~~in Sub-part 4.3.2~~ of this Regulation shall be required to remit a fee of an amount as provided for or as approved by the Director in the Department's Fee Schedule upon application registration.
- 5.1.4. ~~Inspector Training Course and Certificate of Qualification Fee-Hourly Fee.~~ The Department can administer, at its discretion or at the request of an I/M Station or Inspector, a refresher, recertification, or re-training course. The I/M Station or Inspector shall Any qualifying applicant who registers for the Inspection Training Course and Qualification Examination required in ~~Part 4.3.2~~ in this Regulation be be required to remit an hourly fee of an amount as provided for or as approved by the Director in the Department's Fee Schedule upon registration.
- 5.1.5. ~~Inspector Training Course Hourly Fee.~~ The Department can administer, at its discretion or at the request of an I/M Station or Inspector, a refresher, re-certification, or re-training course. The I/M Station or Inspector shall be required to remit an hourly fee of an amount as provided for or as approved by the Director in the Department's Fee Schedule per course hour upon registration.
- 5.1.5. **Annual Fee for an Inspector's Certificate of Qualification.** The fee for any Inspector who qualifies to renew an Inspector's Certificate of Qualification as required by ~~Chapter 4.3.1(iii)c~~ of this Regulation shall be required to remit a fee of an amount as provided for or as approved by the Director in the Department's Fee Schedule upon application for renewal. The annual fee shall be applicable for each I/M Station where the Inspector is currently certified. Inspectors whose certificates have been expired longer than six months shall be required to enroll in the I/M Inspector Training Course. A Prequalifying Exam shall not be required.
- 5.1.6. **Inspector Transfer or Multiple Station Certification Fee.** Any Inspector who applies for a transfer of their Certificate of Qualification or multiple station Certificate of Qualification placement, as required by ~~Sub-part 4.3.1 (ii)~~ of this Regulation, shall be required to remit a fee of an amount as provided for or as approved by the Director in the Department's Fee Schedule per transfer or station upon application.
- 5.1.7. **Air Pollution Control Fee.** The owner of any vehicle which qualifies for registration pursuant to ~~Part 4.1.2~~ of this Regulation shall be required to remit to the County Assessor an Air Pollution Control Fee of an amount as provided for or as approved by the Director in the Department's Fee Schedule upon annual vehicle registration.

- 5.2. Unless otherwise provided for in this Regulation or approved by the Director in the Department's Fee Schedule, all fees collected by the Department are non-refundable. All licenses and permits issued by the Department are non-transferable.
- 5.3. **Denial, Suspension, or Revocation of Approval or Permit.** The Department may suspend, revoke, or deny a permit of an I/M Station and/or require the surrender of the permit ~~and unused Certificates of Compliance~~ with notification and upon showing that:
- 5.3.1. An inspector at the station is in violation of this Regulation and:
- (i) The I/M Station owner or other responsible person had knowledge of the Inspector's violation;
 - (ii) The I/M Station owner or other responsible person had no direct knowledge of the violation but is found to be careless in oversight of the Inspector; or
 - (iii) The station has a history of violations.
- 5.3.2. A vehicle was inspected and issued a Certificate of Compliance by the station personnel, when the vehicle did not, at the time of inspection, comply with all applicable policies, procedures, Technical Bulletins and this Regulation;
- 5.3.3. A vehicle was inspected and rejected by the I/M Station when, in fact, the vehicle was determined, by the Department, to be in such condition that it did comply with the requirements of this Regulation;
- 5.3.4. A vehicle was inspected and issued a ~~Certificate of Compliance~~ test record and did not, at the time of ~~i~~nsp~~e~~ction, comply with the requirements of ~~Part~~ 4.3.6 regarding tampering;
- 5.3.5. The I/M Station has violated any provision of this Regulation, or any ~~R~~ule, ~~R~~egulation, Technical Bulletins, or Department policy properly promulgated for the operation of an I/M Station;
- 5.3.6. The I/M Station was not equipped as required by this Regulation;
- 5.3.7. The I/M Station is not operating within the property boundaries as specified on the permit;
- 5.3.8. An official inspection was done by a non-certified person or a non-certified person has gained access to the official inspection portion of the analyzer or a non-certified person signed a Certificate of Compliance;
- 5.3.9. The computerized analyzer has been tampered with or altered in any way contrary to the certification and maintenance requirements of the analyzer or the vehicle

being inspected has been altered or tampered with in any way so that it will pass the emissions inspection when it would not otherwise;

5.3.10. The I/M Station denies access to or conceals pertinent information from a representative of the Department during an audit or while conducting other necessary business;

5.3.11. A ~~Certificate of Compliance~~ was issued for a passing vehicle inspection report for a vehicle that was not emissions inspected according to the I/M inspection procedures; or

5.3.12. A violation of this Regulation, or any other restrictions or requirements adopted by the Board of Health.

5.4. When the Department takes administrative or legal action to suspend or revoke an I/M Station ~~p~~Permit at a location, a new I/M Station ~~p~~Permit may be issued for that location after the conditions of the suspension or revocation have been met.

5.5. **Denial, Suspension, or Revocation of Certificates of Qualification:** The Department may suspend, revoke, or deny the Certificate of Qualification of an Inspector and require the surrender of the Certificate of Qualification upon showing that:

5.5.1. The Inspector issued or caused a Certificate of Compliance to be issued without an approved inspection being completed;

5.5.2. The Inspector denied the issuance of a Certificate of Compliance to a vehicle owner or that, at the time of the inspection, complied with this Regulation for issuance of said Certificate;

5.5.3. The Inspector issued a Certificate of Compliance to a vehicle that, at the time of issuance, was in such condition that it did not comply with this Regulation;

5.5.4. The Inspector failed to re-qualify for a Certificate of Qualification within the required period of time;

5.5.5. The Inspector recorded "Passed" for the vehicle when the vehicle did not, at the time of inspection, comply with the tampering requirements of the inspection detailed in part 4.3.6 of this Regulation, regardless of whether a Certificate of Compliance was issued or not;

5.5.6. Inspections were performed by the Inspector, but not in accordance with applicable policies, procedures, Technical Bulletins, and this Regulation;

5.5.7. The Inspector allowed a non-certified person to perform an official I/M inspection or gain access to the official inspection portion of the analyzer;

- 5.5.8. The Inspector signed an inspection form or Certificate of Compliance stating that he or she had performed the emissions inspection when, in fact, he or she did not;
- 5.5.9. The Inspector signed a Certificate of Compliance prior to an inspection being performed and prior to the Certificate of Compliance being printed by the printer; and
- 5.5.10. A Certificate of Compliance was issued for a vehicle that was not inspected.
- 5.5.11. Unless otherwise provided for in this Regulation or approved by the Director in the Department's Fee Schedule, all fees collected by the Department are non-refundable. All certifications, licenses and permits issued by the Department are non-transferable.

6. AUDITS & INVESTIGATIONS

6.1. To ensure compliance, a periodic audit shall be made by a Department representative to verify compliance with this Regulation for each I/M Station. As part of the periodic audit of the I/M Station the Department representative shall, as applicable, verify that the Inspection and OBD equipment is operating correctly, perform a gas audit and leak check of each certified analyzer, examine leak check and gas calibration records, and examine inspection records and Certificates of Compliance as well as other required reports, forms, or records to see that the use of these items is in compliance with this Regulation and the policies and procedures of the Department.

6.1.1. During the time of the audit by the Department, the Department representative shall have exclusive access to the approved emissions inspection analyzer(s), inspection bays and any materials pertaining to the I/M Program at the station.

6.1.2. The Department representative may check the accuracy of the analyzer using Department gas to verify that the analyzer is reading within the tolerances established by the Department. Analyzers not reading within the tolerances shall be re-calibrated to acceptable tolerances or placed "out of service".

6.2. Authority for Department to Enter Premises.

6.2.1. **Regulated Commercial Premises.** Upon presenting proper identification, authorized representatives of the Department may enter upon the premises of properties regulated by the Department to perform routine inspections to ensure compliance with rules, standards, regulations, and ordinances adopted by the Department, the Departments of Health & Environmental Quality, county or municipal governing bodies, or the division of Occupational and Professional Licensing.

6.2.2. **Consent by Certificate or Permit Holder:** The Department shall require certificate holders or permit holders to consent to access for inspections as part of

their certificate or permit. Failure to allow access for inspections as set out in the certificate or permit may result in the suspension or revocation of the certificate or permit.

7. ENFORCEMENT MECHANISMS. If the Department has investigated or inspected any property or facility and believes the property owner or other responsible party is in violation of this Regulation or the Department has other reasonable grounds to believe that there has been a violation of any part of this Regulation or that the property owner or otherwise responsible party is not in compliance with this Regulation, the Department may take civil enforcement action as authorized by statute, rule, ordinance, and regulation and may also refer the matter for criminal prosecution. Civil enforcement may involve court or administrative actions, injunctive actions, and closures and may involve cost recovery, penalties, and other remedies. Civil and criminal actions may be brought simultaneously. A person does not need to be first adjudged liable in a civil matter before facing criminal charges;

7.1. Criminal Enforcement Actions. The Department may recommend criminal prosecution for environmental violations either alone or in conjunction with civil enforcement. Criminal prosecutions for environmental violations of state or federal law may be filed by the District Attorney, Utah Attorney General, United States Department of Justice, or other enforcement entity. ~~Factors that~~ The Department may consider the following factors, and any other relevant factors, in recommending criminal enforcement: ~~include the following factors and any other relevant factors.~~

- 7.1.1. The nature and seriousness of the offense including the immediacy of the threat of danger to the life or safety of another, or the harm or threatened harm to human health or environment;
- 7.1.2. The degree to which the violation was designed to provide economic gain or cost avoidance, or it involved a pattern of conduct or a common attitude of illegal conduct;
- 7.1.3. The degree to which the offender is a known violator and has avoided prior actions by the Department;
- 7.1.4. The degree to which prosecution might deter future violations;
- 7.1.5. The person's actual culpability in connection with the offense, ~~including the presence in connection with the offense,~~ including the presence of criminal intent;
- 7.1.6. The person's willingness to cooperate in the investigation, including whether the violator has attempted to conceal evidence or prosecution of others;
- 7.1.7. The appropriateness of referring the case to other agencies having prosecutorial interest; and

7.1.8. Possibilities of civil remedies which would be more appropriate than initiating the criminal justice process.

7.2. Civil Enforcement Actions.

7.2.1. The Department may request that the District Attorney bring an action to restrain or enjoin actions in violation of public health, environmental laws, and other laws or abate conditions in violation of such laws.

7.3. Administrative Actions.

7.3.1. The Department may, at its discretion, issue a Notice of Violation & Order of Compliance (NOV).

7.3.2. **Service of NOV.** The Department may provide notice to the owner of the property or otherwise responsible person by sending the NOV via ~~certified~~ mail to the last known address of the owner of the property or other responsible person or, the owner of the property or other responsible person may be personally served or be given notice by other methods reasonably calculated to give actual notice to the owner or other responsible party.

7.3.3. **Contents of NOV.** The NOV shall:

- (i) Describe the property and the persons believed to be in violation;
- (ii) Describe the violation;
- (iii) Describe remedial action that will comply with the provisions of this Regulation;
- (iv) Set a reasonable time for the performance of any required remedial action(s);
- (v) Describe the procedure to contest the NOV and the time limits for such a contest; and
- (vi) Notify the owner or other responsible person that if no written ~~contest~~ opposition is filed within the time required, the NOV will become final and unappealable to any administrative entity or court.

7.3.4. **Challenging an NOV.** ~~As detailed in the Department's Adjudicative Hearing Procedures, a~~ A party aggrieved by an NOV may request a review of the NOV as set forth in the Department's Adjudicative Hearing Procedures ~~departmental conference, departmental hearing, or departmental appeal~~ in writing within ten (10) days of the date of the NOV.

7.3.5. Departmental Conference, Settlement Agreements, and Stipulations & Orders.

- (i) After issuance of the NOV, the alleged violator has the option to request and attend a Departmental Conference to discuss the NOV and settlement with the Department and its legal counsel. No hearing officer will be present. The process of requesting a Departmental Conference is more fully described in the Department's Adjudicative Hearing Procedures.
- (ii) If the parties agree to a settlement, the Department will prepare, in conjunction with the District Attorney's Office, a binding Settlement Agreement or Stipulation & Consent Order which may require the payment of penalties and the costs of investigation. Parties may also agree to a settlement at any time ~~subsequent to~~ after the Departmental Conference. After signing a Settlement Agreement or Stipulation & Consent Decree, the parties waive all rights to further ~~d~~Department and court hearings or appeals. Settlement Agreements or Stipulation & Consent orders may be enforced in state courts.

7.3.6. Hearings & Appeals. Parties Aggrieved by an NOV may also request a ~~Departmental Hearing or a~~ Departmental Appeal. A hearing officer is present at these proceedings and makes a written determination. The methods of challenging an NOV are more fully described in the Department's Adjudicative Hearing Procedures. ~~Departmental Hearing Orders and~~ Departmental Appeal Orders may be appealed ~~to the entities and~~ within the time limits set out in the Department's Adjudicative Hearing Procedures.

7.3.7. Failing to respond to an NOV. If a party fails to respond to an NOV within the required time, the NOV becomes a final order unappealable to any administrative entity or court. The Department may then enforce the order in state court.

7.4. Additional Administrative Enforcement Authority.

7.4.1. The Department may declare unsanitary conditions a nuisance and cause every nuisance affecting the public health to be abated.

7.4.2. Exercise of Physical Control. The Department may establish, maintain, and exercise physical control over property as the Department finds necessary for the protection of the public health including but not limited to closing theaters, schools, and other public or private places and prohibit public gatherings. The order shall be effective immediately. Any person to whom the order is directed shall comply immediately but may petition the Director for a hearing in accordance with the Department's Adjudicative Hearing Procedures. After the hearing and depending upon the findings as to whether the person has complied with the provisions of this Regulation, the Director shall continue the order in effect or modify or revoke it.

7.4.3. **Emergency Enforcement.** If the Director finds that an emergency exists that requires immediate action to protect the public health, he or she may without notice or hearing issue an order declaring the existence of an emergency and requiring that action be taken as he or she deems necessary to meet the emergency. The order shall be effective immediately. Any person to whom the order is directed shall comply and abate the nuisance immediately; but may petition the Director for a hearing in accordance with the Department's Adjudicative Hearing Procedures. After the hearing and depending upon the findings as to whether the person has complied with the provisions of this Regulation, the Director shall continue the order in effect or modify or revoke it. If circumstances warrant because of the seriousness of the hazard, the Department may act to correct or abate the emergency without issuance of an order or directive or without waiting for the expiration of compliance time previously given in an order.

8. CRIMINAL, CIVIL & ADMINISTRATIVE PENALTIES

8.1. Criminal Penalties.

- 8.1.1. Any person who is found guilty by a court of violating any of the provisions of this Regulation, either by failing to do the acts required herein or by doing a prohibited act, is guilty of a class B misdemeanor, pursuant to Utah Code ~~Ann.~~ § 26A-1-123.
- 8.1.2. Each day such violation is committed or permitted to continue shall constitute a separate violation.
- 8.1.3. Each similar subsequent violation occurring within two years of the initial violation may constitute a class A misdemeanor.

8.2. Civil & Administrative Penalties.

- 8.2.1. Penalties may be included in a Settlement Agreement or Stipulation & Consent Order. Penalties may also be imposed by the Hearing Officer. Penalties may be assessed according to the following factors:
 - (i) The violator's history of compliance or non-compliance;
 - (ii) The violator's economic benefit of non-compliance;
 - (iii) The documented costs associated with environmental or health damage;
 - (iv) The violator's degree of willfulness or negligence; and
 - (v) The violator's good faith efforts to comply and cooperate.

8.2.2. The Director may multiply the penalty by the number of days the violation(s) occurred.

8.3. Recovery of Investigation & Abatement Costs.

8.3.1. The Department may recover its audit, investigative, and abatement expenses and costs from owners or other responsible person(s).

8.3.2. The Department may record a judgment lien on a violator's property to recover its expenses and costs.

9. EFFECTIVE DATE.

9.1. This Regulation shall become effective upon its adoption by the Salt Lake County Board of Health and the Salt Lake County Council pursuant to Utah Code Ann. § 41-6a-1642(2).

APPROVED AND ADOPTED this _____ day of _____, 2024~~3~~.

SALT LAKE COUNTY BOARD OF HEALTH

By: _____
Dan Eckersley, Chair

ATTEST:

By: ~~Ann~~ _____
DOROTHY ADAMS, MPH, LEHS
Executive Director
Salt Lake County Health Department

APPENDIX A

ANALYZER SPECIFICATIONS AND INSPECTION PROCEDURES

1. Equipment Specifications

2. Computer

Each workstation will be equipped with the same computer. The computer will be selected to minimize the obsolescence nature of personal computers. ~~It will contain the following components as a minimum. At a minimum, the computer equipment and software will be capable of interfacing, processing, performing, and integrating the functions contained in the inspection procedures, in the I/M environment.~~ Newer or faster components may be substituted if they become available and the older components can no longer be obtained.

- ~~• Windows 7 Professional.~~
- ~~• Intel Core 2 Duo E7500 processor.~~
- ~~• 2 GB RAM~~
- ~~• Onboard graphics controller capable of supporting 1024x768 resolution.~~
- ~~• Onboard LAN Ethernet controller.~~
- ~~• I/O ports: 6 USB 2.0/1.1 ports, 1 RJ45 LAN port, 3 DB-9 serial ports, 1 DB-15 VGA port, 1 DB-25 parallel port, audio jacks: line out, line in, and mic in.~~

2.1.1 Printer

Each workstation will contain a monochrome laser printer (or equivalent) including a paper tray with a 250 sheet capacity loaded with normal letter sized paper capable of printing 27 pages per minute and first pages within 5 seconds.

2.1.2 OBD Interface

The OBD interface shall be a full OBD, SAE J1978, SAE J1979, SAE HS-3000 Scan Tool Compliant device that reads emission related codes on model year 1996 and newer vehicles. It supports all protocols including CAN, VPW, PWN, ISO, and KEYWORD (KWP). The hardware interface itself will be mounted inside the enclosure. It will be connected to a 5 meter heavy duty cable which will run from the cabinet to the connector used to plug into the vehicle's DLC. The OBD system will meet the following requirements:

- The interface cable has a plug that conforms to the J1962 Diagnostic Connector specification.

- Capable of communicating with the standard data link connector (DLC) of vehicles with certified OBD systems.
- Capable of checking for the monitors supported by the on-board diagnostic system and the evaluation status of supported monitors (test complete/test not complete) in Mode \$01 PID \$01, as well as be able to request the diagnostic trouble codes, as specified in SAE J1979.

In addition, the OBD system will have the ability to capture other information such as PID counts, PCM IDs, and OBD VINs if they are available, which can be used to perform OBD “fingerprinting”.

The enclosure containing the hardware interface will supply the interface with an alternate power supply and ground. This will be used to successfully test vehicles which have either power or grounding issues.

2.1.3 Gas Cap Tester

The gas cap tester used for pressure testing the vehicle gas caps will be mounted inside of the cabinet. The tester uses a 20-foot coiled hose connected to the outside of the cabinet.

The gas cap tester will meet the following specifications:

- Measurement:
 - Flow Rate Method: Comparative reference
 - Test Pressure Regulation: 30" H₂O gauge +/- 1"
 - Flow Rate Pass/Fail Point 60 cc/minute +/- 3 cc/minute
- Operating Conditions:
 - Temperature Range: 15-110° F
 - Altitude Range: - 60-7000'
 - Humidity Range: 0-100% (non-condensing)
- PASS/FAIL Adapter:
 - Pass Setting Flow Range: 52-56 cc/min.
 - Fail Setting Flow Range: 64-68 cc/min.

2.2 Gas and OBDII Units

2.2.1 Gas Analyzer

The system used for the TSI exhaust test will contain heavy duty sample and water filtration system designed to handle high throughput and a durable pump for rapid flow rate and sample delivery.

The analyzer will meet the following specifications:

- Measurement Method is NDIR (non-dispersive infrared) for HC, CO, CO₂, electrochemical cell for O₂
- Measured Gases
 - HC, as either n-hexane or propane
 - CO, carbon monoxide
 - CO₂, carbon dioxide
 - O₂, oxygen
- Measurement Range
 - HC: 0 to 30,000 ppm, (n-hexane)
 - CO: 0 to 15%
 - CO₂: 0 to 20%
 - O₂: 0 to 25%
- Operating Environment
 - 0° to 50°C (32° to 122°F)
 - 5 to 95% humidity
 - -300 to 3,000 m (-1,000 to 9,750 ft)
- Measurement Resolution.
 - HC: 1 ppm
 - CO: 0.001%
 - CO₂: 0.01%
 - O₂: 0.01%
- Measurement Accuracy shall meet or exceed BAR97 accuracy standards.

The analyzer system will be contained in the standard cabinet. The cabinet will contain the following items on it for the analyzer:

- A fused AC power inlet-
- A connector for the sample probe-
- Three external ports for calibration-

2.2.2 Tachometer

The tachometer used for RPM pickup will make use of existing RPM measurement technologies. It will have a resolution of +/-1 RPM and will be connected to the vehicle using the following methods:

- Number one cylinder using inductive probe-
- Primary circuit using inductive probe-
- Battery tachometer using battery clamps or cigarette lighter-

The tachometer leads will hang on a hook on the outside of the cabinet and the tachometer boards themselves will be mounted inside the cabinet.

2.3 Optional Components

2.3.1 Barcode Scanner

The workstation will optionally contain a barcode scanner capable of reading both 1D and 2D barcodes. The barcode scanner will meet the following specifications:

- IP54-rated sealing protects against elements, industrial design withstands multiple 6.5 foot (2 meter) drops to concrete, reducing downtime and costs for maintenance and repairs-
- Ability to read both 1D and 2D barcodes-
- Omni-directional scanning-
- UPC, EAN, Code 39, Code 128, Codabar, Interleaved 2 of 5, Code 93
- PDF417, microPDF417, MaxiCode, DataMatrix (ECC 2000), Composite Codes, QR Code

The barcode scanner will be connected to the cabinet via a USB cable and will be powered by the same cable.

2.3.2 Camera

The workstation will optionally contain one or more USB cameras to be used for taking pictures at various times during an inspection.

3. Equipment Functional Specifications

This section describes the equipment functional specifications for the Utah Analyzer System. These specifications include the maintenance functions to be performed by the analyzers and the operating conditions.

3.1 Analyzer System

3.1.1 Operating Conditions

The gas analyzer shall operate in a temperature range from 40 °F to 110 °F. Within this range, the analyzer must operate within the performance specification described above. A proper environment will be created in order to keep the analyzer operation within these ranges except under the most extreme circumstances. Proper air flow to the gas analyzer will be provided to prevent overheating and condensation of water vapor which could reduce the reliability and durability of the analyzer.

The input power required for proper operation of the analyzer will be 115 VAC at 60 Hz. External fuses or circuit breakers will be used to protect the analyzer from power fluctuations. The operation of the analyzer should not be affected by electrical noise or voltage surges ~~which~~ that would be found in a typical garage environment.

3.1.2 Warm-up

The gas analyzer shall be stable and ready for operation within 35 seconds of being turned on when at normal operating temperatures. If a test is started while the analyzer is in warm-up, a message will be displayed stating the analyzer is not ready and the test will not be able to proceed.

3.1.3 Sampling System

The sampling system will consist of a tailpipe probe attached to a flexible sample line at least 25 feet long, a water removal system, a particulate trap, sample pump, and other flow control components. A second probe and sampling line will be available to test vehicles with dual exhaust systems. The sampling system will be durable to withstand a heavy use system, be free from leaks, and be able to be easily maintained. The system must be able to resist corrosive elements it comes in contact with and be able to withstand typical vehicle exhaust temperatures.

3.1.4 Analyzer Response Time

The response time from the probe to the display shall not exceed eight seconds to ninety percent (90%) of a step change in input nor shall it exceed twelve seconds of a ninety-five percent (95%)

step change in input. The response time for the O₂ sensor may be as long as fifteen seconds to ninety percent (90%) of full scale.

3.1.5 Gas Calibration

The gas analyzer will automatically require a gas calibration for HC, CO, CO₂, and O₂ every 72 hours (this time will be configurable). If the gas analyzer does not pass the calibration, the system will automatically lock out any more TSI emissions tests from being run.

The gas calibration will ensure that accuracy specifications are satisfied and that linearity is correct at both of the required span points. The gases used for the calibration must use BAR97 approved gases and they will be introduced into the analyzer through calibration ports on the gas analyzer enclosure. These gases will be within 2% of the required span points. The calibration procedure will be designed to minimize the amount of calibration gas used. The procedure will not use more than two liters per span point. In addition, the procedure will be designed to take less than five minutes.

The span points used for the gas analyzer calibration will be as close as possible to the following gases.

Low Point	High Point
Propane – 200 ppm	Propane – 3200 ppm
CO – 0.5%	CO – 8.0%
CO ₂ – 6.0%	CO ₂ – 12.0%

3.1.6 Single-Point Calibration Check / Audit

A single-point calibration check will be required as recommended by the manufacturer. This calibration check will use any pre-approved gas values in order to verify the calibration curve. The analyzer enclosure will be designed to allow hooking up the additional calibration gases/bottles, but they will not be a permanent part of the analyzer and may be brought in as needed.

3.1.7 Leak Check

The gas analyzer will automatically require a leak check for the sampling system at a frequency determined by the Department. If the gas analyzer does not pass the leak check, the system will automatically lock out any more TSI emissions tests from being run. A probe tip cap will be provided in order to perform the vacuum decay method of leak check.

3.1.8 Hang-up Check

Before every idle test performed by the system, a HC hang-up check will be performed. This check will be done immediately prior to the actual emission testing portion of the test. During the check, the HC value be monitored and will automatically complete when the HC value is 20 PPM or less. If the HC value does not drop below this limit within 2 minutes, the iInspector will be asked to verify the probe is not in the tailpipe. If the HC value continues to remain high, the test will abort. This check should be performed in the background while the vehicle information is being verified in order to minimize the length of the test.

3.1.9 Dilution Check

While the test is being performed, the readings will be monitored to verify that excessive dilution is not being introduced to the system. This is done by adding the CO and CO2 readings and verifying that they are greater than or equal to 6%. If the sum falls below 6%, too much oxygen is entering the system and the test will need to be restarted after verifying that the probe has not fallen out of the vehicle's tailpipe.

3.1.10 Gas Cap Tester Check

The analyzer will automatically require a check for the gas cap tester every 72 hours or at a frequency determined by the eDepartment. If the analyzer does not pass the gas cap tester check, the system will automatically lock out any more TSI and OBD emissions tests from being run if the gas cap test would be applicable for the vehicle being tested. A pass/fail standard device will be provided in order to perform the check.

3.1.11 Information Display

The software will contain a location(s) where the following information is displayed to the iInspector:

- Date of last calibration
- Date of last leak check
- Date of next required calibration check
- Gas analyzer related lockout

3.2 OBDII System

3.2.1 Operating Conditions

The OBD interface and associated components shall operate in a temperature range from 40 °F to 110 °F. Within this range, the OBD interface must operate within the performance specification described above. A proper environment will be created in order to keep the OBDII system operation within these ranges except under the most extreme circumstances. The input power required for proper operation of the OBDII enclosure will be 12 VDC. External fuses or

circuit breakers will be used to protect the analyzer from power fluctuations. The operation of the OBDII system should not be affected by electrical noise or voltage surges which would be found in a typical garage environment.

3.2.2 DLC Connector

The OBDII connector will be compliant with the SAE J1978 specification and will allow the Inspector the ability to connect to a vehicle easily. The attached cable will allow the system to connect to a vehicle located 15 feet away from the OBDII system.

3.2.3 General

The OBDII system will be compatible with most types of automotive service operating environments. The analyzer shall operate under the conditions and performance requirements listed here and in 40 CFR51. The equipment design and operation must meet all Federal requirements (contained in 40 CFR 85.2207-2231) and recommended SAE practices (i.e., J1962, J1978 and J1979) for OBDII system inspections.

ANALYZER INSPECTION PROCEDURES

1. All options used for inspection procedures, equipment specifications and program design shall meet emission reduction required by this Regulation.
2. The inspection for light duty, non-diesel fueled vehicles 1968 through 1995 model year (0-8500 lbs. GVWR) and 1968 and newer model year medium and heavy non-diesel (8501 lbs. and greater GVWR) shall consist of a TSI emissions inspection, as outlined in the analyzer software, for concentrations of hydrocarbons (HC) and carbon monoxide (CO), a functional inspection of the gas cap and a visual/tampering inspection as outlined in this Regulation.
3. The inspection for light duty, non-diesel fueled vehicles of 1996 and newer model years (0-8500 lbs. GVWR) and 1998 and newer light and medium duty diesel (0-14,000 lbs. GVWR) shall consist of an OBD inspection, as outlined in the analyzer software, and a visual/tampering inspection as outlined in this Regulation. A functional inspection of the gas cap will be included for light duty, non-diesel vehicles up to and including 2001 model years ~~and 1998 and newer light and medium diesel vehicles.~~
4. The inspection of heavy duty, diesel fueled vehicles (14,001 lbs. and greater GVWR) shall consist of a visual/tampering inspection as outlined in this Regulation and may include an OBD inspection, as outlined in the analyzer software.
5. Inspector Responsibilities:
 - a. An Inspector shall perform all facets of the official vehicle emissions inspection procedure as outlined in this Regulation.

6. Inspection Procedures:

- a. When a vehicle owner or operator requests an emission inspection, the Inspector shall perform the inspection in the official testing mode of the analyzer. Performing a training inspection or screening inspection in the manual mode of the analyzer or on a non-approved analyzer shall be in violation of this Regulation. An Inspector who has been assigned to the station where the inspection is being performed shall perform all aspects of the official inspection.
- b. NOTE: If the Inspector is unable, unqualified, or unwilling to make the required repairs or adjustments should the vehicle fail the inspection, the Inspector shall notify the owner or operator prior to performing the inspection.

7. Preparing for the inspection:

- a. TSI preparation:
 - i. The analyzer shall be online, warmed up and stabilized prior to performing a TSI emissions inspection.
 - ii. Each vehicle shall be checked to determine that it is at normal operating temperature by feeling the radiator hose associated with the thermostat or by checking the temperature gauge. All vehicles receiving a TSI emissions inspection shall be at normal operating temperature before beginning the inspection sequence. The inspection area shall be maintained between a temperature range of 41° and 110° Fahrenheit during the inspection.
 - iii. The inspection shall be performed safely with all vehicle accessories turned off, vehicle exhaust properly ventilated and the analyzer probe inserted into the exhaust pipe at least twelve inches or as directed by the analyzer manufacturer, whichever is greater.
 - iv. When inspecting a vehicle under windy conditions, the tailpipe shall be shielded from the wind with a suitable cover.
 - v. For all vehicles equipped with a multiple exhaust system that does not originate from a common point, both sides shall be tested simultaneously with an approved auxiliary probe.
 - vi. The analyzer tachometer must also be properly attached.
 - vii. The entire inspection shall take place within the reach of the analyzer hose.
 - viii. Anytime the engine stalls during the inspection, the inspection shall be restarted. If the inspection cannot be completed because of continuous

stalling, the stalling problem shall be corrected before the inspection is performed.

b. OBD preparation:

- i. The analyzer shall be online and ready prior to performing an OBD inspection. All safety protocols must be followed prior to inspections being performed. Do not connect the OBD test lead until the analyzer prompts you to do so.

8. Data gathering and entry:

- a. Only the inspector shall enter completely and accurately all information required as part of the data entry procedure for the official inspection on the analyzer.
- b. The vehicle identification number (VIN) shall be verified from the vehicle and entered accurately into the analyzer.
- c. The Vehicle Emission Control Information (VECI) label under the hood or an approved emissions system application guide, or both shall be referenced to determine what emissions devices the vehicle was originally equipped with.
- d. Vehicle emissions systems shall be inspected for the presence and apparent operability of emissions devices that may include:
 - i. Air Injection Reaction System (AIR) (diesel and non-diesel);
 - ii. Catalytic Converter (CAT) (diesel and non-diesel);
 - ~~iii. Fuel Neck Restrictor (FNR);~~
 - iii. Exhaust Gas Recirculation System (EGR) (diesel and non-diesel);
 - iv. Evaporative Emissions Control System (EVAP);
 - v. Positive Crankcase Ventilation System (PCV) (diesel and non-diesel);
 - vi. OBD II System (diesel and non-diesel);
 - ~~vii. Diesel Particulate Filter System (DPF); and/or,~~
 - viii. Selective Catalyst Reduction / Urea System (SCR) (diesel); and/or-
 - ix. Fuel Cap (gas and diesel)
- e. Emission control device information shall be accurately entered into the analyzer.

- f. Proof of compliance shall be issued electronically to the vehicle inspection database after a passing emissions test. Certificates of Compliance shall only be issued after being printed by the approved analyzer printer. Completion of certificates by hand-written information by any person or I/M Station other than the Department is strictly prohibited. The certificates and
- g. VIR shall be signed by the Inspector immediately after printing and given to the customer.
- h. If the vehicle fails the inspection, is in a not ready status for the OBD inspection or the inspection has been aborted, the Inspector shall provide a copy of the VIR and any other written materials required by the Department to the owner or operator and the Inspector should explain the VIR to the owner or operator.

APPENDIX B

PENALTY SCHEDULE

Violation (resets after 2 years of no similar violations unless revoked)	1st Occurrence	2nd Occurrence	3rd Occurrence	4th Occurrence
Failure to inspect or substituting a vehicle other than the vehicle on the test record <i>(intentional pass)</i>	Teeh Inspector : 180-day suspension and mandatory retraining	Teeh Inspector : Revocation of permit for 5 years		
	Station: 180-day suspension	Station: 270-day suspension	Station: Revocation of inspection station permit for 5 years	
Passing a failing vehicle or recording pass for tampering on a tampered vehicle <i>(gross negligence)</i>	Teeh Inspector : 30-day suspension and mandatory retraining	Teeh Inspector : 60-day suspension and mandatory retraining	Teeh Inspector : Revocation of permit for 5 years	
	Station: 15-day suspension	Station: 30-day suspension	Station: 60-day suspension	Station: Revocation of permit for 5 years
Falsifying an inspection record or emissions certificate or Failing a passing vehicle <i>(intentional)</i>	Teeh Inspector : 180-day suspension and mandatory retraining	Teeh Inspector : Revocation of permit for 5 years		
	Station: 180-day suspension	Station: 270-day suspension	Station: Revocation of inspection station permit for 5 years	
Non-certified person performing test <i>(gross negligence table)</i>	Teeh Inspector : 60-day suspension	Teeh Inspector : 180-day suspension	Teeh Inspector : Revocation of permit for 5 years	
	Station: 60-day suspension	Station: 180-day suspension	Station: Revocation of inspection station permit for 5 years	
Inaccurate or incomplete data entry <i>(incompetence)</i>	Teeh Inspector : Formal warning and mandatory retraining	Teeh Inspector : 30-day suspension and mandatory retraining	Teeh Inspector : 90-day suspension and mandatory retraining	Teeh Inspector : Revocation of permit for 5 years
	Station: Formal warning	Station: 15-day suspension	Station: 45-day suspension	Station: Revocation of inspection station permit for 5 years
Failure to follow proper test procedures <i>(incompetence)</i>	Teeh Inspector : Formal warning and mandatory retraining	Teeh Inspector : 30-day suspension and mandatory retraining	Teeh Inspector : 90-day suspension and mandatory retraining	Teeh Inspector : Revocation of permit for 5 years
	Station: Formal warning	Station: 15-day suspension	Station: 45-day suspension	Station: Revocation of inspection station permit for 5 years

Negotiated Consent Agreements

~~Technician and/or station~~ Station suspensions may be reduced in length by a Negotiated Consent Agreement which may substitute monetary penalties for part or all of the suspension time. The minimum station consent agreement amount is \$200.00. ~~The minimum technician consent agreement is \$250.00.~~

~~Negotiated Consent Agreements~~ Initial Tester/Technician and/or station suspensions may be reduced in length by a Negotiated Consent Agreement that may substitute monetary settlements for part or all of the suspension time for each violation incurred under the penalty schedule. Consent Agreements for stations shall be based on 50% of the ~~maximum~~ emission inspection fee multiplied by the actual number of ~~Certificates of Compliance~~ inspections completed during the equivalent suspension time frame prior to the violation. ~~Consent agreements shall not exceed \$1,667.00 for every 30 day period contained within a suspension, and shall have a maximum amount of \$10,000.00 for a six month suspension. Consent agreements for the tester/technician shall be based on \$100 increments for any 7 day period or portion thereof up to a maximum of 180 days. Negotiated Consent Agreements are only applicable in relation to suspension. Subsequent violations under each violation category are not eligible for Negotiated Consent Agreements.~~

Violations that have been determined to be intentional or flagrant shall result in the maximum penalties. Permit revocations are not eligible for Negotiated Consent Agreement.

APPENDIX C

SALT LAKE COUNTY EMISSION STANDARDS/CUTPOINTS Motor Vehicle Emissions I/M Program

The following schedule gives the maximum allowable concentrations for carbon monoxide (CO) and hydrocarbon (HC) for both cars and trucks as determined by an approved infrared engine exhaust gas analyzer using prescribed inspection procedures.

All Passenger Vehicles
1978 and older light duty trucks 6000 lbs. GVWR or less
1979 and newer trucks 8500 lbs. GVWR or less

MAXIMUM CONCENTRATION STANDARDS

MODEL YEAR	PERCENT CARBON MONOXIDE	PARTS/MILLION HYDROCARBON
1968-69	6.0	800
1970-74	5.0	700
1975-76	4.0	600
1977-79	3.0	500
1980	2.0	300
1981 & newer	1.2	220

Heavy Duty Trucks and Vans
1978 and older 6001 lbs. GVWR or more
1979 and newer 8501 lbs. GVWR or more

MAXIMUM CONCENTRATION STANDARDS

MODEL YEAR	PERCENT CARBON MONOXIDE	PARTS/MILLION HYDROCARBON
1968-69	7.0	1500
1970-78	5.0	1200
1979-80	4.0	1000
1981 & newer	3.5	800

NOTE: These should be considered as "cutpoints" for maximum allowable emissions levels. Vehicles must never be reset to these emissions levels when re-adjustments are made, but rather shall be adjusted to manufacturer's specifications. By using manufacturers' specifications, the emissions levels should be well below these cutpoints.

APPENDIX D

~~HEAVY DUTY DIESEL INSPECTION AND MAINTENANCE PROVISIONS~~

~~Appendix D is applicable only in Salt Lake County.~~ Heavy Duty Diesel vehicles shall meet the applicable provisions in the regulation and these Heavy Duty Diesel provisions specified herein:

~~1. I/M Program Compliance Required~~

~~Heavy duty diesel powered vehicles of model years 1968 and newer that are or will be registered in Salt Lake County, shall be subject to an inspection as otherwise provided for in Utah Code Ann. § 41-6a-1642 performed by an Inspector at an I/M Station or approved by the Department.~~

~~2. Heavy Duty Diesel Testing Procedures~~

~~Heavy duty diesel powered vehicles (16,001 and heavier GVWR) will be tested using the procedures as outlined in *Specifications for the Diesel Inspection and Maintenance Program*. This procedure is based on the Society of Automotive Engineers (SAE) paper J1667.~~

- ~~(i) The entire diesel inspection shall take place within the reach of the Diesel inspection equipment hoses and/or electrical leads.~~
- ~~(ii) The engine temperature shall be brought up to normal operating temperature. Ambient temperature for an analyzer shall be maintained between 41 degrees Fahrenheit and 110 degrees Fahrenheit during the diesel inspection.~~
- ~~(iii) The diesel inspector shall accurately identify and enter vehicle and owner information from the vehicle to be tested as required by the data entry process.~~
- ~~(iv) The Diesel Inspector shall determine the appropriate test procedure to follow depending on vehicle type and proceed with the test procedures as recommended by EPA and the Society of Automotive Engineers (SAE).~~
- ~~(v) The Diesel Inspector shall not inspect or test any motor vehicle with a mechanical condition which may cause injury to inspection personnel or damage to the Diesel I/M station or test equipment or which may affect the validity of the test, until such condition is corrected. Such conditions include, but are not limited to: coolant, oil, or fuel leaks, low oil or low fluid levels.~~

- (vi) ~~Any time an engine stalls during a Diesel Inspection, the test shall be re-started. If an inspector cannot complete a test because of continuous stalling, fluctuating RPM measurements, or RPM measurements that are not within the Department specified parameters, then these problems shall be corrected before the test is continued.~~
- (vii) ~~For vehicles with multiple exhaust outlets, the Diesel Inspector shall observe the outlets during the pre-conditioning or clean-out cycle to determine which outlet emits the heavier exhaust smoke. During testing, the sample shall be taken from the exhaust outlet which emits the heavier smoke, if there is a difference in smoke levels.~~

3. ~~Heavy Duty Diesel Tools Required~~

~~Heavy duty diesel I/M Stations shall have a Department approved exhaust opacity meter that meets the minimum specifications including an approved data management system that remains on the facilities premises for performance of the inspection and maintenance of heavy duty diesel vehicles unless specifically exempted by the Department.~~

4. ~~I/M Station Owner or Operator's Duty to Return Pre-Printed Heavy Duty Diesel Certificates of Compliance to Department.~~

- (i) ~~An I/M Station owner, manager, or other responsible person shall ensure that all unused pre-printed heavy duty diesel Certificates of Compliance issued to the Station shall be returned to the Department upon final cancellation, suspension, or revocation of the I/M Station Permit.~~
- (ii) ~~An I/M Station owner, manager or other responsible person shall notify the Department immediately and return all unused pre-printed heavy duty diesel Certificates of Compliance and associated paper work if the station does not have a Certified Emissions Inspector employed and available to perform inspections.~~
- (iii) ~~Upon transfer or termination of business ownership, the I/M Station permit and all pre-printed heavy duty diesel Certificates of Compliance shall be immediately forwarded to the Department.~~
- (iv) ~~The Department shall receipt and refund any fee paid for unused pre-printed heavy duty diesel Certificates of Compliance to the station owner according to the Salt Lake County Auditor's procedures.~~

5. ~~Free Re-Inspections~~

~~If a 1968 and newer heavy duty diesel vehicle fails the initial emissions inspection, the owner or operator shall have thirty (30) days in which to have repairs or adjustments made and return the vehicle to the I/M station that performed the initial inspection for one free re-inspection.~~

6. ~~Opacity Meter Maintenance~~

~~Opacity meters shall be maintained by a Department approved business and individual or person. The instruments shall be in good working condition, capable of meeting calibration requirements~~

of the Department, and operated according to manufacturer's specifications and operating procedures.

~~7. Additional Waiver Requirement for Heavy Duty Diesel Vehicle~~

- ~~(i) The minimum spent on repair costs is at least \$1,500.00; and~~
- ~~(ii) Snap idle inspected heavy duty diesel vehicles that experience an increase in measured opacity from the initial inspection to the final inspection shall not be eligible for a waiver regardless of the amount spent in attempting to repair the vehicle.~~