MEMORANDUM CIRCULAR 2020-2195

To: All Existing Operators of Alternate Motor Vehicle Inspection Stations, Subic Bay Freeport Zone, Olongapo City, Zambales. (AUTOTEC AUTOMOTIVE TESTING AND EMISSION CENTER; SUBIC BAY MOTOR VEHICLE INSPECTION CENTER, INC; & VEHICLE INSPECTION AND TESTING CORPORATION).

SUBJECT: GUIDELINES FOR THE UPGRADE OF THE EQUIPMENT AND FACILITIES OF THE ALTERNATE MOTOR VEHICLE INSPECTION STATIONS (ALTERNATE-MVIS)

DATE: 10 MARCH 2020

WHEREAS, The Land Transportation Office (LTO), pursuant to the provisions of Republic Act 4136 (Land Transportation and Traffic Code), is mandated to:

a. Inspect and Register Motor Vehicles
b. Issue Driver's Licenses and Permits
c. Enforce Land Transportation Laws and Traffic Rules
d. Adjudicate Traffic Violation Cases

WHEREAS, in the LTO's mandate to inspect and register motor vehicles, Section 16 of R.A. 4136 provides that,

"xxxif an inspection as provided in paragraph (6) of Section four hereof, any motor vehicle is found to be unsightly, unsafe, overloaded, improperly marked or equipped, or otherwise unfit to be operated, or capable of causing excessive damage to minimum standards and specifications, the Commissioner (now, Assistant Secretary) may refuse to register the said motor vehicle, or if already registered, may require the number plates thereof, to be surrendered to him, and upon seventy-two hours' notice to the owner of the motor vehicle, suspend such registration until the defects of the vehicle are corrected and/or minimum standards and specifications fully complied with."

WHEREAS, the LTO, under R.A. No. 8749 (The Philippine Clean Air Act), is likewise mandated to enforce the required emission standards for motor vehicles.
WHEREAS, the LTO issued Memorandum Circular No. RTL-MC-02402, setting the guidelines and procedures for the Accreditation of Alternate Motor Vehicle Inspection Stations for the Inspection/Testing of Used-Imported Motor Vehicles for the Purposes of Permit to Travel and Initial/First Registration.

NOW, THEREFORE, premises considered, the LTO hereby promulgates these Guidelines for the Upgrade of the Equipment and Facilities of the Alternate MVIS, as follows:

SECTION 1. LANE REQUIREMENTS

The Alternate MVIS shall have a minimum of One (1) Heavy Duty Vehicle (HDV) lane with an option for another lane for Light Duty (LV) Vehicles. The HDV lane could also be configured to test LV Vehicles.

The HDV Inspection Lane shall be of 3-Stage configuration.

SECTION 2. TIMELINE

The Alternate MVIS shall have a period of not more than one-hundred fifty (150) calendar days to complete the upgrade and operationalization of their facilities.

SECTION 3. NOTICE OF COMPLIANCE

A. Within three (3) calendar days upon completion of the upgrade of the facility, the Alternate MVIS shall submit a Notice of Compliance to the LTO. Upon Receipt of the Notice of Compliance, the LTO shall direct an Inspection Team, to be designated by the LTO Assistant Secretary, to conduct inspection of the upgraded facility within seven (7) calendar days.

B. The Inspection Team shall submit the result of its inspection within three (3) calendar days from completion of the inspection.

C. Within seven (7) calendar days from receipt of the Report from the Inspection Team, the LTO shall evaluate the Report and the Certificate to Operate and Accreditation shall be issued.

D. The Accreditation shall be valid for a period of five (5) years from the issuance of the Accreditation Certificate and renewable every five (5) years thereafter upon compliance with the requirements to be set by the LTO.

SECTION 4. RENEWAL OF ACCREDITATION

The Alternate MVIS shall follow the existing procedure on the Renewal of Accreditation. The renewal of Accreditation shall be conducted by the LTO through the LTO Assistant Secretary Office.
SECTION 5. ANNUAL FEE

There shall be an annual fee of Php. 30,000.00 payable within 10 days before the end of the fiscal year.

In case of failure to file for renewal within the period prescribed, an administrative fine of Php. 25,000 shall be collected in addition to the renewal fee.

SECTION 6. PERSONNEL

A. The Alternate MVIS Motor Vehicle Inspection Technician (MVIT) shall have a minimum of NC II TESDA Automotive Servicing Certification or its equivalent.
B. The Alternate MVIS shall have at least Three (3) authorized MVIT per HDV lane, one for each stage.

SECTION 7. LIST OF INSPECTION EQUIPMENT

Heavy Duty Vehicle (HDV) Lane and Light Duty Vehicle League
1. Headlight Tester (Full Automatic)
2. Roller Brake Tester
3. Sideslip Tester
4. Speedometer Tester
5. Emission Tester
6. Diesel Smoke Tester
7. Bar Code Scanner and/or RFID Reader
8. Bogie Rollers (for Tandem Differential Testing)
9. Axle Play Detector (Joint Play Tester)
10. Sound Level Meter (Sonometer)
11. Suspension Tester (for LV only)
12. Smoke Extraction System

SECTION 8. STANDARD AND SPECIFICATION FOR MOTOR VEHICLE INSPECTION SYSTEM

A. The inspection equipment shall comply with international standards on health, safety and environmental protection (i.e. CE, ISO or its equivalent) and supplied by a legitimate equipment and service supplier:
B. The inspection procedure must be completed within 30 minutes for each vehicle.
C. Design of the control and software can be configurable to any number of stages or position of inspection.
D. Test equipment should be easy to calibrate and maintain.
E. PC interface or its equivalent for interfacing/IT connectivity
F. The Alternate MVIS application software (equipment and I.T. connectivity) should be submitted to DPO for evaluation and compilation.
G. There shall be a minimum of two (2) CCTVs to cover the entire process of testing including one (1) still camera to capture an image of the vehicle undergoing testing, as well as a Television Screen to monitor the test.

SECTION 9. INSPECTION EQUIPMENT AND SPECIFICATIONS

FOR HEAVY DUTY VEHICLE AND LIGHT DUTY VEHICLE

1. HEADLIGHT TESTER
   i. Automated headlight tester
   ii. Automatic detection of the headlight
   iii. Measurement of the luminous intensity, vertical and horizontal deviation of the light beam
   iv. Steel base mounted with rollers
   v. Capable of measuring all types of headlight
   vi. Automatic pass/fail judgment
   vii. Operating conditions 0 - 40°C
   viii. Sensor type – Photocell Camera system
   ix. Process indicator (digital display/Color LCD)
   x. PC interface or its equivalent for interfacing/IT connectivity
   xi. Precise measurement of different light (Halogen, LED, Xenon) sources in real time

2. ROLLER BRAKE TESTER
   i. Automated brake tester
   ii. Maximum load per axle 15,000 kgs
   iii. Frame: Heavy duty structural steel
   iv. Sensor type: load cell
   v. Speed of Test 2 - 5 kph
   vi. Lifting method - Hydraulic System (if needed)
   vii. Automatic pass/fail judgment
   viii. PC interface or its equivalent for interfacing/IT connectivity
   ix. Process indicator (digital display/Color LCD)
   x. Capable of measuring brakes of 4WD vehicle
   xi. Raised rear roller to facilitate the exit of the vehicle and for more efficient measurement
   xii. Electromagnetic brake for easy drive out of the Roller set or equivalent
   xiii. Roller coating should simulate road condition
   xiv. Capable to test hand brake/parking brake
   xv. Capable to check brake balance from front-to-rear wheel

3. SIDE SLIP TESTER
   i. Automated sideslip tester
   ii. Automatic pass/fail judgment
iii. Type: Single/Dual plate configuration
iv. Maximum load per axle 15,000 kgs
v. Mounting plate: Heavy duty structural steel
vi. Sensor type e.g., Linear Transducer
vii. Beginning of measurement after optical passage detection
viii. PC interface or its equivalent for interfacing/IT connectivity
ix. Fast measurement within 2 seconds precise values, fast indication of toe out or in.

4. SPEEDOMETER TESTER
   i. Automated speedometer tester
   ii. Type: Roller speedometer tester
   iii. Sensor type: Digital speed sensor
   iv. Frame: Heavy duty structural steel
   v. Automatic pass/fail judgment
   vi. 750mm-2800mm minimum-maximum track
   vii. Maximum load per axle 15,000 kgs
   viii. Lifting method: Hydraulic System or Pneumatic System

5. EMISSION TESTER
   i. Type: Gas analyzer on trolley for mobility
   ii. 5 gas analyzer
   iii. Automatic Pass/Fail judgement
   iv. PC interface mandatory
   v. Class O device compatible OIML R99/0 or its equivalent
   vi. Capable to test Euro 4 Engine Exhaust Gas

6. DIESEL SMOKE TESTER
   i. Type: Opacimeter
   ii. Automatic Pass/Fail judgement
   iii. Can be combined with gas analyzer
   iv. PC interface or its equivalent for interfacing / IT connectivity

7. BAR CODE SCANNER and/or RFID READER
   i. Type: Optical
   ii. Nominal scan ratio: maximum speed 20 - 30 scan/sec.
   iii. Sensor type: high input optics
   iv. Built-in parameters are user configurable

8. BOGIE ROLLERS (for double differential HDVs)
   Type: Eight (8) Rollers configuration
   ii. Maximum load per axle - 15,000 kgs
iii. Frame: Heavy duty structural steel
iv. Monobloc Bogie roller
v. Maximum speed: 120km/hr

9. AXLE PLAY DETECTOR (JOINT PLAY TESTER)
   i. Weight per axle – 15,000 kgs
   ii. Type: Hydraulic/Electronics plates (2) and hydraulic ram inducers
   iii. Hand held pendant with light and built-in controls
   iv. Hydraulic unit for the movement of plates
   v. Assist in the detection of defects located on the wheel axle of the suspension of vehicles

10. SOUND LEVEL METER (SONOMETER)
    i. Portable
    ii. Internal Oscillation Calibration
    iii. With positioning tripod stand
    iv. Digital display

11. SMOKE EXTRACTION SYSTEM (DIESEL-FED MVs)
    i. Means of directing exhaust outside the inspection area

12. PROCESS INDICATOR
    i. Digital display/Color LCD On stand /wall Clamping, Additional screen.
    ii. Instruction on test procedures given to the inspector are displayed on a digital display screen monitor. Pass/fail judgement results are also displayed on the same screen monitor.

13. SUSPENSION TESTER (for LV use only)
    i. Type: Dual Plate configuration
    ii. Maximum load per axle: 3,500kgs
    iii. Frame: Heavy Duty Structural Steel
    iv. PC interface or its equivalent for interfacing / IT connectivity
    v. Network capable suspension tester
    vi. With axle weighing capability
    vii. With steel cover for passage of Heavy Duty Vehicles
SECTION 10. INSPECTION PROCEDURE

A. INSPECTION OF HEAVY DUTY AND LIGHT DUTY USED-IMPORTED MOTOR VEHICLES

This lane applies to all trucks, semi-trailer tractor units and other heavy-duty vehicles with gross vehicle weights of 4,501 kgs. and above and Light Duty Vehicles with axle weights below 4,500 kgs).

1. STAGE 1. VEHICLE INFORMATION AND SPECIFICATION

INPUT/ABOVE CARRIAGE&UNDER CARRIAGE INSPECTIONS

EXHAUST EMISSION CHECK

i. INSPECTION PROCEDURE:
   The MVIT is required to log in through a finger scanning device before every test.

   At this stage, vehicle information and specification are validated into the computer panel by RFID reader.

ii. VEHICLE INFORMATION AND SPECIFICATION
   a. Chassis Number
   b. Motor Number
   c. Make/Series
   d. Name of Owner/Operator
   e. Address of Owner/Operator
   f. Type of body/color
   g. Year Model
   h. Gross Vehicle Weight
   i. Net Capacity
   j. Fuel type
   k. Classification
   l. Denomination

iii. TEST EQUIPMENT AND APPARATUS
   a. Computer
   b. Wireless touch screen monitor
   c. Tablet for test operation control
   d. Barcode scanner/RFID reader
   e. Process indicator monitor

iv. INSPECTION STANDARDS
   a. The engine/motor number is the same as the engine/motor number appearing in the current Original Certificate of Registration.
   b. The make/type, model, plate number and sticker of the motor vehicle presented for inspection are the
same as the information reflected in the current Original Official Receipt/Certificate of Registration.

v. ABOVE CARRIAGE ITEMS FOR INSPECTION

a. Identity/construction  
b. Lighting system and reflectors  
c. Windshield/window glass  
d. Wiper/washer  
e. Chassis/motor number authenticity  
f. Horn  
g. Floor board  
h. Body appearance  
i. Seat belts  
j. Door/Hinges  
k. Rear view/side mirror  
l. Brake system/parking brake  
m. Clutch system  
n. Steering  
o. Driver's/passenger's seat  
p. Tires/wheels  
q. Wheels bolts/nuts  
r. Fuel tank/fuel tank cap  
s. Mobile Air-conditioning System (MAC'S)  
t. EWD  
u. Length, width and height (Rebuilt and locally assembled)

vi. UNDER CARRIAGE ITEMS FOR INSPECTION

a. Chassis Frame/Chassis member  
b. Drive Shaft Bolt/Nut  
c. Engine Oil Leakage  
d. Transmission Oil Leakages  
e. Differential Oil Leakages  
f. Steering Linkages/Gear Box Mounting  
g. Steering Ball joints  
h. Radiator  
i. Shock Absorbers  
j. Exhaust pipe  
k. Propeller Shaft Couplings  
l. Front/Rear Shackle Eyes/Pins/Bushes  
m. Spring Clips  
n. Stabilizer/Bushes  
o. Suspension joints/Bushes  
p. Engine Bracket/Mounting  
q. King Pins and Bearing  
r. Steering Idler/Section Shaft  
s. Brake Hoses/Pipes/Cylinders
At this stage, all items for inspection are visually checked. Both above carriage and undercarriage inspections are monitored and recorded using HD cameras. The HD camera shall be connected to the MVIC IT System to store the visual inspection of motor vehicle. The inspector follows the instruction of the process indicator.

An axle play detector or joint play tester is used to assist the inspector while inside the undercarriage inspection pit.

Passed/failed items are determined and the data is transferred to the database.

**TEST EQUIPMENT AND APPARATUS**

- a. Computer
- b. Wireless touch screen monitor
- c. Tablet for test operation control
- d. Bar code scanner/RFID reader
- e. Axle Play Detector (Joint Play Tester)
- f. Process indicator monitor
- g. IP Camera (2)

**EMISSION MEASUREMENT**

**i. GASOLINE-FED MOTOR VEHICLE (Spark Ignition Engine)**

**i.1 INSPECTION PROCEDURE:**

The test procedure is for the determination of the concentration of Carbon Monoxide (CO) and Hydrocarbon (HC) emission from in-use motor vehicles equipped with spark ignition engine running at idle speed. At this stage, the motor vehicle gear-change control is in the neutral position with the hand brake engaged. The temperature of the engine is at least 70°C. The vehicle exhaust system is leak proof and will allow the insertion of sampling probe by at least 30 cm from the tailpipe outlet.

While the engine idles, the inspectors insert the gas emission analyzer probe into the exhaust pipe of the
vehicle. This is operated automatically and the measured data of the gas analyzer are displayed. Results are transferred to database after inspection is completed.

i.2 TEST EQUIPMENT AND APPARATUS

i.2.1 Exhaust gas analyzer (HC, CO, CO₂, NOₓ, O₂)*

i.2.2 Process Indicator monitor

*The test equipment should be capable of testing other types of fuels that will be introduced in the market (e.g. LPG/CNG/ethanol).

ii. DIESEL-FED MOTOR VEHICLES (Compression Ignition Engine)

ii.1 INSPECTION PROCEDURE:

This test is a smoke opacity measurement for in-use motor vehicle equipped with compression-ignition (diesel) engine using the free-acceleration method. The exhaust system shall not have any leaks. The motor vehicle-gear change control in the neutral position with the hand brake engaged. Accelerate the engine two to three (2-3) times prior to smoke sampling in order to remove deposits or soot in the tail pipe. While the engine idles, the inspector put the sampling probe into the exhaust pipe of the vehicle in accordance with the instruction on the process indicator.

Results are transferred to database after inspection is completed.

ii.2 TEST EQUIPMENT AND APPARATUS

ii.2.1 Computer

ii.2.2 Opacity meter

ii.2.3 Process indicator monitor

2. STAGE 2

2.1 SIDESLIP TEST

a. At this stage, the inspection is fully automated.
b. The sideslip tester measures the vehicle's front wheel alignment of toe-in and toe-out.

c. The process indicator prompts the inspector to drive the vehicle forward to the sideslip sensor plate.

d. The measurement of lateral slip/movement of wheels starts when the vehicle enters the first switch and the result of the test is determined when the vehicle passes through the last switch of the tester.

e. Passed/failed judgments are determined and the data is transferred to the database.

i. TEST EQUIPMENT AND APPARATUS

a. Computer  
b. Sideslip tester  
c. Process indicator monitor

2.2 SUSPENSION TEST (for LV use only)

This test measures the effectiveness of the shock absorbers on each wheel of the vehicle, checking the absolute damping levels and comparing the relative damping balance between the left and right side of each axle. It also measures the efficiency of the shock absorbers using the EUSAMA principle or its recognized equivalent.

i. INSPECTION PROCEDURE:

a. At this stage, both wheels of the axle under test are on the equipment's shaker plates. The test is performed on each wheel independently. The equipment will automatically measure the axle weight and the shaker plates will oscillate each wheel. The inspector will receive instructions via process indicator.

ii. TEST EQUIPMENT AND APPARATUS

a. Suspension Tester  
b. Process indicator monitor

2.3 ROLLER BRAKE TEST - At this stage, the inspection is fully automated. This test measures the braking forces of the left and right wheels for both front and rear axles of the vehicle. The process indicator prompts the driver to release or depress the brake pedal of the vehicle. The vehicle's wheel drag and the braking force of each wheel are measured. Parking brake is conducted with respect to the axle incorporating the
parking brake mechanism. The result of inspection is determined and the data is transferred to the database.

i. TEST EQUIPMENT AND APPARATUS

a. Computer
b. Roller brake tester (with axle weighing device)
c. Bogie roller (for testing Tandem-Axle Trucks)
a. Process indicator monitor

2.4 SPEEDOMETER TEST - This test measures the actual speed of the vehicle and checks the accuracy of vehicle's speedometer reading.

i. INSPECTION PROCEDURE:

a. The inspector performs instructions from the process indicator. Accelerates the vehicle to the speed of 40 km/hr and decelerate to rest.

The result of inspection is determined and the data is transferred to the database.

ii. TEST EQUIPMENT AND APPARATUS

a. Computer
b. Speedometer Tester
c. Bogie roller (for Testing Tandem-Axle Trucks)
d. Process indicator monitor

3. STAGE 3.

3.1 HEADLIGHT TEST - The headlight tester measures the luminous intensity and the photometric axis or optical axis deviation of the vehicle's headlight.

i. INSPECTION PROCEDURE:

i.1 At this stage, the inspection is fully automated. The inspected vehicle will stop at a predetermined distance in relation to the headlight tester. After completion of inspection, the headlight tester will automatically return to its position.

The result of inspection is determined and data is transferred to the database.

i.2 TEST EQUIPMENT AND APPARATUS
3.2 SOUND LEVEL MEASUREMENT

i. INSPECTION PROCEDURE:

The inspector performs instructions from the process indicator. Accelerate the engine and measure the sound level.

i.1 TEST EQUIPMENT AND APPARATUS

i.1.1 Sonometer
i.1.2 Process indicator monitor

The suggested lay out of the Alternate MVIS Equipment for Heavy Duty Lane is attached as Annex "A".

SECTION 11. MOTOR VEHICLE INSPECTION SYSTEM REPORT (MVISR)

A. The Motor Vehicle Inspection System Report (MVISR) provides the following information:
1. Vehicle information and specification;
2. Name and address of owner/operator;
3. Alternate MVIS location;
4. Pass/fail status of all items in all stages of inspection; and
5. MVISR security number

SECTION 12. GENERAL REQUIREMENTS

A. The Upgraded Alternate MVIS shall be FULLY AUTOMATED and capable of being interconnected or interfaced with the existing LTO IT System;

B. The results of all visual inspections and tests shall be recorded/uploaded automatically (no human intervention) by direct input to the lane computer via touch screen monitor and/or keyboard. The pass/fail judgment is indicated in every stage of inspection and displayed in an overhead TV monitor;

C. Upon completion of all stages of inspection, the results are transferred to the Main Database Server (MDS). The Motor Vehicle Inspection System Report (MVISR) will provide the overall pass/fail status of a vehicle. An indestructible sticker will be issued and physically attached by an authorized representative of the Alternate MVIS. The MVISR and sticker will be designed by the LTO;
D. The Alternate MVIS IT systems are equipped with a compatible communication interface for transfer of test results in all stages of inspection to the main system control computer, for on-line and real-time authentication and validation of test results with the LTO IT System;

E. There shall be no manual encoding of test results. Editing of said result shall be prohibited;

F. Payment may be accepted either on-site or online by the Alternate MVIS System. Payment status and details must be uploaded into the MVIS IT system;

H. The LTO IT System shall serve as repository of the Alternate MVIS inspection test results;

I. The Alternate MVIS shall be able to function on an offline mode “stand-alone”. It shall be able to collect and record test results for a minimum of sixty (60) days which may be saved in an external storage device when necessary. The recorded test results shall be transmitted to the LTO-IT System once on-line;

J. Fingerprint recognition and user authentication must be provided to authorized MVITs to activate the inspection equipment and MVIS application software;

K. The Alternate MVIS IT system must also be able to generate periodic, special and ad hoc reports including but not limited to audit reports, transaction and inspection records, etc.

L. There shall be sufficient parking area for vehicles;

M. There shall be an administrative office with clients' waiting lounge with the provision for real-time broadcasting of the inspection process;

N. The inspection shall be done in a well-ventilated building.

O. There shall be a data control room at the end of the inspection lane for the releasing of Certificates of Inspection and for the database.

P. The Alternate MVIS equipment must be supplied by an ISO9001:2015 Certified manufacturer, and must have CE (Conformite Europeene) Certification.

Q. It is understood that “down time” or “offline” refers to the internet connection downtime; other than that, the Alternate MVIS shall not be allowed to proceed with its business operation.
R. Any changes or updates of Alternate MVIS IT System shall be submitted to LTO for approval and subject for evaluation of LTO.

SECTION 13. MAIN DATABASE SERVER (MDS)

A. On completion of all stages of inspection, the results are transferred to the Main Database Server (MDS). The MVISR will provide the overall pass/fail status of a vehicle. All computer systems are equipped with a communication interface for transfer of test results in all stages of inspection to the MDS, for on-line and real-time authentication and validation of test results with LTO IT System. An indestructible inspection sticker shall be issued to all motor vehicles that completely passed the inspection process.

SECTION 14. OTHERS

A. 1. IP CAMERA
   The Alternate MVIS shall provide an IP camera for each stage of inspection for monitoring and recording of the inspection process. The LTO shall be able to monitor the actual activities of inspection online/real-time.

2. HD Camera
   An HD Camera (1080p) shall be dedicated to record the whole process (preferably from an isometric point of view) to be shown real-time to the Customer Lounge. The recording shall be available for 1 year from the date of inspection.

B. INTERPHONE COMMUNICATION SYSTEM
   The Alternate MVIS shall provide an interphone or a wireless communication system so that the inspector can communicate with each other at their respective stages of inspection.

C. PUBLIC ADDRESS SYSTEM
   The Alternate MVIS shall have a public address system so that inspector can communicate to the driver of a vehicle.

D. RE-INSPECTION OF FAILED ITEMS
   The system must be capable to identify and activate only those failed items for re-inspection while automatically bypassing the passed items. The same must only allow re-testing/re-inspection after two (2) hours.

E. LANE CAPACITY
   The inspection lane is capable of operating in accordance with the performance standards and criteria set forth in these Guidelines.
F. TRAINING
All MVITs shall undergo training on the MVIS procedures and processes. This will be conducted by the LTO and certificates will be issued upon training completion.

G. CALIBRATION
All specifications, brochures, and calibration process of all inspection equipment shall be provided by the Alternate MVIS and submitted to the LTO. All equipment shall undergo calibration every 6 months to ensure accuracy. The calibration company shall be accredited by any government agency such as Department of Trade and Industry (DTI).

H. MAINTENANCE OF INSPECTION FACILITIES AND EQUIPMENT
The Alternate MVIS shall undertake the maintenance and calibration of all inspection facilities. Repair upkeep and replacement of parts, if necessary, shall also be the responsibilities of the Alternate MVIS. It shall submit a maintenance plan and periodic scheduled calibration to all test equipment to ensure accurate and consistent operation from the entire warranty period.

I. SYSTEM RECOVERY
The Alternate MVIS shall provide an operational system recovery plan; indicate how service will be resumed, in case of power and operational failure, and implement the same within one (1) day from such failure.

J. MOTOR VEHICLE INSPECTION SYSTEM REPORT (MVISR) AND INSPECTION STICKER
The MVISR and inspection sticker shall be issued to the vehicle owner/driver after the motor vehicle successfully completes the inspection process.

K. BAR CODE SYSTEM OR SIMILAR ELECTRONIC IDENTIFYING SYSTEMS
The system must employ automatic data capture, such as bar-code scanning to positively and quickly identify vehicles and their records.

L. REAL TIME SYSTEM
The Alternate MVIS shall be connected directly to the LTO IT SYSTEM. This system shall be used to automatically look up, retrieve vehicle information at the beginning of the inspection, and immediately download results at the conclusion of the inspection.
M. AUTOMATIC PASS/FAIL RESULTS
Passed or failed items shall be automatic and shall be transferred to database after inspection process except those items under the "visual inspection category".

N. AUTOMATIC ZEROING
To ensure data recording accuracy there shall be an automatic resetting of data to zero before each test.

O. SECURE
The equipment must also prevent falsification of, or unauthorized access to, test reports and data storage media. This shall be accomplished by using an attached printer utilizing secure certificates for compliance, at the end of the inspection line.

P. HARDWARE/SOFTWARE REQUIREMENTS
The Alternate MVIS system and service must be equipped with all essential hardware and software needed to support the inspection process. The Alternate MVIC shall also provide documentation of programs, including user manuals, program descriptions, and the name and address of any outside software manufacturers.

1. The capability of system hardware to meet all requirements.
2. The capability of system and application software to support the application requested.

Q. INTERNET CONNECTION
The Alternate MVIS should have an internet speed of at least 5 MBPS using a leased line.

R. SECURITY
1. SECURITY
The system must have multiple levels of security (such as biometrics fingerprint and AFIS) and access codes to regulate system access and to ensure the protection of information from unauthorized access (accidental or intentional), modification, destruction, or disclosure. The multiple levels of security should be relative to the different types of users. It shall include:

i. Software security applications which can easily be updated
ii. Ability to document reports on various system and user activities
iii. Number of layers/divisions of security
iv. Length/description of passwords
v. Ability to restrict access for specified tasks
2. DATA SECURITY

The Alternate MVIS database shall not be accessed/open on-site without prior notifications and approval by LTO. Must ensure that all data collected or received by the Alternate MVIS becomes and remains the exclusive property of the LTO. The Alternate MVIS shall not supply any report or statistical information to any person or entity other than the LTO without advance specific written permission.

3. INTERFACE SECURITY

The Alternate MVIS’ system must support all LTO IT System communications interface requirements as related to access security.

SECTION 15. SYSTEM REQUIREMENTS

A. A system generated Certificate of Inspection shall be the output of the inspection process with “Passed” or “Failed” criteria.

B. Data Management System. All inspection result shall be uploaded online and real time to the LTO IT system. This result shall be used for the monitoring of the Alternate MVIS by LTO.

C. All inspection equipment shall be interfaced to the Alternate MVIS system. The storage system must have a minimum capacity of 10 year volume of data.

D. The Alternate MVIS System must be interfaced to the LTO IT System. The Alternate MVIS System shall upload test results, vehicle and payment data to the Central database online and real time. The Central MVIS database shall serve as repository of all inspection results from the Alternate MVIS.

E. A Database System Solution (E.g. Cloud Storage) for check and balance purposes will be provided to the DOTr by the Alternate MVIS for “one-to-one” record comparison to LTO-IT System data. This allows the DOTr to monitor and view all inspection results, pictures and/or videos of the vehicles tested as visual proof of inspection for transparency. This data storage facility shall have the capacity to store and maintain the records, pictures and videos of a vehicle for duration of at least one (1) year from the date of inspection.

SECTION 16. INSPECTION FEES

For the conduct of inspection/testing by the testing/inspection fee shall be charged as authorized by the DOTr Assistant Secretary.

SECTION 17. ANNUAL PERFORMANCE AUDIT

Using a non-discretionary pass or fail criteria, the LTO through the Inspection Team shall ascertain, validate and/or verify the Alternate
MVIS compliance with the documentary, legal and technical requirements

SECTION 18. ADJUDICATION PROCESS

An Alternate MVIS alleged to have committed a violation/s shall be issued a Show Cause Order by the LTO.

SECTION 19. PENALTY PROVISION

Any violation of the terms and conditions of the “Authorization Certificate” and these Guidelines, as well as any issuance by the LTO, shall be ground for the imposition of the following penalties:

FIRST OFFENSE: Php 200,000.00 and 30-day suspension;
SECOND OFFENSE: Php 500,000.00 and 60-day suspension;
THIRD OFFENSE: Cancellation of Authorization, also applicable for the following offenses or violations:

i. Non-compliance with the standards or methods of inspection as provided by law and regulation;
ii. Failure to comply with the laws, rules and regulations as imposed in this Circular;
iii. Misrepresentation/fraudulent supporting documents for accreditation; and
iv. Other violations to issuances promulgated by the LTO.

SECTION 20. REPEALING CLAUSE

All memoranda, circulars, orders and other issuances in conflict or inconsistent herewith are hereby superseded, amended and/or repealed accordingly.

SECTION 21. EFFECTIVITY

This Memorandum Circular shall take effect fifteen (15) days following the completion of its publication in the Official Gazette and/or in a newspaper of general circulation and/or the filing of three (3) copies with the UP Law Center pursuant to Memorandum Circular 11 dated 09 October 1992 of the Office of the President.

EDGAR C. GALVANTE
Assistant Secretary
Annex “A”

Lay Out of a Three (3) - Stage PMVIC Equipment for Heavy Duty Vehicle or Light Duty Vehicle Lane

Stage 1
- Computer
- Barcode Scanner/RFID Reader
- Tablet Test Operation Control
- Above Carriage

Stage 2
- Computer
- Sideslip Tester
- Brake Tester
- Suspension Tester
- Speedometer Tester

Stage 3
- Computer
- Gas Analyzer
- Opacimeter
- Headlight Tester
- Sonometer

Main System Control Computer/Peripherals

Entrance

Main System Control Computer/Peripherals

EXIT
# MOTOR VEHICLE INSPECTION SYSTEM REPORT

<table>
<thead>
<tr>
<th>MVISR No.</th>
<th>Name of PMVIC Operator</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>M.V. File No.</th>
<th>Date Inspected</th>
<th>VIN No.</th>
</tr>
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<tbody>
<tr>
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</table>

<table>
<thead>
<tr>
<th>Plate No.</th>
<th>Vehicle Type Category</th>
<th>Purpose of Inspection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Owner</th>
<th>Owner's Address</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Source of Power</th>
<th>[ ] Gas</th>
<th>[ ] Diesel</th>
<th>[ ] Auto-LPG</th>
<th>[ ] CNG</th>
<th>[ ] Electric</th>
<th>[ ] Others</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>

### ABOVE CARRIAGE

<table>
<thead>
<tr>
<th>Result</th>
<th>UNDER CARRIAGE</th>
<th>Result</th>
<th>SIDE BLIP TEST</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>

1. **Body Appearance**
   - Reflector

2. **Chassis**
   - Engine Block/Mounting

3. **Engine**
   - Engine Oil Leaks

4. **Handle bars**
   - Transmission Oil Leaks

5. **Wiper/Washer**
   - Steering Linkage/Box Mounting

6. **Headlight**
   - Steering Intersector Shaft

7. **Signal Lights (front)**
   - Front Shackle Eyes/Pins/Bushes

8. **Signal Lights (rear)**
   - Rear Shackle Eyes/Pins/Bushes

9. **Parking Lights (front)**
   - Stabilizer/Bushes

10. **Parking Lights (rear)**
    - Front Suspension Joint/Bushes

11. **Back-up Lights**
    - Rear Suspension Joint/Bushes

12. **Clearance Lights**
    - Rear Lamps

13. **Number Plate Lights**
    - Brake Hose/Pipes/Cylinders

14. **Hazard Lights**
    - Emergency Light/brakes

15. **Parking Lights (front)**
    - Headlights

16. **Parking Lights (rear)**
    - Shock Absorbers

17. **Receivers**
    - Signal Lamps

18. **Interior Lights**
    - Spring Clips

19. **Top Light/Flasher**
    - Shock Absorbers

20. **Seat Belts**
    - Drive Shaft Safety

21. **Horn**
    - Differential Oil Leakage

22. **Brake union**
    - Propeller Shaft Coupling

23. **Floor Board**
    - Exhaust Pipes and Silencer

24. **Side Mirror/Refr View**
    - Chassis Frame

25. **Cabin System**
    - Cab/chassis Cross Member

26. **Brake System**
    - Body Floor Board

27. **Driver/Passenger's Seat**
    - Seat Headrest

28. **Steering**
    - Parking Brake Wire

29. **Tires/Wheels**
    - Mobile Air Conditioner (MAC)

30. **Vehicle Body/Frame**
    - Other

31. **Fuel Tank/Cap**
    - Other

32. **Panel Gauges**
    - Other

33. **Lighting**
    - Other

34. **Emission Test**
    - Other

35. **Other**
    - Other

36. **Other**
    - Other

### BRAKE TEST

<table>
<thead>
<tr>
<th>Result</th>
<th>Side Blip Test</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>

- **Rear Brake**
- **Front Brake**

### SPEEDOMETER TEST

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<tr>
<th>Result</th>
<th>Result</th>
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</table>

### HEADLIGHT TEST

<table>
<thead>
<tr>
<th>Result</th>
<th>Result</th>
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</table>

- **LH**
- **RH**

### SUSPENSION TEST

<table>
<thead>
<tr>
<th>Result</th>
<th>Result</th>
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<tbody>
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</table>

### ROUND LEVEL TEST

<table>
<thead>
<tr>
<th>Result</th>
<th>Result</th>
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</table>

### REMARKS

- **CO**

This is to certify that the motor vehicle described above has [ ] PASSED the MVIS Test. [ ] FAILED

If FAILED, the vehicle should come back within 5 working days from the date of inspection for reinspection of failed item/s.

Test Conducted By:

Signature over Printed Name
MV Inspector

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**U.P. LAW CENTER**
OFFICE OF THE NATIONAL ADMINISTRATIVE REGISTER
Administrative Rules and Regulations

**JUL 07 2020**

**RECEIVED**

---

21
1. STAGE-1 DATA ENTRY CONTROL PANEL
2. STAGE-1 PROCESS INDICATOR/MONITOR
3. SOUND LEVEL TESTER
4. EXHAUST GAS TESTER
5. DIESEL SMOKE TESTER
6. JOINT-PLAY TESTER
7. HEADLIGHT TESTER
8. SIDE SLIP TESTER
9. BRAKE TESTER
10. SPEEDOMETER TESTER
11. FREE ROLLER
12. STAGE 2 PROCESS INDICATOR
13. CONTROL ROOM
14. EXHAUST EXTRACTION UNIT

HEADLIGHT TEST
SOUND LEVEL TEST

'ALIGNMENT/BRAKES/SPEEDOMETER TESTS
'A-B-S' TEST

EMISSION TEST
UNDER CARRIAGE INSPECTION
ABOVE CARRIAGE INSPECTION
DATA INPUT/VERIFICATION

BUILDING: 40M X 7M
LOT: 1,500SQ.M.

1-LANE HDV INSPECTION LANE
STAGE-1 DATA ENTRY CONTROL PANEL
STAGE-1 PROCESS INDICATOR/MONITOR
SOUND LEVEL TESTER
EXHAUST GAS TESTER
DIESEL SMOKE TESTER
JOINT-PLAY TESTER
HEADLIGHT TESTER
SIDE SLIP TESTER
BRAKE TESTER
SPEEDOMETER TESTER
FREE ROLLER
STAGE 2 PROCESS INDICATOR
CONTROL ROOM
EXHAUST EXTRACTION UNIT

EMISSION TEST
UNDER CARRIAGE INSPECTION
ABOVE CARRIAGE INSPECTION
DATA INPUT/VERIFICATION

BUILDING: 40M X 20M
LOT: 4,000SQ.M.

2-LANE HV INSPECTION CENTER