Fleet Commercial Motor Vehicles

1. Purpose / Background
The purpose of this document is to provide information and procedures to assure that motor vehicles are used safely per the MIT Environmental, Health and Safety (EHS) Policy and in accordance with number eleven and fourteen of the Guiding Principles in Support of the EHS Policy. To view the EHS Policy and Guiding Principles, go to https://ehs.mit.edu/site/content/ehs-policy.

Motor vehicle accidents are the number one cause of occupational fatalities. The National Institute for Occupational Health and Safety (NIOSH) reported that work-related roadway accidents resulted in over 12,000 deaths between 1992-2000. Prevention efforts include education, enforcement, and engineering controls, e.g. the use of seat belts. According to the NHTSA, seat belt use prevented over 11,000 deaths in 2000 [NHTSA 2002].

The Research and Special Programs Administration (RSPA), Department of Transportation (DOT) contain two agencies, the Federal Motor Carrier Safety Administration (FMCSA) and National Highway Traffic Safety Administration (NHTSA), that hold primary responsibility for developing and enforcing safety standards related to vehicle design and operation.

The Federal Motor Carrier Safety Regulations 49 CFR 390-399 applies to businesses or individuals who operate commercial motor vehicles (CMVs) in interstate commerce. The following are considered CMVs:

- Motor vehicles having a gross vehicle weight rating (GVWR) or gross combination weight rating, or gross vehicle weight or gross combination weight, of 4,536 kg (10,001 pounds) or more, whichever is greater*; or
- Motor vehicles designed or used to transport more than 8 passengers, including the driver, for compensation; or
- Motor vehicles designed or used to transport more than 15 passengers, including the driver, and is not used to transport passengers for compensation; or
- Motor vehicles used in transporting material found by the Secretary of Transportation to be hazardous under 49 U.S.C. 5103 and transported in a quantity requiring placards under regulation prescribed by the Secretary under 49 CFR, Subtitle B, Chapter 1, Subchapter C. Note that the Materials of Trade Exemption (refer to Section 4.2) does allow for small quantities of materials normally considered hazardous material to be transported without placarding if specific conditions are met.

*Note: Since Massachusetts has adopted 49 CFR 390-399, these regulations apply to intrastate commerce as well. Massachusetts opted to exempt CMVs with a GVWR under 26,001 pounds.

2. Scope
This SOP outlines requirements for operating commercial motor vehicles under the Federal Motor Carrier Safety Regulations 49 CFR 382, 390-399. This SOP also outlines additional requirements for motor vehicles under the Massachusetts Registry of Motor Vehicles, the Massachusetts Department of Transportation.
Environmental Protection, the MIT Travel Office, the MIT Insurance Office, and the Division of Student Life.

This SOP does not apply to motor vehicles other than commercial motor vehicles. This SOP does not apply to “conveyances”, such as cranes, forklifts, powered industrial trucks, powered pallet jacks, golf carts, zambonis, watercraft (boats), bulldozers, tractors, riding snow removal equipment that are defined as machines used to transfer materials or people.

Construction contractor safety is covered in the Contractor Safety Manual.

3. **Prerequisites**

3.1 **Vehicle Registration and Inspection**

3.1.1 Per the Massachusetts Registry of Motor Vehicles (RMV), any motor vehicle that meets the Massachusetts definition of “Commercial Motor Vehicle” shall be registered with a license plate marked “Commercial”. Registrations shall be renewed on annual basis (>5,000 lbs.). Refer to the RMV website for fee schedule: [http://www.mass.gov/rmv/fees/registration/](http://www.mass.gov/rmv/fees/registration/)

3.1.2 Commercial and trailer registration fees are determined by weight. The "registered gross weight" is the vehicle weight plus the maximum intended weight the registrant intends to carry at one time. It is up to the registrant to fix the registered weight depending on intended use (and the capacity of the vehicle as set by the manufacturer). It is a violation of law to operate a vehicle beyond its "registered gross weight."

3.1.3 Vehicles shall be inspected annually at a state-licensed inspection facility. DLCs shall maintain inspection records.

3.1.4 No one shall operate an MIT vehicle that has not passed inspection, is out of date, is not registered, or has an expired registration. In addition, no one shall operate a vehicle without a valid license for that vehicle class (i.e., any vehicle that does not meet Class A, B, or C requirements is a Class D vehicle and requires a standard Class D operator’s license).

3.1.5 Any one hired into a job duty where routine operation of a motor vehicle for MIT business is expected shall possess a valid driver’s license for the class of motor vehicle to be operated either at the time of hire or when driving activities commence. Supervisors shall check that driver licenses are valid for those employees annually as long as the employee remains in that job title/function.

3.2 **Massachusetts Department of Environmental Protection (MA DEP) Anti-Idling Policy**

The MA DEP publishes regulations concerning air quality protection in 310 CMR (Code of Massachusetts Regulations) 7.00. 310 CMR 7.11 (I) outlines requirements for motor vehicles to prevent air pollution resulting from vehicle idling. Specifically, 310 CMR 7.11(1) (b) states: "No person shall cause, suffer, allow or permit the unnecessary operation of the engine of a motor vehicle while said vehicle is..."
stopped for a foreseeable period of time in excess of five (5) minutes.” Exemptions from the five-minute limit include: “1) vehicles being serviced, provided that operation of the engine is essential to the proper repair thereof; 2) vehicles engaged in the delivery or acceptance of goods, wares, or merchandise for which engine assisted power is necessary and substitute alternate means cannot be made available, or, 3) vehicles engaged in an operation for which the engine power is necessary for an associated power need other than movement and substitute alternate power means cannot be made available provided that such operation does not cause or contribute to a condition of air pollution.”

Failure to comply with the anti-idling regulation is punishable by fines ranging from $100 to $25,000 and applies to all motor vehicles.

3.3 MIT Travel Office Policy
The MIT Travel Office posts policies and procedures pertaining to use of travel services, including personal automobile, for Institute business. These policies and procedures are available at http://vpf.mit.edu/index.php/site/travel/policies_procedures/mit_policies_procedures/mit_travel_policy. Requirements directly applicable to use of commercial motor vehicles include:

3.3.1 Per 3.05b, Private Automobile Travel: The transport of equipment in a private vehicle is strongly discouraged due to the potential exposure for property damage or loss.

3.3.2 Per 3.05e, 15 Passenger Vehicle: The use of 15-passenger vans is not an approved travel expense unless authorized by the Office of Insurance.

3.4 MIT Insurance Office Risk Management Controls for the Use of Vehicles While on MIT Business
Any use of MIT-owned vehicles, including commercial motor vehicles, shall be in accordance with the MIT Insurance Office. A copy of the policy is available at: http://vpf.mit.edu/site/insurance/policies_procedures/automobile/

If a commercial vehicle will be taken out of state, the driver shall be aware that certain states adopt standards that are more stringent than the Federal requirements. The driver shall contact that State’s registry of motor vehicles to determine whether any additional requirements are in effect in the state to which the vehicle will be traveling.

3.5 EHS Vehicle Use Policy
The EHS Office has published an internal standard operating procedure that outlines care and use of EHS Office Vehicles for use in carrying out Institute business, including steps that shall be followed in the event of an accident. Those Departments, Labs and Centers that do not already have internal policies regarding the use of Department-owned commercial vehicles are encouraged to adopt the EHS Vehicle Use Policy. A copy of the policy may be obtained by contacting environment (at) mit (dot) edu and entering “EHS Vehicle Use Policy” in the subject line, or by dialing the EHS main number at x2-3477.

3.6 Division of Student Life (DSL) Vehicle Use Policy
3.6.1 DSL has published guidelines governing the use of Institute vehicles for Residential Life Programs and other DSL-related activities. The guideline is available at: [http://studentlife.mit.edu/sao/finance/travel](http://studentlife.mit.edu/sao/finance/travel).

3.6.2 In any instance where an MIT employee, faculty member, or student is expected to drive vehicles on student group or club business, a driver questionnaire (Student Life Programs Driver Safety Form) shall be completed and submitted to the Student Life Programs Office in W20-549. The completed form shall be valid for a period of one year.

3.6.3 The Student Life Programs Office does not recommend the use of 15-passenger vans for student use. No one shall operate a 15-passenger van without a valid Commercial Driver’s License (see Section 4).

### 3.7 Accident Reporting

Accidents involving an MIT vehicle or individual transporting MIT personnel in a rental vehicle shall be reported to the Insurance Office. In addition, if any injuries have been sustained as a result of the accident, the Supervisor’s Report of Illness or Injury shall be submitted. The form is available at: [https://atlas.mit.edu](https://atlas.mit.edu). Click “FULL CATALOG” and keyword search “Supervisor.”

### 4. Requirements for Commercial Motor Vehicles (Class A, B, C)

#### 4.1 General

4.1.1 The driver of any vehicle exceeding 10,001 lbs. (including tow weight) shall complete a physical exam that demonstrates medical fitness to drive. A copy of this certificate shall be kept with the driver at all times.

4.1.2 Most vehicles at MIT that bear the license plate marked “Commercial” do not exceed the thresholds for the Class A, B, and C designations described in Section 4.3. In these instances, the requirements of Section 4, with the exception of the medical certificate requirement in 4.1.1, are not mandatory, but do serve as a recommended risk management practice for the Institute. For the few vehicles that do qualify as a Class A, B, or C commercial motor vehicle, compliance with the requirements of this section is mandatory.

#### 4.2 Materials of Trade (MoT) Exemption from Placarding

4.2.1 Hazardous materials, not including hazardous waste, are exempted from placarding if the Materials of Trade exemption conditions are met.

4.2.2 DLCs shall consult with the EHS Office to determine if a planned transport of materials qualifies for the MoT exemption.

4.2.3 A hazardous material is considered a material of trade if it is carried on a motor vehicle:

4.2.3.1 For the purpose of protecting the health and safety of the motor vehicle operator or passengers;

4.2.3.2 For the purpose of supporting the operation or maintenance of a motor vehicle (including its auxiliary equipment); or

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4.2.3.3 By a private motor carrier (including vehicles operated by a rail carrier) in direct support of a principal business that is other than transport by motor vehicle.

4.2.4 For individual DOT classes, the limits that shall be transported on any one vehicle are as follows:

4.2.4.1 High hazard (Packing Group 1): 1 lb (0.5 kg) for solids, 1 pint (0.5L) for liquids.

4.2.4.2 Medium or lower hazard (Packing Group II or III) - flammable liquids, flammable solids, corrosives, oxidizers, organic peroxides or consumer commodities (ORM-D) such as paint: 66 lbs (30 kg) for solids, or 8 gal (30 L) for liquids. Division 4.3 substances are not included in this group.

4.2.4.3 Division 4.3 substances materials (i.e., dangerous when wet materials): one ounce (30 mL).

4.2.4.4 Each cylinder containing a gas (Division 2.1- e.g., propane or 2.2-e.g., nitrogen.) may not weigh more than 220 lbs (100 kg).

4.2.4.5 Diluted mixture of Class 9 material, i.e., miscellaneous hazardous materials such as airbags and dry ice (not exceeding 2% concentration) may be transported in a tank with capacity up to 400 gal (1500 L).

4.2.5 No more than a gross weight of 440 lbs of MoT material (combination of DOT classes) shall be transported on any one vehicle.

4.2.6 Explosives, radioactive materials and Select Agent toxins do not qualify for the MoT exemption.

4.2.7 Packaging and Marking Requirements

4.2.7.1 The packaging shall be the manufacturer’s original or a package of equal or greater strength and integrity.

4.2.7.2 The packaging shall be marked with a common name or a proper shipping name from the Hazardous Materials Regulations.

4.2.7.3 Packaging shall be leak-tight for liquids and gases, and sift proof for solids.

4.2.7.4 Packages shall be securely closed, secured against movement, and protected against damage.

4.2.7.5 Outer packaging is not required for receptacles (such as cans and bottles) that are secured against movement in cages, bins, boxes, or compartments.

4.2.7.6 Gasoline shall be transported in a metal or plastic container meeting DOT or OSHA requirements (HMR 173.6(b) (4) and 173.202).
4.2.7.7 Cylinders and pressure vessels shall conform to the HMR except that outer packaging is not required. These cylinders shall be marked with the proper shipping name and identification number and have a hazard class warning label.

4.2.7.8 If the package contains a reportable quantity of a hazardous substance, it shall be marked “RQ”.

4.2.7.9 A tank containing a diluted mixture (not more than 2% concentration) of a Class 9 material shall be marked on two opposing sides with the UN identification number.

4.2.8 Drivers shall be trained in the MoT requirements (i.e., shall understand what is being transported, the hazard class, appropriate packaging and marking, and the applicable transport limits). Though formal training is not required, it does help to ensure that MIT does not accidentally trigger placarding requirements.

4.2.9 Shipping papers are not required, however a Bill of Lading does help to document that transport limits have been met. Bills of Lading are available from the EHS Office.

4.3 Motor Carrier Identification Report (DOT Number)
Employers shall file a Motor Carrier Identification Report for vehicles that meet the Class A, B, or C designation described in Section 4.4. Refer to [http://www.fmcsa.dot.gov/mission/forms](http://www.fmcsa.dot.gov/mission/forms) to obtain a US DOT Number (Form MCS-150). The US DOT number shall be marked on all CMVs engaged in interstate transport that meet the Class A, B, or C designation.

4.4 Commercial Driver’s License (CDL)
The Commercial Motor Vehicle Safety Act of 1986 required each State to meet the same minimum standards for commercial driver licensing. 49 CFR Part 383 outlines commercial driver’s license standards, requirements, and penalties.

In Massachusetts and for interstate commerce, operators of the following commercial motor vehicle classes shall possess a commercial driver’s license:

- **Class A**: A trailer with a GVWR of more than 10,000 pounds if the gross combination weight rating is more than 26,000 pounds
- **Class B**: A single vehicle with a gross vehicle weight rating (GVWR) of more than 26,001 pounds
- **Class C**: A vehicle designed to transport 16 or more persons (including the operator)
- **Class C**: Any size vehicle which requires hazardous materials placards

In Massachusetts, CDL applicants shall take one or more knowledge tests, depending on what class of license the applicant needs, and a Road Skills Test in a vehicle that meets the written description for that class. See Section 10 Definitions for a description of the vehicle classes.

4.5 Driver Qualifications and Application for Employment

4.5.1 Physical – Driver shall:

4.5.1.1 Be at least 21 years old.

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See Legal Disclaimer at: [http://ehs.mit.edu/site/content/legal-disclaimer](http://ehs.mit.edu/site/content/legal-disclaimer)
4.5.1.2 Pass a DOT Physical Exam and every 24 months submit a medical examiner’s certificate (i.e., medical certificate) that s/he is physically fit to drive a CMV. Refer to http://www.fmcsa.dot.gov/documents/safetyprograms/Medical-Report.pdf

4.5.2 Skills – Driver shall:
   4.5.2.1 Be able to read and speak English.
   4.5.2.2 Possess a valid commercial driver’s license (CDL) issued by only one State.
   4.5.2.3 Successfully pass a road test and a written general knowledge exam. See Appendix A for items included on the road test and general knowledge exam. In place of a road test and written exam, driver may present a valid commercial driver’s license. However, the employer may still require a road test as a condition of employment. See Section 4.3 of this SOP regarding CDLs.

4.5.3 Driving Record:
   4.5.3.1 Driver shall provide an annual record of moving violations (see Appendix B for Driver License Audit and Certification form).
   4.5.3.2 Employer shall keep records that an annual inquiry was made into the driving records of each driver to the appropriate agency of every State in which the driver held a CDL in the past year.
   4.5.3.3 Driver shall notify the employer the next business day if her/his license was revoked, suspended or if any other disqualification occurred, and notify the employer within 30 days of a conviction for any traffic violation other than a parking violation (see Appendix C for a list of items that disqualify a driver.)

4.5.4 Driver Qualification File and Application for Employment:
   4.5.4.1 Employer shall maintain a Driver Qualification File containing the items listed below:
   - Driver’s application for employment
   - Written record of 3 years of past employers and their responses
   - Inquiry to State agencies of the driver’s driving record for the past 3 years
   - Annual driver record request to State agencies
   - A note stating the results of the annual review of the driver’s driving record
   - Annual driver’s certification of violations
   - Medical examiner’s certificate
   - Driver’s Road Test Certificate or the license or certificate which the employer has accepted as equivalent to driver’s road test

   4.5.4.2 Driver application for employment shall contain the items listed below:
   - Date application is submitted
   - Applicant’s name, address, date of birth, and social security number
   - Issuing state, number, and expiration date of license
   - Address of residences over last three years
   - Extent of experience
   - List of employers over last three years
   - List of all accidents in previous three years
4.6 Alcohol and Drug Testing

4.6.1 Anyone who operates a commercial motor vehicle and is required to have a commercial driver’s license, in commerce in any State is subject to 49 CFR Part 382 Controlled Substances and Alcohol Use and Testing, as mandated by the Omnibus Transportation Employee Testing Act of 1991 (OTETA). The Department of Transportation’s (DOT) rule, 49 CFR Part 40, describes required procedures for conducting workplace drug and alcohol testing for the transportation industry. Exemptions to Part 382 include drivers that are exempt from commercial driver’s license requirements by the State and active duty military personnel.

4.6.2 MIT’s Human Resources Department has outlined the Institute’s Policy Regarding the Use of Alcohol and the Policy Regarding a Drug-Free Workplace at MIT in Sections 3.1.3 and 3.1.4 of the MIT Personnel Policy Manual. Both policies prohibit the use of alcohol or controlled substances in work areas at the Institute.

4.6.3 In the event of an accident involving an MIT-owned vehicle that is not a Class A, B, or C commercial motor vehicle, the Institute may perform drug and alcohol testing to determine if driver impairment was a factor in the accident.

4.6.4 Types of alcohol and controlled substance tests

4.6.4.1 Pre-employment: employer shall have received the negative controlled substance test result before allowing a driver to perform a safety sensitive function.

4.6.4.2 Post-Accident: As soon as practicable following an accident involving a Class A, B or C commercial motor vehicle operating on a public road in commerce, the employer shall test for alcohol and controlled substances for each driver:

- Who was performing safety-sensitive functions with respect to the vehicle, if the accident involved the loss of human life; or
- Who receives a citation under State or local law for a moving traffic violation arising from the accident, if:
  - The accident involved bodily injury to any person who, as a result of the injury, immediately receives medical treatment away from the scene of the accident; or
  - The accident involved one or more motor vehicles incurring disabling damage that required the motor vehicle to be transported away from the scene by a tow truck or other motor vehicle.

4.6.4.3 Random: employers shall randomly test drivers at a minimum annual percentage rate of 10% of the number of drivers for alcohol testing, and 50% for controlled substances testing. The random alcohol test shall be performed immediately prior, during or immediately after a driver is about to, or has performed a safety sensitive function as defined in Section 382.107. All drivers shall have an equal chance of being selected.
4.6.4.4 **Reasonable Suspicion:** An employer shall require a driver to submit to an alcohol and/or controlled substance test when the employer has reasonable suspicion to believe that the driver has violated the prohibitions concerning alcohol and/or controlled substances. The employer's determination that reasonable suspicion exists to require the driver to undergo an alcohol and/or controlled substances test shall be based on specific, contemporaneous, articulable observations concerning the appearance, behavior, speech or body odors of the driver. A supervisor or company official who is trained according to 382.603 shall make the required observations.

4.6.4.5 **Return-to-Duty:** Each employer shall ensure that before a driver returns to duty requiring the performance of a safety-sensitive function after engaging in conduct prohibited by subpart B concerning alcohol or controlled substances, the driver must undergo a return-to-duty alcohol test with a result indicating an alcohol concentration of less than 0.02 and/or the driver must undergo a return-to-duty controlled substances test with a result indicating a verified negative result for controlled substances use.

4.6.4.6 **Follow-up:** The Substance Abuse Professional must establish a follow-up testing plan, and the employer must ensure that the follow-up testing plan is carried out. A minimum of six tests must be conducted in the first 12 months, and the driver may be subject to this test for a maximum of 60 months.

4.6.5 **Inquiries to previous employers:** Employer, with the driver's written authorization, shall inquire about the following information from the driver's previous employers for a period of two years preceding the driver's date of application:
- Alcohol tests with a result of 0.04 alcohol concentration or greater;
- Verified positive controlled substances test results;
- Refusals to be tested;
- Other violations of drug and alcohol regulations; and
- Documentation of completion of return-to-duty requirements.

4.6.6 **Applicant's previous pre-employment tests:** Employer shall ask an applicant about previous pre-employment tests or refusals where the applicant did not obtain a job, during the two years preceding the applicant's date of application. If the applicant had any positive tests or refusals, the applicant shall have documented completion of the return-to-duty process.

4.7 **Inspections, Repair and Maintenance of CMVs**

4.7.1 Employer shall systematically inspect, repair, and maintain, all CMVs subject to its control and keep records of all inspections, repairs and maintenance. The Inspection, Repair and Maintenance Record form may be downloaded from: [http://www.fmcsa.dot.gov/safety/carrier-safety/motor-carriers-guide-improving-highway-safety](http://www.fmcsa.dot.gov/safety/carrier-safety/motor-carriers-guide-improving-highway-safety). The Inspection Items form is also located in the guide.

4.7.2 Each CMV component specified in Part 396, Appendix G shall pass an inspection by a qualified inspector at least once in the previous 12 months in order to be operated.

4.7.3 Employer shall ensure that each CMV is properly lubricated and free of oil and grease leaks.

4.7.4 Driver shall complete a pre-trip inspection to ensure that vehicle parts such as horn, windshield wipers, mirrors, coupling devices, lights, and brakes are in good working order. At the end of the day, the driver shall submit a written report on each vehicle used that day. Driver’s Vehicle Inspection Report form: (http://www.fmcsa.dot.gov/safety/carrier-safety/motor-carriers-guide-improving-highway-safety). At a minimum, the report shall cover brakes, steering, lights, reflectors, tires, horns, windshield wipers, rear vision mirrors, coupling devices, wheels and rims, and emergency equipment. If a defect or deficiency is identified, then the employer shall repair the defects before the vehicle can be operated.

4.7.5 Driver shall ensure that cargo is properly distributed and secured as specified in 49 CFR 393.100 and 393.106, and ensure that cargo does not interfere with the driver’s view, movement of arms and legs, access to controls, and ability to exit from the vehicle. Driver shall also re-examine the cargo and load-securing devices periodically throughout the trip.

4.8 Operating CMVs

4.8.1 CMV shall be properly registered, licensed, and in good working order.

4.8.2 Employer shall not schedule a run that requires a driver to operate the vehicle above the speed limit.

4.8.3 Driver shall wear a seat belt, obey speed limits, slow down at railroad crossings, exercise extreme caution while driving in hazardous conditions, and activate emergency signals when stopped in a travel lane or shoulder of a highway.

4.8.4 Driver shall not operate a CMV while under the influence of a controlled substance except for prescription drugs that will not affect safe operation.

4.8.5 Driver shall not operate a CMV if alertness is impaired by fatigue or illness.

4.8.6 Driver shall not use alcohol or be under the influence of alcohol within 4 hours of going on duty or operating a CMV. Driver must not use or be in possession of alcohol while working. Any driver violating these regulations is immediately placed Out-of-Service (prohibited from driving) for 24 hours.

4.8.7 Lamps or reflectors shall not be obscured by dirt, tailboard, load, etc.

4.8.8 A CMV shall not be fueled when the engine is on.
4.8.9 No driver shall transport any persons on a CMV (buses and passenger vans excepted) unless authorized in writing by the carrier.

4.8.10 Radar detectors are prohibited on CMVs.

4.8.11 CMVs shall be safely loaded.

4.8.12 Employer shall keep records of all accidents for at least one year.

4.8.13 Maximum hours of driving time and duty time for CMV drivers include:
   4.8.13.1 Drivers shall not drive after having been on duty 60 hours in 7 consecutive days or 70 hours in 8 consecutive days.
   4.8.13.2 Property-carrying drivers shall not drive for more than 11 hours after 10 consecutive hours off duty or for any period of time after having been on duty 14 hours following 10 consecutive hours off duty.
   4.8.13.3 Passenger-carrying drivers shall not drive for more than 10 hours after 8 consecutive hours off duty or for any period of time after having been on duty 15 hours following 8 consecutive hours off duty.
   4.8.13.4 Note: on-duty includes time spent loading, unloading, performing inspections, etc.

4.9 CMV Parts and Accessories

   4.9.1 Trucks and buses manufactured after March 1, 1999, shall be equipped with an anti-lock brake system that has a malfunction indicator system.
   4.9.2 Table 1 in 393.11 (FMCSA - Regulation: 393.11) includes lighting regulations for CMVs including lighting devices and reflectors, turn signals, clearance lamps, head lamps, reflectors, and electrical equipment.
   4.9.3 Sections 40 CFR 393.100, 393.104, and 393.106 outline requirements for: brakes, window construction, fuel systems, coupling devices and towing methods, miscellaneous parts and accessories, emergency equipment (including fire extinguishers), protection against shifting or falling cargo, frames, cab and body components, wheels, steering, and suspension systems.

4.10 Additional Requirements for CMVs ≥10,000 Pounds or for CMVs Used to Transport Hazardous Materials in Quantities Requiring Placarding

   4.10.1 Shall be equipped with Type 1 or 2 seatbelt assemblies that conform to 49 CFR 571 Standard No. 207, 208, 210 and rear impact guard that meets Standard No. 223 (Section 223 - Rear Impact Guards).
   4.10.2 Towing vehicles shall be equipped with lamp and reflectors-combinations according to 49 CFR 393.17 (PDF) 49 CFR Ch. III (10–1–02 Edition) § 393.17
4.10.3 Semi trailers and trailers manufactured before Dec 1, 1993 shall be equipped with a retro reflective sheeting and reflex reflectors that meet requirements.

4.10.4 Red flags shall be on projecting loads if the load extends beyond the sides more than 4 inches or more than 4 feet beyond the rear.

4.10.5 Shall be equipped with devices to prevent shifting, falling, leaking, spilling cargo
   4.10.5.1 Cargo shall be contained, immobilized or secured
   4.10.5.2 Motor vehicle shall be equipped with a header board or similar device
   4.10.5.3 All tie down and securement devices shall withstand the following forces: 0.8 g deceleration in the forward direction, 0.5 acceleration in the rearward direction, 0.5 acceleration in the lateral direction.
   4.10.5.4 Shall use structures of adequate strength, dunnage or dunnage bags, tie-downs, or shoring bars, or a combination of these.
   4.10.5.5 Shall protect against lateral and longitudinal movement
   4.10.5.6 Front end structure of cargo-carrying vehicles shall meet performance requirements
   4.10.5.7 Equipment and machinery shall be stored according to regulations

4.10.6 Coupling devices:
   4.10.6.1 For driveaway-towaway operations: no more than three saddle mounts shall be used in combination and no more than one tow bar may be used in combination.
   4.10.6.2 Except for driveaway-towaway operations, coupling devices shall be installed so that when operated on a smooth paved surface the path of the towed vehicle will not deviate more than 3 inches to either side. Fifth wheel assemblies shall have secure mounting systems, locking mechanisms, and safety devices that conform to regulations in case of tow bar failure or disconnection.

4.11 Driving and Parking Rules for CMVs that Transport Hazardous Materials
   4.11.1 Applies to CMVs used in transporting material found by the Secretary of Transportation to be hazardous under 49 USC 5103 and transported in a quantity requiring placarding under 49 CFR, Subtitle B, chapter 1, Subchapter C.

   4.11.2 Shall not be operated near an open fire, unless precautions have been taken; must not be parked near an open fire.

   4.11.3 No person shall smoke or carry a lighted cigarette, cigar, or pipe on or within 25 feet of a motor vehicle containing materials in Class 1, 5, or flammable materials in Division 2.1, 3, 4.1, 4.2, or an empty motor vehicle which has been used to transport Class 3 flammable materials or Division 2.1 flammable gases.

   4.11.4 CMV containing Division 1.1, 1.2, or 1.3 explosive material:
   4.11.4.1 Shall not be parked on or within 5 feet of the traveled portion of a public street or highway; on private property without knowledge of the property owner; or
within 300 feet of a bridge, tunnel, dwelling, or place where people work or congregate.

4.11.4.2 Driver shall have a copy of the rules in part 397 (FMCSA - Regulations - Federal Motor Carrier Safety Administration), a document containing the instructions and procedures to be followed in the event of an accident or delay which includes the names and phone numbers of persons to be contacted and the nature of the material being transported, and the signature of the driver.

4.11.4.3 Shall be attended at all times by its driver or a qualified representative

4.11.5 When being fueled, its engine shall not be in operation and a person must be in control of the fueling process.

4.11.6 If equipped with dual tires on any axle, its driver shall stop the vehicle in a safe location at least once every 2 hours or 100 miles of travel and examine the tires.

4.11.7 Shall comply with routing designations of a State or Native American tribe.

4.11.8 A carrier that is operating a motor vehicle containing Class 7 (radioactive) materials shall ensure that the vehicle is operated on routes that minimize radiological risk. Information on accident rates, transit time, population density and activities, and time of day and day of the week shall be considered. A preferred route shall be taken. Any variation between the route planned and route taken shall be reported. No person shall transport a Class 7 material unless trained within the previous 2 years, has a certificate of training and has a route plan.

4.12 Additional Requirements for CMVs that Transport More Than 8 Passengers For Compensation or more than 15 Passengers Not For Compensation

- Passengers shall be rearward of the clearly marked standee line.
- Aisle seats shall conform to regulations, e.g. automatically fold to leave aisle clear
- Baggage or freight shall be stowed and occupants protected against injury from falling articles
- There shall be unrestricted freedom of movement of the driver and operations
- There shall be unobstructed access to all exits by any occupant and clearly marked emergency doors
- Push-out window, emergency doors and door marking lights shall be inspected every 90 days
- If the CMV is equipped with air brakes, there shall be rear and front brakes so that the rear brakes can be used if the front brakes fail.
- Shall be equipped with Type 1 or 2 seat belt assembly that conforms to 49 CFR 571 Standard No. 207, 208, 209, or 210.

5. Roles & Responsibilities

5.1 The EHS Office shall:

- maintain up-to-date guidance pertaining to safe operation of CMVs;
- maintain an up-to-date list of CMVs driven on campus and the supervisor in charge;
• perform a periodic audit of DLCs that own/operate CMVs; and
• address questions or concerns pertaining to CMVs.

5.2 Supervisors shall ensure that:
• those individuals that they supervise who drive CMVs meet the qualifications outlined in the regulations and this SOP;
• those individuals that they supervise have attended the required training classes;
• vehicles have registered (including certificate of insurance) and where applicable, that a DOT number has been secured;
• vehicle registrations are renewed annually;
• vehicles are inspected annually;
• vehicles are appropriately maintained and maintenance records kept;
• any accidents involving vehicles on MIT business are reported to the Insurance Office as soon as possible;
• a Supervisor’s Report of Illness/Injury is submitted where an accident involving an MIT vehicle results in physical harm to the driver or passenger(s);
• where hazardous materials are transported, either the Materials of Trade exemption conditions are met or the vehicle is placarded and driven by an operator with a valid CDL;
• for Student Life activities where individuals will be transported using MIT vehicles or passenger vans, that a Driver Safety Form has been completed and submitted to the Student Life Programs Office; and
• operators comply with MA DEP anti-idling requirements.

5.3 The DLC EHS Coordinator shall:
• address questions or concerns regarding CMVs, and consult with the EHS Office if necessary.

5.4 Individuals driving CMVs shall:
• know and follow the regulations that pertain to them that are outlined in this SOP;
• complete the Student Life Programs Driver Safety Questionnaire, where applicable;
• report any incidents, problems or concerns with operating or inspecting CMVs to their supervisor or PI; and
• comply with MIT’s policies on alcohol use and maintaining a drug-free workplace.

6. Training
The employer shall provide educational materials (supervisors training and driver awareness training) of the requirements of the regulations regarding drug and alcohol testing as well as the employer's policies regarding alcohol misuse and controlled substances abuse.

At a minimum, detailed discussions should include:
  o The identity of the person designated to answer drug and alcohol questions
  o Which drivers are subject to these requirements, what behavior is prohibited, and clarification of what a "safety sensitive function" entails.
The circumstances under which a driver will be tested, and the procedures that will be used for testing.

- Explanations of the requirement that a driver submit to the testing, as well as what constitutes a driver’s refusal to submit to testing.
- The consequences for drivers who have violated the testing requirements.
- Information concerning the effects of alcohol misuse, and controlled substances abuse on health, work, and personal life.

Although defensive driving training is not required in the FMCS regulations, it is recommended that CMV drivers undergo training that teaches the proper skills, performance, and behaviors necessary to be a safe CMV driver. The National Safety Council offers a Professional Truck Driver-Online Course to teach defensive driving techniques.

7. Monitoring Requirements
Inspections, driver license audit and certification, and driving record checks must be performed as outlined in this SOP.

8. Record Management
All records related to the use of CMVs shall be maintained per the SOP on Records Retention.

Driver Qualification file shall be kept for each driver for the length of employment plus three years.

Record retention schedule and location mandated by 49 CFR 382 Controlled Substances and Alcohol Use and Testing:
- Five year retention:
  - Alcohol test results indicating a Breath Alcohol Concentration (BAC) of 0.02 or greater
  - Verified positive drug test results
  - Refusals to submit to required alcohol and drug tests
  - Driver evaluations and referrals
  - Required calibration of Evidential Breath Testing (EBT) devices
  - A copy of each calendar year summary required by 382.403.
- Two year retention: records related to the collection process
- One year retention: negative and canceled controlled substance test results (alcohol test results indicating a BAC of less than 0.02)
- Indefinite retention: education and training records
- Location of records: maintained in a secure location with limited access, and made available for inspection by an authorized representative of the Federal Motor Carrier Safety Administration.

9. References
The following references are available through the EHS Office:

9.1. Standards
Federal Motor Carrier Safety Regulations 49 CFR 382, 390-399
Massachusetts Air Pollution Control Regulations, 310 CMR 7.00
Hazardous Materials Regulations, 49 CFR 100-181, specifically 173

NHTSA Federal Motor Vehicle Safety Standards 49 CFR 571

Omnibus Transportation Employee Testing Act of 1991 (OTETA)

Department of Transportation 49 CFR Part 40 Procedures for Transportation Workplace Drug and Alcohol Testing Programs

Fair Labor Standards Act (FLSA)
OSHA General Duty Clause

9.2. Other SOP/SOGs
Contractor Safety Manual
EHS Vehicle Use Policy

9.3. Supplementary Documents
MIT Environment, Health and Safety Policy
MIT’s Commercial Motor Vehicle Drivers Alcohol and Controlled Substances Use Information, Training, and Referral
NIOSH Hazard Review: Work-related Roadway Crashes; Challenges and Opportunities for Prevention

10. Definitions
10.1. Commercial Motor Vehicle definition in FMCSR:
- Motor vehicles having a gross vehicle weight rating (GVWR) or gross combination weight rating, or gross vehicle weight or gross combination weight, of 4,536 kg (10,001 pounds) or more, whichever is greater; or
- Motor vehicles designed or used to transport more than 8 passengers, including the driver, for compensation; or
- Motor vehicles designed or used to transport more than 15 passengers, including the driver, and is not used to transport passengers for compensation; or
- Motor vehicles used in transporting material found by the Secretary of Transportation to be hazardous under 49 U.S.C. 5103 and transported in a quantity requiring placards under regulation prescribed by the Secretary under 49 CFR, Subtitle B, Chapter 1, Subchapter C.

10.2. Vehicle Classes:
- Class A – any combination of vehicles with a gross combination weight rating of 26,001 lb or more, provided the GVWR of the vehicle(s) being towed is more than 10,000 lb.
- Class B – any single vehicle with a GVWR of 26,001 lb or more, or any such vehicle towing a vehicle with a GVWR of no more than 10,000 lb
• Class C- Any single vehicle or combination of vehicles that does not meet the definition of Class A or B but is either designed to transport 16 or more passengers (including the driver) or is placarded for hazardous materials
Appendix A

Road Skills Test

<table>
<thead>
<tr>
<th>Item</th>
</tr>
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<tbody>
<tr>
<td>Pre-trip inspection</td>
</tr>
<tr>
<td>Coupling and uncoupling of combination units</td>
</tr>
<tr>
<td>Placing vehicle in operation</td>
</tr>
<tr>
<td>Use of controls</td>
</tr>
<tr>
<td>Use of emergency equipment</td>
</tr>
<tr>
<td>Operating vehicle in traffic</td>
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<tr>
<td>Operating vehicle while passing</td>
</tr>
<tr>
<td>Braking</td>
</tr>
<tr>
<td>Backing-up</td>
</tr>
<tr>
<td>Parking</td>
</tr>
<tr>
<td>Air brake inspection and operation skills</td>
</tr>
<tr>
<td>Safe driving skills (lane changes, turns, signaling, speed control, visual search, and following distance)</td>
</tr>
</tbody>
</table>

General Knowledge Exam

<table>
<thead>
<tr>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proper use of vehicle controls and safety features</td>
</tr>
<tr>
<td>Backing rules and procedures</td>
</tr>
<tr>
<td>Visual search methods</td>
</tr>
<tr>
<td>Speed management</td>
</tr>
<tr>
<td>Night driving</td>
</tr>
<tr>
<td>Hazard perception</td>
</tr>
<tr>
<td>Relationship of cargo to vehicle control</td>
</tr>
<tr>
<td>Vehicle inspection procedures</td>
</tr>
<tr>
<td>Vehicle maneuvering in emergency situations</td>
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<tr>
<td>Hazardous materials transport</td>
</tr>
<tr>
<td>Air brake systems</td>
</tr>
<tr>
<td>Combination vehicles:</td>
</tr>
<tr>
<td>Coupling and uncoupling procedures and vehicle inspection</td>
</tr>
</tbody>
</table>

Appendix B
MIT Driver License Audit and Certification

Date of Audit and Certification: ________________

Driver License Audit:

Name of Driver: ________________________________

Driver’s License Number: ______________________ Issue State _____________________

License Expiration Date: ________________ License Classification: ____________

Driver Certification:

I certify that the following is a true and complete list of traffic violations (other than parking violations) for which I have been convicted or forfeited bond or collateral during the past 12 months.

<table>
<thead>
<tr>
<th>Date of Conviction</th>
<th>Offense</th>
<th>Location</th>
<th>Type of Motor Vehicle Operated</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. ____________</td>
<td>____________</td>
<td>______________</td>
<td>___________________________</td>
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<tr>
<td>2. ____________</td>
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<td>3. ____________</td>
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<td>______________</td>
<td>___________________________</td>
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<tr>
<td>4. ____________</td>
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<td>______________</td>
<td>___________________________</td>
</tr>
</tbody>
</table>

Driver’s Initials: ____________

I, _______________________________________(print name) hereby certify that the above is a true and accurate list of all traffic violations for which I have been convicted or pled guilty to during the past twelve months. I further certify that I have not been convicted or pled guilty to a Driving under the Influence (DUI), Driving While Intoxicated (DWI), or an offense of similar magnitude during the past five years.

__________________________________________ Date

Driver’s signature

Audit conducted by:

__________________________________________ Date

Print name Signature
Appendix C

Driver Disqualification List

1. Driving a CMV with a revoked, suspended, or cancelled commercial driver’s license, or while disqualified.
2. Driving under the influence of alcohol or of a disqualifying drug or other substance
3. Refusing to take an alcohol test
4. Transporting or possessing a disqualifying drug or controlled substance
5. Leaving the scene of an accident
6. Committing a felony using a CMV
7. Using a CMV to violate an Out-of-Service Order. An out-of-service order is a loss of only commercial driving privileges for a specified period of time.
8. Causing a fatality through negligent operation of a CMV
9. Serious Traffic Violations/Convictions. Serious traffic violations/convictions include reckless driving, speeding 15 mph or more above the speed limit, improper or erratic lane changes, following too closely, and any moving violation relating to a fatal crash. Serious traffic convictions also include driving a CMV without obtaining a CDL, driving a CMV without CDL in possession, and driving a CMV without proper class of CDL or endorsement/restrictions.
10. Railroad-highway grade crossing offenses