



Baler Safety Program

GENERAL

The UNCW Environmental Health & Safety Department (EH&S) is authorized by [UNCW Policy 05.600](#) to develop and manage comprehensive environmental, health and safety programs. Additionally, they are tasked to identify and address regulatory requirements. In that spirit, this Baler Safety Program has been developed to protect employees by ensuring that all employees understand the Baler Safety Program before employees perform servicing and maintenance activities. This program is intended to meet the Occupational Safety and Health Requirements for General Industry 29 CFR 1910.147

SCOPE

This program applies to all university employees regardless of status or type of employment. It may be used as minimum guidelines for contractors and/or vendors that are expected to maintain their own safety program.

APPLICATION

This written program outlines responsibilities, training, and program requirements with regard to the Baler Safety Program.

RESPONSIBILITIES

Each Department shall be responsible for the implementation of the Baler Safety Program procedures. Employees shall have training in understanding the significance of implementing the procedures. Employees will use the Baler Safety Program when working with balers where there is a danger of injury. EH&S shall be consulted before the purchase and installation of a baler.

TRAINING

The department shall provide training, within 30 days of purchase or assignment to a job that requires baler operations, so employees understand the purpose and function of the program (knowledge, skills, application, use, removal). Employers are required to refer employees to, and have readily available, the manufacturer's instructions to ensure correct operating and maintenance procedures and work practices are understood and followed. Employers are required to ensure employees possess knowledge and skills to safely operate the stationary compactor.

Training shall include:

1. Safe use, operation and shutdown of equipment
2. Safety guarding of equipment
3. Maintenance of equipment
4. PPE required for use of equipment

PROGRAM REQUIREMENTS

General Requirements

1. Instruct all employees how to identify and report exposure to hazards.
2. Prohibit wearing loose clothing, jewelry or long loose hair that can become entangled in the equipment
3. Installation, inspection and maintenance:
 - 1) Install and maintain the equipment according to the manufacturer's instructions
 - 2) Keep the equipment in safe working order
 - 3) Always follow Lock out / tag out polices when performing work, service or general maintenance (note that a specific lock out protocol will be required for each baler)
 - 4) Follow the manufacturer's recommendations for inspecting and testing equipment
 - 5) Keep records of inspections and maintenance (provide to EH&S upon request)
 - 6) DO NOT USE damaged, malfunctioning or defective equipment
 - 7) Have a qualified person inspect equipment at least annually
 - 8) Have qualified person to perform maintenance and repair operations
4. Guard moving Parts per OSHA requirements set for in 29 CFR 1910 Subpart O
5. Controls
 - 1) Clearly label the function of each control
 - 2) Make sure controls are not subject to unintentional activation
 - 3) Have "Stop" controls that conspicuous to operator
 - 4) Provide a way to stop complete operation during any point of cycle
 - 5) Ensure emergency stop controls are readily accessible
6. Access points for Maintenance or Repairs
 - 1) Ensure access covers have functional locks that require tools for removal
 - 2) Have necessary/ required warning signs posted on compactor and/ or baler
 - 3) Replace defective signage
7. Perform daily, pre-stat inspections before use (see [Appendix A](#))
8. Work Area
 - 1) Keep work are clear of clutter, waste material or other obstructions around equipment
 - 2) Ensure all Warning Signs are posted in a conspicuous place (see [Appendix C](#))



Appendix A

Owning Department _____ Baler Location _____

Baler Safety Checklist

1) Check that all signs and warnings are in place and in good condition:	Yes	No	N/A	Comments
Warning: no one under 18 years old is permitted to operate machine				
Caution: Stand Clear while bale is ejecting				
Operating Instructions				
Danger: High Voltage				
Caution: Close Gate				
Caution: Keep Clear				
Watch Fingers				
Do Not Climb				
2) The following control functions have been checked:	Yes	No	N/A	Comments
On/Off Key Switch				
Manual / Auto Selector Switch				
Up/ Down Push Button				
Start Button				
Emergency Stop Button				
Full Light				
Other (please note)				
Is gate in proper working order?				
Door Safety- with main door open machine should not operate in Auto				
Is wiring frayed or are connections loose				

Check structure for failure including ram (welds, etc.)				
Check ejector chains or cables for bent or broken parts				
3) Check Operation of Baler	Yes	No	N/A	Comments
Press all buttons with gate up - does any motion occur? (none should occur)				
<i>Pull gate down and check the following:</i>				
Auto / Manual Switch operating correctly?				
Up / Down switch operating correctly?				
Is Ram operating correctly?				
Allow cylinder to "bottom" - does motor and pump stop?				
Run unit up and down several times - is it properly working?				
Lift gate while Ram is operating (hold down button) - does motor stop?				
Run Ram to up position- does motor stop?				

Operator Signature

Date



Appendix B

Baler Lockout Tagout Program

LOCKOUT PROCEDURE DEVELOPMENT INFORMATION

OSHA (occupational health and safety administration) 29 CFR (code of federal regulations) 1910.147 requires that each company develop, maintain and follow a lockout / tagout procedure for employees and equipment. This procedure must be followed prior to performing maintenance or service work or entering any hazard area that may exist.

1. All affected employees shall be notified that equipment is being shut down and locked out prior to performing service or maintenance.
2. The equipment, if operating, shall be shut down by normal means and the energy isolating device shall be de-activated to isolate the equipment from the energy source. Isolation shall include:
 - a) Remove the key from the baler control box
 - b) Turn off disconnect and affix a lock to secure disconnect in the off position
 - c) Affix a tag to the lock, clearly identifying the individual who locked out the machine
 - d) Post signage to warn against hazardous conditions and actions required to avoid hazardous conditions. (e.g., “Do Not Operate”)
 - e) Place operating equipment in such a position as not to be subject to possible free fall and/or install additional blocking devices to prevent freefall.
 - f) Relieve stored hydraulic or pneumatic pressure after blocking devices are installed
3. Equipment isolation shall be verified by activating the normal operating controls, ensuring first that no personnel are exposed. Ensure operating controls are returned to the “neutral” or “off” position after verifying the isolation of the equipment.
4. When the servicing or maintenance is complete:
 - a) Ensure that the equipment is ready to operate
 - b) Ensure that the surrounding area is clear
 - c) Ensure employees are safely positioned or removed from the area
 - d) Verify that controls are in “neutral” or “off” position

Tags and locks must be removed by the same person who attached them.

5. Affected employees shall be notified that the servicing or maintenance has been

completed and the equipment is ready for use.

- Current and applicable ANSI and OSHA standards are available to operators at all times. At time of writing the applicable standard is OSHA Standard 29 CFR 1910.147 / 1910.147 Appendix A. Also reference ANSI Z245.5, others may also apply.



APPENDIX C

Baler Safety Fact Sheet

WARNING: Do Not Operate Baler without Thorough Understanding of Instructions

****PERFORM SAFETY CHECK TO ENSURE PROPER INTERLOCK FUNCTION DAILY**

****ONLY AUTHORIZED PERSONNEL SHOULD BE ALLOWED TO OPERATE THIS BALER**

- Keys to this machine shall be removed between uses to prevent unauthorized operation.
- Federal regulation prohibits use of this machine by people under the age of 18.

****DO NOT ATTEMPT TO DEFEAT THE PURPOSE OF ANY SAFETY SWITCH!**

Immediately replace any switches that are found not to be in proper working condition

****DO NOT OPERATE BALER UNLESS GATE IS FULLY CLOSED**

****REMAIN CLEAR OF THE BALER WHILE EJECTING A BALE**



THE BALER SHOULD NEVER BE ENTERED OR SERVICED WITHOUT FOLLOWING THE LOCK-OUT TAG-OUT PROCEDURE

The baler should not be restarted until all workers have exited the baler and moved out of the way of all moving components.



ONLY AUTHORIZED PERSONNEL SHOULD BE ALLOWED TO OPEN THE PANEL BOX

Baler operates with high voltage and should not be serviced by people who are not certified to do so. **Lock-out procedure must be used before opening panel box.**



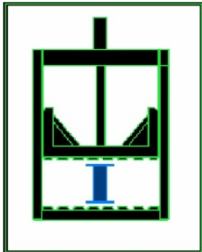
BEWARE OF MOVING COMPONENTS

The gate and door should not be opened at anytime while the ram is advancing under pressure. The user should stand away from baler while in operation and should never reach into the machine in any way.



DO NOT CLIMB THE BALER UNDER ANY CIRCUMSTANCE

User should also be familiar with applicable safety codes (ANSI, OSHA, etc.)



NOTICE: BE ABSOLUTELY SURE TO FULLY SUPPORT THE RAM

When changing cylinder, performing hydraulic service or performing structural repairs.