NBCC

Safe Work Practice (SWP)

Name of Task: Fuel Transport & Handling	
Department/Unit: All Staff	
Personal Protective Equipment or other required equipment or other safety considerations: Not required during routine filling of a vehicle or container. Use PPE for other gas handling including protective eyewear/face shield, protective gloves.	
Hazards: Fire/explosion, absorption, burns, inhalation of toxic fumes, splash injuries	
Required Training	WHMIS certification
Steps to be taken to complete task safely:	
1	This SWP deals with the transport and handling of liquid fuel (gas, diesel). Handling or transportation of any other type of fuel must follow approved government regulations.
2	**General Safety Precautions:** • All instructions and warnings must be read and understood before fueling equipment. • Ensure proper fuel is being put into equipment. • Only trained and competent workers may re-fuel equipment; this includes WHMIS training. • Ensure equipment is shutoff prior to refueling • An appropriate fire extinguisher must be located within 25 feet. • DO NOT leave the area while refueling is in progress. • Always fuel in a well ventilated area. • Avoid contact with skin. Most fuels contain known carcinogens. Wash skin thoroughly with soap and water in case of contact. • Avoid breathing vapors or mist. • Fuel tanks must be grounded and pumps must be CSA approved. • Ensure there are no lit cigarettes, open flames, handheld devices or other sources of spark or static in the vicinity while fueling. • If fuel splashes onto clothing, remove and allow for fuel to evaporate completely outdoors before washing. Thoroughly wash clothing before re-use.

3	**Fueling Vehicles at a Pump:** • Identify and ensure you know how to operate emergency fuel cut offs. • Ensure engine is turned off while fueling. • Remove twists and small loops in the fuel delivery hose. They can cause the hose to fail or catch on bumpers as vehicles move around the pump islands. • Insert delivery hose nozzle firmly into the fill pipe of the vehicle. Maintain contact with the lever until the delivery is complete to reduce possibility of static electricity sparking. • Reinstall the cap on the fill pipe when delivery is complete. Replace the nozzle. • Fill small gas tanks (such as lawn mowers, motorbikes) slowly to prevent fuel from spilling and contacting hot engine. • Do not use the gas cap or other objects to hold the fuel delivery nozzle open. • Do not leave area unattended while fueling.
4	**Filling Portable Containers:** • Make sure your container is made to hold the correct type of FUEL and is CSA approved. Approved gas fuel containers are red for gas and yellow for diesel and have a marking stating their intended use either for gasoline or diesel. • Discharge static electricity. Static electricity can build up and cause a spark, igniting the gas fumes. Release any static electricity in your body collected from being in the car by touching a metal part of the car, possibly the car door, as you exit the vehicle. • Remove the container from vehicle prior to fueling. Never fill a gas container that is located inside a vehicle or in the bed of a truck. The container is not grounded from electrical charge if it is in a vehicle. Bed liners and mats in truck beds negate the grounding of static charges. • Place the container on the ground at a safe distance from moving or parked vehicles and people. • When dispensing fuel into a portable container, manually control the nozzle valve throughout the filling process. Fill a portable container slowly to decrease the chance of static electricity build up and minimize spilling or splattering, open any air “vents” to allow proper ventilation while filling. Close when filling is complete. • Fill container no more than 95 percent full to allow for expansion. • Place cap tightly on the container after filling – do not use containers that do not seal properly. • If the fuel spills on the container, or on the ground, use absorptive material provided at the pumps and advise the attendant. Dispose material in hazardous bucket normally found at or near Pump Island. Make sure that fuel has evaporated from the container before you place the container in your vehicle. Report all spills to the attendant. • Never leave the container unattended while refueling and never use a device to hold the discharge lever in the open position. Ensure that the delivery nozzle has been properly returned to the pump after filling. • Ensure gasoline containers carry appropriate MSDS or insure employee has been properly trained on how to handle a fuel spill.

5	**Transport of Fuel:** • Remove the container from the vehicle prior to filling. • Take steps to prevent gas spills in your vehicle. Make sure all caps and vent caps are on correctly and tightened. Sit the container upright. Secure gas containers so they cannot move. • Leave gas containers in your vehicle for as short a time as possible. Make sure the area is not enclosed. Open windows to keep the space well ventilated. Do not leave gas containers in the trunk or inside the riding area of a vehicle. • Keep gas containers away from sources of heat (even the sun) and spark. • Protect passengers from the harmful fumes of gasoline. Gas containers should not be placed on the seat beside people. Secure the containers as far from people's faces as possible. Passengers should never be left in an enclosed vehicle with a gas container.
6	**Fueling with a Container:** • Use a proper fueling device at all times to avoid splashing fuel on the engine or frame of the equipment. Loosen any air vents on container to allow smooth pour. • Fill slowly and listen to air coming out of the container as the fuel pours in. As the container nears the full level, air will come out faster, and the pitch will get higher. As the container empties, fuel is replaced with additional air flow which increases pressure, allowing fuel to flow faster. Stop before the tank is full. Leave 5 percent empty to allow for expansion of the tank. • When the tank is full, let the fueling nozzle drain for a few seconds before removing it from the fuel port to prevent dripping. • Replace the filler cap.
7	**Cleaning Up:** • Avoid spillage on equipment or ground. If you have a spill, you MUST report to your supervisor or the person in charge. • Spills are to be contained immediately. Use oil dry, Absorbal or similar product on all spills. • Fuel spilled on hands or exposed skin shall be washed off as soon as possible, • Wipe up any spills or drips and allow any damp spots around the motor to evaporate before attempting to start the equipment.
8	**Never:** • smoke, light matches or lighters while refueling or when using fuel anywhere else. • use cell phones and other electrical devices when refueling. • breathe fuel vapors for a prolonged period of time. Use fuel only in open areas that get plenty of fresh air. Keep your face away from the nozzle or container opening. • siphon fuel by mouth nor put gasoline in your mouth for any reason. Gasoline can be harmful or fatal if swallowed. If someone swallows gasoline, do not induce vomiting. Contact a doctor immediately.

9	**Static Electricity** • Static electricity-related incidents at "refueling" outlets are extremely unusual, but the potential for them to happen appears to be the highest cool and dry climate conditions. • In rare circumstances, these static related incidents have resulted in brief flash fires occurring at the fill point. Motorists can take steps to minimize these and other potential fueling hazards by following safe refueling procedures all year long. • Motorists should not get into their vehicles while pumping fuel. It may be a temptation to get back in the car when it is cold, but the average fill-up takes only two minutes, and staying outside greatly minimizes the likelihood of any static electricity build-up that could be discharged at the nozzle. • A buildup of static electricity can be caused by re-entering a vehicle during fueling, particularly in cool or cold and dry climate conditions. If the motorist then returns to the vehicle fill pipe during refueling, the static may discharge at the fill point, causing a flash fire or small sustained fire with refueling vapors. • Motorists who cannot avoid getting back into the vehicle should always first touch a metal part of the vehicle with a bare hand, such as a door, or some other metal surface away from the fill point upon exiting the vehicle.

If an emergency situation occurs while conducting this task, or there is an equipment malfunction, shut the equipment off immediately and follow the lock out procedure. Report any hazardous situation to your instructor/supervisor immediately.

Responsibilities, Completion and Review

Management and workers to ensure all duties performed in accordance to training, established health and safety regulations/guidelines, policies and procedures (e.g. utilizing personal, protective equipment as per SAFE Work Procedures). Notify Manager or designates (i.e. supervisors) of all occurrences, injuries illnesses or safety and health concerns which are likely to harm themselves, co-workers, or any others who enter the premises.

Completed by and Date:	**Approved by**:
Last Reviewed / Revised by and Date:	**Note**: This task will be monitored periodically to ensure compliance and effectiveness.