### Safety Briefing – Building AC

#### Emergency Phone Numbers
- **Fire Emergency:**
  - Cell: 494-5911 (Command Center)
  - Room Phone: 911 (Command Center)
- **Medical Emergency:**
  - Cell: 494-5911 (Command Center)
  - Room Phone: 911 (Command Center)

#### Emergency Information
Be prepared to give zone location/room number & phone number, type of emergency, to help direct response personnel.

#### Room Hazards
Location of Exits, Nearest Fire Extinguisher & Automatic Emergency Defibrillator (AED)

#### Take Cover
Red flashing strobe light with long escalating whooping tone. Repeated three times, followed by prerecorded instructions. In the event of a Take Cover go to the nearest Take Cover area. (East/West or North/South Hallways)

#### Evacuation
White flashing strobe light with three short buzzing tones, followed by prerecorded instructions. In the event of an Evacuation, leave through the nearest exit. Meet outside at your designated location.

#### All Clear
One long tone followed by prerecorded instructions, with specific instructions given by Security.
The Waste Managers Conundrum

“Obedience is the mother of success and it is wedded to safety.”

-Aeschylus

Safety First
The Waste Managers Conundrum

“Obedience is the mother of success and it is wedded to safety.”

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Rules
Procedures
Methods & Processes
Compliance

Discipline
Conformity
Consequences
Training

Safety First
The Waste Managers Conundrum

“Obedience is the mother of success and it is wedded to safety.”
-Aeschylus

“The desire for safety stands against every great and noble enterprise.”
-Tacitus

Safety First
The Waste Managers Conundrum

“Obedience is the mother of success and it is wedded to safety.”

-Aeschylus

“The desire for safety stands against every great and noble enterprise.”

-Tacitus

Stay away from the Tacitus’ of the world.
## Fatality & Injury History

<table>
<thead>
<tr>
<th>Category</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
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<tr>
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<td>78</td>
<td>92</td>
<td>87</td>
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<td></td>
<td>(8.3)</td>
<td>(7.6)</td>
<td>(6.9)</td>
<td>(6.5)</td>
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<td>Solid Waste Collection</td>
<td>45</td>
<td>34</td>
<td>43</td>
<td>46</td>
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<td></td>
<td>(9.9)</td>
<td>(9.8)</td>
<td>(8.3)</td>
<td>(7.5)</td>
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<td>Solid Waste Landfill</td>
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<td>12</td>
</tr>
<tr>
<td>Other Treatment &amp; Disposal</td>
<td>4</td>
<td>3</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>(8.2)</td>
<td>(6.9)</td>
<td>(7.0)</td>
<td>(6.2)</td>
</tr>
<tr>
<td>MRF</td>
<td>3</td>
<td>4</td>
<td>9</td>
<td>4</td>
</tr>
</tbody>
</table>

**Safety First**
Let’s compare the list we made with this one. This isn’t all the equipment on a landfill compactor that might be considered safety items… but it includes the more important ones.

[ Discuss those items omitted on the flipchart…and those the class thought of that are not on this list. ]

Perhaps most important is the Owners & Operators Manual. This book should be in the cab of your machine, and you need to spend the time to read it and understand it. You won’t find more information about your machine anywhere else than in the O&M.
Safety

- Wear all PPE
- No smoking on the face
- Wear seat belts in all vehicles
- Use 3 points contact when mounting / dismounting machines
- Look in reverse before driving in reverse
- Know and understand all lock out / tag out procedures
- Know how to use all fire suppression equipment
- Awareness
  - Personnel on the ground
  - All vehicles

Let’s compare this list with the classes answers. Are there any that we’ve missed?
You should Always wear the PPE, personal protective equipment, necessary to perform your job. Depending on the type of job you perform, these requirements might change. Read, know, and understand your companies policies on PPE for the type of work you are performing. This slide lists some of the basic PPE for most waste applications.
Safety

- Awareness
  - How do you feel?
  - Are you alert?
  - Are you ready to go to work?

I. Illness
M. Medication
S. Stress
A. Alcohol
F. Fatigue
E. Eating

Safety First

Awareness of all your surroundings is part of a safe work routine. SELF awareness should be part of that routine. If you think about the “IMSAFE” method, this will help you in understanding if you are ready to go work.

1. There is an acronym called IMSAFE.. Each letter stands for something you should be aware of while operating or working.
2. Give them the first letter…. I …… for illness.. Then have them try to guess each one after that.
3. Describe what each might mean to their operating abilities or awareness.
4. Fatigue and Eating are the hardest to describe. If you are tired can you function correctly.. If you eat a lot of sugar, drink a lot of coffee or soda, don’t eat correctly.. How can it affect your operation. What happens after lunch when your body starts using energy to digest your food. YOU GET T I R E D !
Safe operators have a high level of awareness. Most accidents occur when an operator doesn’t see or hear the warning signs. So **look**, and **listen**.

**Be aware of traffic.** Know where other machines are on the face, at the toe or landing, even on the floor. The sooner you see another vehicle, the more time you have to react to it.

**Be aware of people.** It’s easy to forget how many people are on the ground at a landfill. This includes your spotters, but also truck drivers leaving their trucks to check material, other operators who may be out of their machines, or other landfill personnel.

**Be aware of your surroundings.** Know where the **cover** material is and what it’s covering. Check the **floor** so you know what’s there: vehicles, people, objects that could create a hazard.

You should constantly check the **face** and the kinds of materials on it.

There are lots of **hazards you can’t see** that lie underneath the surface of the face. Be prepared.

**Cables** can wrap around your machine’s undercarriage. **Pipes** can either flip up and throw material, or penetrate the machine. Be aware of **flying objects** of all kinds. **Large or heavy objects** can pose direct hazards. **Light objects**, such as plastic garbage bags, can cause airborne problems. Construction materials or any **powdery substance** can create clouds of dust if not handled properly.
Safety

- Awareness
  - people - (truck drivers)
  - machines - other vehicles
  - waste / trash - screen
  - your thought process
- Communicate

We have discussed “basic” safety items with many landfills during our visits and training sessions. This list is comprised of input from many different sites and people like you.

They all agree that being alert and keeping alert is the main objective when performing their jobs. You can never be sure what: truck drivers, other people, machines, different types of waste, etc, will do, so you need to stay alert.

Be aware of how you feel. Always keep IMSAFE in mind.

Most of COMMUNICATE – (see next slide)
Communication is the key

- **What's the plan?**
- Objective
- Talk
- Supervisors, to spotters.
- Between operators
  - Shift change
  - Change machines
- Two way radio's good
  - Hand signals, eye contact, horn signals, short discussions

**Safety First**

Communication is the most important part of your job –

The plan for the day should be communicated with EVERYONE who will be affected. Discuss the plan. Ask for input. And be ready for changes which you then need to communicate with everyone.

When you change machines at shift end, lunch, breaks, etc. you need to communicate machine concerns and application concerns with the person you are changing with.

Communication between waste personnel is important and should be handled by: radio, hand signals, horn signals, making eye contact with someone and signaling them.. But.. Remember, most of all, if you use any of these forms of communication.. That ALL communication requires a response. Never assume that someone else sees you, hears you, or knows where you are if they have not RESPONDED to your communication.
As stated in the previous slide, it is important to utilize the proper safety procedures in approaching a machine to communicate with the operator.

1. Approach from the front half of the machine
2. Stand away from the machine and get the operators attention
3. Make eye contact and make sure he sees you… GET A RESPONSE!
4. You need to indicated to him by hand signal what you want to do. Ie: I want to approach the machine – point to the yourself then the machine
5. Receive acknowledgement from him that it is safe to approach and talk with him.
6. Keep eye contact – never assume that he sees you or knows what you want to do.
7. **ALL COMMUNICATION REQUIRES A RESPONSE!!!!**
There are more heavy equipment accidents involving mounting and dismounting the machines than any other cause.

[ Describe 3-point contact and importance of using the ladders and steps provided in the prescribed manner. ]

Never mount or dismount with anything in your hands.

Just so everyone knows the rules up front:

**If you jump from any machine at any time during the next two days, you fail this class.**

End of story.
Before you get off your machine, make sure your machine is on a **safe, secure, flat surface**. You should get out of any traffic lanes, if possible off the face.

**BEFORE** you get out of the seat **ALWAYS** lower all attachments, shift to neutral, and set the parking brake. … whether you have shut down the engine or not.

Even if you are parked on a flat / level surface where you ‘know’ the machine won’t roll, in waste the ground might shift, another machine might nudge yours, or any number of things could aid the machine in moving. Don’t take chances with your life or any one else’s.

Dismount with 3 points contact and Always look before you step onto the ground.

The average for injuries from mounting and dismounting normally from jumping or climbing with something in their hands… is roughly about 75%.
Safety

- Visibility
  - Work area
  - Other machines
    - Don’t work in their blind spot
  - Clean windows
  - Look in reverse
    - (before moving in reverse)
    - don’t always rely on mirrors

It is important to make visibility a high priority of your work ethic.

1. Continually visually sweep your work area
2. Don’t work in someone else’s blind spot
   1. Keep in mind that you want to work with others how you expect them to work with you
3. Clean your windows and keep them clean
4. Most of all, and this is something everyone is guilty of not doing all the time
   1. Look in reverse BEFORE you shift to reverse
5. Due to the nature of most machines, visibility to the rear can’t always be accomplished by just using the mirrors, scan the work area by looking over your shoulder
Safety

- Fire Safety
  - Check all fire suppression and extinguishers
  - Know and understand all company regulations
  - Get training on fire suppression equipment
    - Machine suppression
    - Fire extinguishers
  - Know where suppression systems are on machines and your work area

Does everyone understand how to use a hand held fire extinguishers and fire suppression equipment?

  get training if you don't

You need to know and understand all company rules and regulations for fire safety

Know where all extinguishers are on your machine and in your work area.

CHECK them regularly
If working on the face – move the machine away from the face if possible.

Keep waste away from heat sources on your machine

this should be part of your normal walk around inspections

Be alert for fires on your machine, other machines, and in the work area

No smoking on the landfill, not even in the cabin of the equipment

Once again, check your extinguishers, fire suppression equipment and make sure that the powder in the extinguishers has been fluffed or loosened regularly.

Machines operating in waste applications tend to have a high amount of vibration – thus – powder filled fire extinguishers have a habit of caking. Although the gauge reads full, if you use the extinguisher, it might only discharge air onto the fire.

Once every month or two, turn the extinguisher upside down, shake or tap the bottom with a rubber hammer to loosen the material

Before discharging the extinguisher onto a fire, it is recommended to turn it upside down and shake it a few times.
[ Ask class to get out their start-up and shut-down procedure sheets and sign their names the same way they did on the walk around inspection sheets. ]

[ Next, go through the steps on the procedure sheet and make sure everyone understands each item. ]
<table>
<thead>
<tr>
<th>Task</th>
<th>Procedure</th>
<th>Check</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety Equipment Inspection</td>
<td>Ensure all equipment is in good working order.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Machine Set-up and Operation</td>
<td>Check machine set-up for proper function.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Machine Maintenance</td>
<td>Ensure all maintenance is up to date.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Machine Inspection</td>
<td>Check all mechanical components for damage.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Safety First**

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<table>
<thead>
<tr>
<th>Operator/Inspector</th>
<th>Date</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are you inspecting?</td>
<td>What are you looking for?</td>
<td>Evaluator Comments</td>
</tr>
<tr>
<td><strong>FROM THE GROUND</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blade Cutting Edge</td>
<td>Structural Wear Or Damage</td>
<td></td>
</tr>
<tr>
<td>Blade Columns</td>
<td>Structural Wear, Damage, Leaks</td>
<td></td>
</tr>
<tr>
<td>Wheels, Tires, Brakes</td>
<td>Damage, Pitting, Wear</td>
<td></td>
</tr>
<tr>
<td>Undercarriage Of Machine</td>
<td>Final Drive Leaks, Damage</td>
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</tr>
<tr>
<td>Steps And Handrails</td>
<td>Corrosion And Cracks</td>
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<tr>
<td>Fuel Tank</td>
<td>Fuel Level, Damage, Leaks</td>
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<tr>
<td>Hydraulic Oil Tank</td>
<td>Fluid Level, Damage, Leaks</td>
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<tr>
<td>Front Muff</td>
<td>Old Level</td>
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<tr>
<td>Batteries &amp; Hold Down</td>
<td>Corrosion, Loose Bolts &amp; Nuts</td>
<td></td>
</tr>
<tr>
<td>Overall Machine</td>
<td>Loose Or Missing Nuts &amp; Bolts, Loose Grille, Corrosion</td>
<td></td>
</tr>
</tbody>
</table>

**Safety First**

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Key points for the safety section are

1. Know and understand your companies rules and regulations on safety and all work related job procedures

2. Always wear your required PPE for the job you are performing

3. Total awareness of yourself, your machine, your work area, others, etc. will keep you and others alive and safe

4. Always look in reverse before shifting to reverse

5. Communication is the most important part of your job

6. Visually check your area continuously. Keep windows clean. Stay out of others blind spots

7. Utilize 3 points of contact and don’t carry anything in your hands when mounting and dismounting machines

8. All communication requires acknowledgement – don’t assume anything

9. Know and understand your companies rules on fire safety and how to use all fire equipment
Safety First
1. Explain 3 point contact mounting and dismounting.
2. Leave the hands free when climbing up. Place lunch boxes, thermos.. Etc.

someplace where you can pick it up once finished climbing vertically.
1. One way you can get them to see the improper scan pattern is to pretend that you are performing a walk around.. The wall is your pretend machine.. Walk fast up and down the wall only looking at eye level.. Stop and ask them what you missed? They will see that you missed a lot of things up, down, under, all around.. Etc.

2. This visual pattern helps you see problems
Critical Issues For Walk Around Inspection Techniques

1. Start in the **SAME** place everyday
2. Make it **ROUTINE**
3. Look: **UP, DOWN, UNDER, ALL AROUND**
4. **REPORT!!:** verbally and written

1. Repeat the 4 steps of the proper walk around thought process
WALK AROUND TECHNIQUES

WHEN???

• Beginning of shift
• End of shift
• Any time off of machine!!!

1. See previous notes
Walk Around Inspections

- Why do we do walk around inspections?
  - prevent safety hazards
  - prevent unnecessary downtime
- How many times a day should you do a walk around?
  - start of shift
  - end of shift
  - anytime you get on or off the machine
- 5-10 Minutes = time well spent

Walk around inspections is the most important part of your daily work routine

You should always perform a full walk around at the
  - start of the shift
  - end of the shift

and perform visual inspections anytime you get on and off of the machine

This type of thought process not only keeps you and others safe, it also will help keep machine availability up
Walk Around Inspections

- **FOUR rules** for walk around inspections
  - Start in the same place everyday
    - Clear your work area and visually check the cab
  - Make the walk around routine
    - Look for the un-routine and Focus on critical areas
  - Look: up, down, under, all around
    - Take time to “see” everything
  - Report!
    - Verbally
    - Written

Simple rules for a walk around inspection are:

1. Always start in the same place every day
   1. Clear your work area
   2. Look into the cab as you approach the machine
2. Keep you walk around routine
   1. You see the unroutine
3. Look up, down, under, and all around the machine
   1. Continually scan and look at the machine
   2. Physically touch critical areas to make sure you are looking at them
4. Most importantly REPORT
   1. Verbally
   2. Written

These 4 (four) points help you check the critical areas of the machine. Everyone knows they are looking for: leaks, broken parts, loose parts, worn or wearing areas, fluid levels, etc. Treat the inspection as a critical part of your work routine.
Walk Around Inspections

Return on Asset

- Maintenance
  - Proper daily walk around inspections assure asset performance.
  - Daily walk around sheets, (shift sheets) are necessary for helping track: concerns, machine maintenance, and availability
  - Daily walk around inspection sheets should detail
  - Machine hours, fluids added, repairs needed, and adequate area for comments
- KEEP machines and cabs clean!
  - Supervision should allow time for this

Safety First

Keeping the machine well maintained is imperative for all waste applications.

Again, this is the harshest environment known to machines and personnel.

Your safety and machine availability depend on your attitude towards the machine walk around inspection.

Keep your cabs clean – think about the environment you are working in. What do people discard in waste? This should give you a clue as to why cab cleanliness and keeping filters cleaned as often as possible should be a main objective.
Walk Around Inspections – Key Points

- Proper walk around inspections are Critical to: safety, machine life and operation, and to machine availability!
- How many times do we perform walk around inspections / day?
  - Start of shift, end of shift, and any time off of the machine
- The FOUR rules for machine walk around inspections
  - Start in the same place everyday
  - Make the walk around routine
  - Look: up, down, under, and all around
  - REPORT!
- Keep the cab and machine clean!

Safety First

Walk around inspection Key Points

1. Proper walk around inspections keep you and your machine safe. They help keep machine availability to a maximum.

2. Check the machine at the beginning and end of the shift and any time you get off of the machine perform a quick visual.

3. Remember the 4 rules of walk around inspections
   1. Start in the same place
   2. Make it routine
   3. Look: up, down, under, and all around.
   4. Most of all, report verbally and written.

Take pride in what you do and how you operate. Don’t depend on anyone else to do this for you.