Number: SWP-06 Rev 1

Title: FUELING GASOLINE ENGINES

Prepared by: D Yanchula Feb 2023

SWP Purpose

This safe work practice is intended to provide guidance to workers in situations where they are required to add fuel to gasoline engines, motors, or tanks.

Scope

This SWP applies to vehicles that are used by workers, any heavy equipment they may need to use and smaller portable gas-powered equipment (e.g. chainsaws, brushers).

Responsibilities

Responsibilities apply to the Trip Manager/Volunteer Lead, all workers, and the Health and Safety Committee.

It is the responsibility of the Trip Manager/Volunteer Lead to

- Enforce the application of this SWP in all gasoline fueling situations.
- Reinforce to workers that any recommended controls must be applied consistently.
- Require that this SWP be implemented for all vehicles and equipment used

It is the responsibility of the Workers to

- Be aware of the potential hazards that may occur during the fueling of tanks and/or equipment.
- Ensure recommended controls are implemented and used appropriately.
- Be aware of and apply manufacturer's instructions.
- Inspect equipment and work areas for hazards before, during, after process.
- Select and use appropriate PPE.
- Immediately report any safety events (near misses, hazard identifications, incidents) to the Crew Lead.

It is the responsibility of the Safety Committee to

- Maintain this Safe Work Practice
- Perform periodic audits to assess that these requirements/SWP are being acted upon.
- Reinforce that recommended controls are to be implemented and used appropriately.

Hazards

Hazards include explosion/fire, inhalation, skin contact, eye contact, and/or ingestion.

Gasoline vapors are highly flammable and can ignite at temperatures as low as -45°C. A single cup of gasoline, when vaporized and ignited, has the explosive power of five sticks of dynamite. Gasoline ignites easily, burns strongly, and vapors may explode under certain conditions.

Exposure to vapor during normal refueling activities is not considered to be a significant health concern. However, significant spills can result in short-term exposures to high concentrations of vapors. This can

Number: SWP-06 Rev 1

Title: FUELING GASOLINE ENGINES

Prepared by: D Yanchula Feb 2023

cause irritation of the eyes, nose, respiratory tract, and possible signs of central nervous system depression.

Minor accidental skin contact may occur during refueling and is not considered to be a significant health concern. Major skin exposure for longer periods of time will only likely occur in accidental spill situations (e.g. due to soaking of clothing during pump malfunction). Skin contact may cause local irritation. If exposure is more frequent or for a longer period, reactions may be more severe. Gasoline exposure can result in dry, cracked skin.

Splashing into the eye may cause irritation and discomfort. This is usually temporary; permanent damage is unlikely to occur.

Hazards due to worker behavior include drowsiness/fatigue, distractions within or around the vehicle, psychological factors such as stress, lack of familiarity with the vehicle or the task. Safe lifting should be practiced during this task.

Controls

Controls may include elimination/substitution, engineering, warnings, administrative, and/or PPE.

- Park vehicle as close to the fueling point as safely possible.
- Place the vehicle in park and turn off the ignition. Do not add gasoline to a running engine/motor. Always turn off the engines/motors prior to refueling.
- Ensure the fuel nozzle is always in contact with the vehicle filler spout.
- Avoid spilling. Do not overfill tanks.
- Ensure good ventilation.
- Do not smoke in proximity. Ensure there are no ignition sources within the immediate area of the vehicle and fuel pump (cigarettes, lighters, cell phones).
- Do not operate a cell phone while fueling; static electricity can cause a problem.
- Avoid breathing in the vapors. Turn your face away from the nozzle and keep the gasoline away from your eyes and skin. Wearing gloves and safety glasses is advisable.
- Where possible, in field, place spill collection below filling port to capture minor spills
- When fueling is complete, lightly tap the end of the nozzle in the fuel port to remove any fuel drops.
- Replace the fuel nozzle and the fuel cap.
- Keep gasoline away from all ignition sources (heat, sparks, open flame).
- If a worker does react to exposure to the fumes, remove the person to a fresh air location.
- If significant skin contact occurs, wash all affected areas with soap and water.
- If eyes are contacted, flush with water.
- Never siphon gasoline by mouth.
- Never use gasoline as a cleaning solvent.
- Follow posted regulations.

Number: SWP-06 Rev 1

Title: FUELING GASOLINE ENGINES

Prepared by: D Yanchula Feb 2023

• If transporting gasoline to a work site, select the correct container following Dangerous Goods Regulations and check the container for wear and tear before use.

- Good housekeeping is essential; fuel storage and refueling areas should be weed and debris free. If feasible, store fuel out of access from bears.
- Check fuel/oil ratios, if needed for specific equipment (e.g. chainsaws).
- Ensure that equipment is turned off and cool before refueling.
- Use appropriate equipment for any fuel transfer, such as funnels.
- Clean off any spilled fuel before starting the engine.
- Carry spill kits appropriate to the size of the tanks/engines.
- Report any spill to Crew Leads.
- Eye protection is required when fueling)

Training

Workers must be adequately trained. On the job/scenario or demo-based training is useful. If a worker is involved in an accident, training should be reviewed.

Resources, References, Definitions

Revision History

Revision	<u>Date</u>	<u>Description of Change</u>	Personnel Involved
REV 0	Feb 2020	New SWP	D Yanchula
Rev 1	Feb 2023	Changes in BOLD	D Yanchula