



Title: Safety Rules, Procedures, and Techniques for Solid Waste and Recyclable Materials Processing and Collection	
Effective Date: 12/18/2017	Document #: SRPTSWRMPC.JPB
Revision Date: Rev. 0	

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I. PURPOSE

The following safety rules and procedures are provided to assist and ensure workers who perform waste collection, handling, or recycling duties are protected from safety hazards often associated with these duties.

II. SCOPE

This document identifies rules, procedures, and techniques for safe collection, pick up and handling of solid waste such as garbage, trash and recyclable materials, including operation of associated heavy equipment and vehicles.

III. APPLICABILITY AND RESPONSIBILITIES

- A. This policy/procedure applies to Buffalo State College employees, including Grounds Department personnel responsible for collection pick-up of trash, garbage and recyclable materials.
- B. The Buffalo State College Grounds and Arboretum Manager is responsible for:
 - 1) Ensuring a copy of the manual is made available to and reviewed with affected personnel in the Grounds Department;
 - 2) Ensuring that safety training, including safety (e.g. "tailgate") talks, is frequently provided by the Grounds Department Supervisor, Grounds and Arboretum Manager, or his/her designee, to Grounds Department employees as further described in Section V;
 - 3) Monitoring staff worker implementation of safety procedures and promptly ensuring appropriate corrective measures are implemented whenever safety related deficiencies in worker or equipment performance are identified or reported;
 - 4) Receiving input and suggestions from affected employees to improve safety performance and following up with appropriate measures; and
 - 5) Ensuring affected employees are issued Personal Protective Equipment and other protective equipment necessary to perform their work safely.
- C. The Buffalo State College Grounds Department Supervisor is responsible for:
 - 1) Ensuring a copy of the manual is made available to and reviewed with affected personnel in the Grounds Department;



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- 2) Ensuring that safety training is frequently given, including safety (e.g. "tailgate") talks, to Grounds department employees as further described in Section V;
- 3) Monitoring staff worker implementation of safety procedures and techniques and prompt communication of deficiencies and corrections to affected personnel whenever safety deficiencies in worker or equipment performance are observed;
- 4) Receiving input and suggestions from affected employees to improve safety performance and following up with appropriate measures, including "up the chain" reporting of issues and incidents; and
- 5) Ensuring staff workers receive and utilize required Personal Protective Equipment and other protective equipment when required or necessary to perform their work safely.

D. The BSC Environmental Health and Safety (EH&S) Office is responsible for:

- 1) Monitoring, assessing, and implementing processes for assuring compliance with this procedure;
- 2) Arranging training and consultative advice to college employees on safe methods for solid waste collection and recyclable materials collection; and
- 3) Monitoring regulations and disseminating information to college employees on new or modified safety requirements pertaining to solid waste and recyclable materials collection;

IV. SAFETY RULES, PROCEDURES, AND TECHNIQUES

4.1 Personal Protective Equipment (PPE)

A matrix listing the required PPE that must be worn for general and specific works tasks is provided as Appendix A.

4.2 Routine General Duties and Vehicle Operation

1. All employees MUST wear PPE listed for the task in the task/PPE matrix contained in Appendix A.
2. DO NOT, under any circumstances, move the truck or heavy equipment until the driver can see the ground crew or spotter either by direct view or in the rear-view mirror.



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3. Before the driver moves the vehicle, visually inspect footwear to verify that it is free from mud, oil, or any other slippery material to prevent slippage off the pedals.
4. Wear the seat belt if the vehicle that you are driving is designed with a seat belt for you.
5. Wear the safety glasses and hard hat when you are operating "open-top" equipment.
6. Do not hinder your ability to hear verbal communication from your coworkers or any other surrounding sounds or warnings; do not use radio, tape player, CD headphones, music ear buds, IPOD or similar devices while you are working.
7. No smoking in buildings or vehicle equipment.
8. Wash hands, shower, and change clothes after you are finished working.
9. Do not wear big or hanging jewelry that can get caught in machinery or equipment.
10. Do not place tools or other objects on the floor of vehicles that can interfere with pedal and gear operations.
11. Before leaving the yard, assist the driver in checking the truck back-up alarm, drivers warning buzzer and all lights particularly stop signal and tail lights.
12. *Riding on the trash vehicle riding step is NOT PERMITTED if:*
 - A. *The truck is backing up;*
 - B. *Forward speeds are expected to exceed 10 mph; and,*
 - C. *If the truck is expected to travel more than two-tenths (0.2) of a mile without stopping.*
13. When riding on the riding step, stand facing the truck and use both hands on the grab-handle.
14. Garbage Trucks are to be staged/parked at 750 Grant St. ("Russlander Bldg").
15. Washing of trucks is necessary to prevent development of nuisance conditions. Washing of trucks on impermeable or paved surfaces on or



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near storm sewer drains is prohibited. Trucks are to be washed in porous areas or where sanitary sewer drains are located, such as at the west end of 750 Grant St. (Ruslander).

- 14. Try to make all of our jobs safer. If you have ideas for improving safety, tell your supervisor or manager. Report vehicle, dumpster, equipment, or any other safety concerns immediately to your supervisor. Contact the Front Desk ext. 6111 to create work orders to arrange for safety related repairs as necessary.

4.3 Backing Garbage, Dump, or Other Heavy-Duty Trucks or Equipment

- 1. The following rules apply when backing is required:
 - A. The driver is responsible for knowing exactly where other members of the crew, other persons in the vicinity, vehicles, etc., are before the driver begins backing the vehicle. This means that waste collector/crew positions must be visible in the truck mirrors before backing begins.
 - B. Crew members are responsible for assisting the driver in the backing process by positioning themselves to the rear of the truck visible to the driver.
 - C. Crew members shall carefully observe the backing process. If it appears that the truck may strike a person, vehicle or other obstacle, the collector **MUST** shout and raise both arms to the vertical to signal and tell the driver to **STOP IMMEDIATELY!**
 - D. NEVER mount the truck while it is backing or moving.
 - E. NEVER dismount the truck while it is backing or moving.
 - F. NEVER ride on the step while the truck is backing.
- 2. When guiding or directing the backing vehicle:
 - A. On a two-person crew or larger, a helper should be designated to guide the backing vehicle. The driver and helper should work together as a team.
 - B. Do not back up unless a helper is guiding and the location of workers is known. On a single person operation, carefully check to the rear to make sure the way is clear before backing up.
 - C. The helper shall be standing to the side and to the rear of the truck, visible to the driver.



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- D. If the helper is not in sight, stop the truck immediately and do not resume backing until the helper is again in view and in a position to signal properly.
- E. The helper must be off the truck in a position that gives the helper an unobstructed view of the ground over which the truck is about to be moved.
- F. The helper must face the driver at all times while signaling.
- G. The helper must be positioned as to observe for the most immediate hazards to the truck. This will require the helper to stop the truck and change positions one or more times to guide the driver effectively.
- H. Wherever possible, the helper must be stationed at the point where the backing maneuver is to end, so that the helper avoids the hazards of walking backward over surfaces the helper cannot see.
- I. The rest of the crew shall be standing to the front of the truck, clearly visible by the driver.
- J. The driver must continuously alternate looking into both rearview mirrors.
- K. Back the vehicle at a slow (about 3 mph), even rate.
- L. All signals should be made with the hand away from the head and body so the driver will see the signaling to the side and/or above the outline of the helper's head and body.
- M. Never mount or dismount while the truck is moving.

4.4 Use of Hand Signals

Voice communications are sometimes impossible in certain working situations due to distance and noise. Hand signals can prevent accidents and save time. Using these hand signals will provide an easy and effective way to communicate.

- 1. COME TO ME – Raise the right arm vertically overhead, palm to the front, and rotate in large horizontal circles.
- 2. MOVE TOWARD ME – Look and point toward the person(s), vehicle(s) you want moved. Hold one hand in front of you, palm facing you, and move your forearm back and forth.



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3. THIS FAR TO GO – Place hands in front of face, palms facing each other. Move hands together or further apart to indicate how far to go.
4. MOVE OUT – Face desired direction of movement. Extend arm straight out behind you, then swing it overhead and forward until it's straight out in front of you with palm down.
5. LOWER EQUIPMENT – Point toward the ground with forefinger of one hand while moving the hand in circular motion.
6. RAISE EQUIPMENT – Point upward with forefinger, making a circle at head level with your hand.
7. SLOW DOWN – Extend the right arm horizontally sideward, palm down, and wave arm downward 45 degree minimum several times, keeping the arm straight. Do not move arm above horizontal.
8. START ENGINE – Move arm in a circle at waist level as though you were cranking an engine.
9. STOP – Raise the right hand upward, arm fully-extended, palm to the front. Hold that position until the signal is understood.
10. SPEED UP – Raise the right hand to the shoulder, fist closed. Thrust fist upward to full extent of the arm and back to the shoulder rapidly several times.
11. STOP ENGINE – Move your right arm across your neck from left to right in a "throat-cutting" motion.
12. MOVE TO THE RIGHT – Raise the right hand above the shoulder and with the thumb pointing to the right, make repeated motions to the right with the hand.
13. MOVE TO THE LEFT – Raise right hand above the shoulder and with the index finger pointing to the left, make repeated motions to the left with the hand.

4.5 Lifting Containers and Curbside Pick-Up

For lifting of containers or curbside pick-up, follow these steps to help ensure your safety as well as the safety of other campus employees and the public:

1. Wear the required PPE listed in the task/PPE matrix in Appendix A when performing this work.



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2. Follow safe lifting techniques in Section 4.6 when lifting garbage cans and bags.
3. Test the weight of the garbage container before lifting it by pushing the load along its resting surface; if the load is too heavy or bulky, ask for assistance from your coworker.
4. Do not ride or sit in the garbage hopper at any time.
5. Sit in the cab of the truck, especially when finished with the route or when the truck is traveling far distances, such as the transfer station.
6. If riding the step or platform becomes necessary follow the procedures for safe mounting, riding and dismounting listed in Section 4.7.
7. Make sure the dumpster is properly secured to the truck before lifting.
8. Stand clear of the dumpster and packer mechanism while the dumpster is lifted and when the packer is in operation.
9. Do not restrict the PTO (Power Take Off) control to the packer. Tie-down of the joy-sticks (e.g. packer lever) is prohibited.
10. If using a tailgate lift, stand well clear when the tailgate is in motion and during unloading. DO NOT stand under raised tailgate.
11. Always enter and exit vehicles using the climb supports; never jump into or out of vehicles.
12. Ensure dumpster is properly disengaged from the truck before leaving the pick-up site.
13. Do not hoist loads over co-workers, crew, other employees or the members of the public.

4.6 Lifting Techniques for Back Safety

To provide safety for your back, follow these guidelines:

1. Always evaluate the load before lifting it and get assistance from a co-worker to lift heavy and/or bulky objects. To provide safety to your
2. Tighten the stomach muscles.
3. Get a firm footing with a wide base of support.
4. Bend the knees.



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5. Lift with the legs.
6. Keep the load close.
7. Keep the spine upright.
8. Never lean forward without bending the knees or extending one leg back.
9. Never lift anything of significant weight above the elbows.

4.7 Use of Riding Steps and Platforms

1. Riding on the platform/step of the garbage truck should only be done if absolutely necessary. PPE listed in Appendix A must be worn when riding on the platform or step.
2. When getting on and off the rear riding step:
 - A. Never get on or off the vehicle while the truck is moving or jump on or off the step.
 - B. Dismount to the side and keep an eye on the ground.
 - C. Keep your body facing the truck when dismounting.
 - D. Keep a hold on the grab handle when stepping onto or off the riding step.
 - E. Check for traffic and the road surface before dismounting to be sure that there are no slippery spots, puddles, or other hazards
 - F. Place feet flatly on the surface.
 - G. Avoid painted, slippery curbs, and wet grass when stepping off the truck.
 - H. Keep steps dry and clean of waste and/or debris.
3. When riding on the step:
 - A. Maintain a firm grip on the handholds with BOTH hands.
 - B. Keep body close to the truck.
 - C. Stand with feet placed squarely on the step and slightly apart.



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- D Be alert to oncoming hazards.
- E Do not rest feet or any part of the body on the hopper sill, and do not “pack on the run.”
- F A signal should be arranged with the driver that will tell driver when the crew is securely on the step before the driver starts moving.
- G Press the emergency buzzer (if equipped) to alert the truck driver of any danger you anticipate or experience.
- H Always wait until the truck has come to a complete stop before mounting or dismounting.
- I Keep the step clear of waste material and grease; to avoid a slip and fall situation.
- J If there is a button that signals the driver, remember to use it only in emergency situations. Make sure the button works before using the vehicle.
- K When the truck is traveling a long distance (more than two-tenths of a mile), ride in the cab and wear the seat belt.
- L Do not ride on the step while backing.
- M Do not block the rear signal lights.
- N If there are not enough riding steps for a multi-man crew, ride in the cab, not in the hopper.
- O Ride in the cab, not on the step, at the landfill and other disposal sites.

4.8 Operating Mulchers, Chipper/Shredders, Stump Grinders or Similar Heavy Equipment

1. The required PPE listed in the task/PPE matrix in Appendix A must be worn when performing this work. Note that a hard hat or “bump cap” and safety glasses must be worn if working within 20 feet of an operating chipper/shredder, mulcher, grinder or similar debris impacting equipment.
2. Only trained and authorized personnel should operate the equipment.



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3. Before operating, read and follow the operating directions in the equipment manual.
4. Only the (mulcher, grinder, chipper/shredder) equipment operator should stand within 4 feet of the equipment while it is in operation.
5. If trash or other material is clogging the equipment, conveyor, etc. stop and de-energize all associated before removing the trash. *DO NOT climb into equipment debris collection basin while it is in operation.*

V. TRAINING

The Grounds and Arboretum manager shall ensure training on proper safety procedures and techniques described in this document is scheduled and given to Grounds Department employees on a frequent routine basis. This includes monthly safety "tailgate" talks given to employees on specific aspects covered in this procedure, current "hot" safety topics", or safety topics extending beyond this procedure but falling within their work duties. The safety talks shall also focus on addressing observed recurring safety deficiencies and non-compliance with this procedure and associated appropriate corrective methods/techniques. These safety talks shall be given by the Grounds and Arboretum Manager, Grounds Labor Supervisor or the manager's designee.

The Grounds and Arboretum Manager and Grounds Labor Supervisor shall ensure records are kept that document the date of each safety talk or training, names of employees in attendance and the subject matter covered.



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APPENDIX



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APPENDIX TABLE: Task/Personal Protective Equipment (PPE) Matrix for Buffalo State College Employees

Task	Safety glasses w/side shields	Close fitting long sleeve shirts and pants	Safety shoes (see notes)	Leather or similar cut - resistant gloves	Hearing protection (see notes)	Reflective safety vests	Hard hat or bump cap	Additional requirements and comments
Garbage/trash collection	√	√	√	√	√	√		
Collecting large debris or branches etc.	√	√	√	√	√	√	√	
Working within 20 feet of a shredder/mulcher/grinder	√	√	√	√	√	√	√	
Operating heavy equipment**	√	√	√*	√	√	√	√	* ANSI-approved safety-toed footwear required when working around heavy equipment or (potential) falling objects. **Additional PPE may be required depending on the specific task Job Safety Analysis (JSA).
Inspecting heavy equipment (hydraulic hoses, machine (safety) guards, etc.)	√	√	√***	√	√		√	*** ANSI-approved safety-toed footwear required when inspecting heavy equipment.
Performing any manual task on or near a roadway or parking lot **	√		√			√		**Additional PPE may be required depending on the specific task JSA.
Other Tasks:								
Trimmer operation	√	√	√	√	√	√	√	
Mower operation	√	√	√	√	√	√	√	
Removing or replacing spark plugs	√	√		√				
Removing and sharpening mower blades (on a benchtop)	√****	√	√	√	√		√	**** A face shield may be worn as an alternative to safety glasses when sharpening blades.
Charging a battery	√	√	√	√	√			
Inflating a mounted tire	√	√		√	√			



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Additional Notes for Appendix Table:

Safety shoes – safety shoes must be at least ankle high, composition construction sole with outer sole of hard durable, cut and break resistant material which is skid resistant and resists degradation caused by oil. The upper portion of the sole must be soft and pliable to allow cushioning to foot, such as polyurethane sole which provides ultimate protection and good long wear qualities.

Hearing protection – Headphones, including noise cancelling headphones or ear buds, are not to be used for hearing protection.