Aggregate Site Hazard Awareness Handbook

✓ Visitors
✓ Vendors
✓ Customers
✓ Independent Contractors

Revised 4/2016
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INTRODUCTION

It is the goal of Our Team to develop and maintain the safest possible work environment consistent with current regulations, available technology and sound business practices. In order to accomplish this at each of our facilities and sites, we need YOUR cooperation. From the moment you enter an Aggregate Site you need to be aware of possible hazards that you may be exposed to while on our property. This handbook is designed to inform you of these basic hazards, so that you will be able to recognize and avoid them while here.

The Mine Safety & Health Administration (MSHA -30 CFR Part 46) requires “Site-Specific Hazard Awareness Training” for all who enter a “surface mine” site, and additional training may be required for individuals performing mining related work at this site. Therefore we require that...

- **All new Visitors, Vendors, Customers (including Truck Drivers) and Independent Contractors must check-in at the scale or other designated area before entering the property, in order to review important safety information about the site.**
The additional information specific to individual Aggregate Sites may also be available from the Plant Foreman or the “Safety Information Board” located at the entrance to each site. All possible information on each location cannot be covered in this publication, therefore it is important to review the following items at each site you visit:

- **Communication Channels** – most sites monitor a specific CB channel so you may contact site personnel without leaving your vehicle.

- **Restricted Areas** – any areas of the property that are off-limits to unauthorized personnel due to safety concerns or other reasons.

- **Specific Material Or Stockpile Locations** – certain types of material may be moved to different locations from time to time, so make sure you confirm where you need to be.
• Emergency Equipment & Communication Locations – including locations of phones, first aid supplies, fire extinguishers, and other emergency equipment.

• Traffic Patterns – including STOP signs, RR Crossings, one-way roads, steep grades, restricted travel areas and other signs.

• Special Loading, Dumping, or Scaling Procedures – some sites may have unusual procedures or specific limits for loading, dumping or scaling.

REMEMBER: All who enter an aggregate site need to get safety information that is specific to each individual site visited. Refer to the section entitled “Training Requirements Policy” for additional information.
RESPECT FOR OUR NEIGHBORS & THE ENVIRONMENT

- Do not use engine brakes.
- Clean tailgates and side rails of loose material before leaving the site.
- Observe local speed limits, stop signs and traffic control signing.
- Obey all local and state tarping regulations.
- Discard refuse in a proper garbage container.
- Do not use diesel fuel or other non-approved materials for lubrication or cleaning of your vehicle or equipment.
- Report any material spills to site personnel immediately.
- Understand and obey all local, state and federal regulations pertinent to your work. Regulations may include opacity limits, storm water run-off, settling pond issues, spill containment methods, and dust control of haul roads.
GENERAL SAFETY POLICIES

ALCOHOL & CONTROLLED SUBSTANCES

- Use or possession of intoxicating beverages or controlled substances, which would impair the individual’s ability to perform assigned tasks or conduct other business in a safe manner, is strictly prohibited.

- Any individual violating this policy is subject to immediate removal from the site or facility.

HAZARD COMMUNICATION (HAZ-COM)

- The company’s Hazard Communication (Haz-Com) Program is designed to inform all personnel of the hazardous substances with which they work with and the ways in which they can protect themselves. A complete copy of the Hazard Communication Program including pertinent Material Safety Data Sheets (MSDS) is available form the Plant Foreman.
REPORTING UNSAFE CONDITIONS & ACCIDENTS

- All individuals are asked to share responsibility for helping to identify and eliminate hazards in the workplace. If you observe an unsafe condition, contact the plant foreman or other site personnel immediately.

- All individuals must immediately report all injuries and accidents, whether to themselves or a coworker, to the Plant Foreman, other site personnel, or the main office at:
  (262) 524-1700 (P&D) or (920) 757-2900 (NEA or P&D MI)

PERSONAL PROTECTIVE EQUIPMENT (PPE)

All individuals are required to wear the following Personal Protective Equipment for all pedestrians while at the site:

- **Hardhats** – at all times
- **Safety Glasses** – at all times
- **Protective Toed Boots** – at all times
- **Hearing Protection** – when within 100’ of plant machinery or during other high-noise tasks that require their use.
- **Traffic Safety Vests** – during hours of darkness
**TRAINING REQUIREMENTS**

MSHA requires two different levels of training for all individuals at a surface mine, depending on their relative exposure to mine hazards. Comprehensive Miner Training and Site Specific Hazard Awareness Training. The following is a brief description of individuals general duties and their associated level of training required by MSHA.

<table>
<thead>
<tr>
<th>1. Visitors, vendors, customers or independent contractors who come on site and only enter the office or scale.</th>
<th>Site Specific Hazard Training Required?</th>
<th>NO</th>
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<tr>
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<td>Comprehensive “Miner” Training Required?</td>
<td>NO</td>
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<th>2. Visitors, vendors, customers or independent contractors who come on site and travel to places other than the office, but are not involved in equipment maintenance or repair and are not involved in mining related activities. (Commercial over-the-road truck drivers, heavy equipment delivery/pick-up drivers, short term maintenance or repair technician)</th>
<th>Site Specific Hazard Training Required?</th>
<th>YES</th>
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<td>Comprehensive “Miner” Training Required?</td>
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<th>3. Visitors, vendors, customers or independent contractors who come on site to perform tasks that are normally associated with mining activities such as stripping overburden, grading haul roads, drilling &amp; blasting, construction or demolition of mining equipment, hauling material within the mine site, or equipment maintenance or repair activities more than 5 consecutive days at the site or involving a pattern or recurring exposure to mine hazards.</th>
<th>Site Specific Hazard Training Required?</th>
<th>YES</th>
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<td>Comprehensive “Miner” Training Required?</td>
<td>YES</td>
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• **Site Specific Hazard Training** will be provided by a Company representative or site personnel.

• **Comprehensive “Miner” Training** will be the responsibility of the Vendor or Independent Contractor.

**OPERATION & SAFETY REQUIREMENTS**

Independent contractors and vendors performing work at our aggregate sites for frequent or extended (more than 5 consecutive days) periods are required to complete an “**Aggregate Site - Operations & Safety Requirements Checklist**” …with the Site Manager before beginning work at any aggregate site.

Contracts are expected to comply with all pertinent MSHA regulations and the training requirements of 30 CFR Part 46 as they apply to their work. Additional Information regarding these requirements can be obtained from MSHA at their web site [www.msha.gov](http://www.msha.gov) or our Safety Department at 262-524-1700.
FALL PROTECTION

All personnel, when exposed to a fall 4 feet or more from an unprotected side or edge, are required to wear fall protection at all times. NOTE: MSHA does not have an “action level” for fall protection. 4-feet is merely a suggested maximum height taken from OSHA’s General Industry Standards. Shorter distances may require protection depending on exposure.

- Stay back from the edge of high-walls.
- Never climb on the top or mid rail of a guard rail system.
- Observe and obey Restricted Access Area signs – there may be serious fall hazards for any untrained individual.
- Do not climb on the sides of a dump truck - if access is required, use a ladder or the tarping racks available at most facilities.

FIRE SAFETY

During an emergency, lives may depend on the quick use of fire extinguishers and other emergency response equipment. Before beginning work:

- Become familiar with the locations of fire extinguishers and other safety equipment, and never block or clutter the path to these items.
- Obey all “No Smoking” signs and be aware of flammable and combustible material storage locations.
HEAVY EQUIPMENT & VEHICLES

DON’T TAKE SHORT CUTS
Use the main haul roads as indicated by signing and pavement marking. Other equipment doesn’t expect you to cut between stockpiles or under conveyors.

USE CAUTION ON HAUL ROADS
Travel at a safe speed (most sites have been posted with a 10 or 15 MPH speed limit) and be prepared for steep grades and oncoming traffic.
STAY IN VEHICLE
Always stay in your vehicle in all stockpile and loading areas – for your safety, you will not be loaded if you are not seated in the driver’s seat.

DON’T BE AFRAID TO ASK QUESTIONS

- Stockpile areas can be confusing for first-time drivers. If you are not sure where you should or should not be, contact the operator on the site’s CB channel, they will be happy to provide you direction.
USE DESIGNATED AREAS

- Use the dump-off area if a portion of your load needs to be dumped after scaling.

- Use the holding or parking area if you are waiting or if you need to inspect or tarp your load after scaling. This is the only “Safe” area to get out of your vehicle.
USE CAUTION ON SCALES

- First time drivers must always check in at the scale before entering the aggregate site.
- Pay attention to horizontal and vertical clearances around scale.
- Read and follow the scale’s capacity and load limits.
- Drive on & off smoothly & slowly - no sudden starts or stops.
- One truck on the scale at a time.
- Do not back off the scale or tarp your load on the scale.
- Trucks are not allowed to leave yard if over their LICENSED capacity.
**WATCH OUT FOR HEAVY EQUIPMENT**

- Pay Attention! Heavy Equipment in the stockpile area backs up frequently and many areas can be congested at certain times of the day. Be patient.

- Leave adequate room between your vehicle and all heavy equipment at all times. Don’t approach other trucks or heavy equipment until you have made eye contact and never travel, park or walk behind a piece of heavy equipment – stay back at least 100 feet. Remember: **HEAVY EQUIPMENT HAS THE RIGHT-OF-WAY!**
WATCH FOR OVERHEAD LINES

- Avoid overhead power lines and other obstructions. **You must maintain at least a 10-foot clearance from all overhead lines.** Make sure your truck is safely clear before raising the truck bed or using a tarping mechanism.

READ & OBEY SIGNING

Many times important safety information is conveyed to personnel on the site by the use of signs around the facility. Read and obey all signing including stop signs, speed limits, traffic pattern and other traffic control and warning signs. Some areas of this mine property are restricted and not safe for customers, vendors or visitors. Review the site map or contact the site foreman if you need any additional information or if you have any questions.
HIGHWALL HAZARDS

Be aware of highwall locations around the site, they may not always be protected by a fence or berm.

- Stay back at least 10 feet from the top edge of a highwall at all times, loose ground or unstable rock may fall without warning.

- Never park your vehicle, walk, or stand near the base of a highwall. Unstable rock or loose material at the top may fall without warning, especially after rain or a freeze/thaw. Always stay back half the height of the highwall.
PEDESTRIAN SAFETY AROUND HEAVY EQUIPMENT

All individuals on site should be aware of basic safety aspects of heavy construction equipment.

- NEVER assume that the operator can see you. Personnel should establish eye contact with operators of mobile equipment before approaching the equipment or walking behind or around it.
- NEVER work or stand in ANY of the operator’s blind spots. Remember the site distance an operator needs to identify you.
- Consider wearing a safety vest when walking around a site for frequent or extended periods, and replace it promptly when it becomes worn or dirty.
- Stay out from under suspended loads.
• ALWAYS face vehicle routes when performing work tasks in or adjacent to haul roads. If you cannot face traffic, have someone act as a spotter.

• Many machines have the ability of changing direction or starting quickly or without notice. Learn the pinch points and rotating parts of the machines you work around and always stay clear of them. Examples include the pivot area of articulated machines and the counterweights of cranes or excavators.

• NEVER become complacent or desensitized to the warning signals heard repeatedly on the job-site. Make a conscience effort to be aware of audible warning devices such as back-up alarms, beepers and horns.

• Never use the bucket or other part of a machine as a work platform or personnel carrier, unless it has been designed as one.

**DRIVER SAFETY AROUND PEDESTRIANS**

• Never assume that the pedestrian sees you and will get out of your way.

• Use spotters when backing through areas where personnel are working on the ground.

• Conduct through pre-operation inspections, including adjusting mirrors and checking back-up alarms.

• Limit distractions while driving in the work area. Windows down with radio off, telephone off and no eating or drinking.
SLIPS, TRIPS & FALLS

Many aggregate sites have uneven terrain, stairways, ladders, and other work platforms that can put you at risk of fall related injuries. Awareness of the hazards, and keeping to good work practices can help to minimize the slip trip and fall hazards you may face on a daily basis.

ALWAYS...

- Wear shoes or boots with good soles.
- Use handrails where provided.
- Stay back from ledges such as loading docks and open manholes.
- Try to keep at least one hand free for support or to break a fall.
- Keep walkways clear of debris and equipment.

NEVER...

- Take short cuts through unfamiliar areas, uneven terrain or steep slopes.
- Jump from platforms or ladders.
- Get distracted by horseplay or conversation.
• Try to carry large loads that block your vision - get a helper instead.
STOCKPILE HAZARDS

- Many job sites in which we work have sand, stone, or other material stored in large stockpiles around the site. Special caution should be used around these areas to avoid a number of hazards.

- Never stand, walk or park your vehicle near to the bottom edge of a stockpile – sometimes called the “toe”. Stockpiles can “slough-off”, meaning clumps, pieces, or large volumes of material can lose their adhesion with the rest of the material and fall down the face of the pile with little or no advance warning.
• When working in the vicinity of a stockpile, be aware of other work around you and keep an eye on the top and face of the pile for any changing conditions.

• Often stockpiles are added to by dump trucks or other heavy equipment. When they dump their load at the top of the pile, tons of material can slide down the edge of the pile without warning.

• Never walk on top of a stockpile, unless it has been graded as a haul road. Some stockpiles may contain air voids that are hidden from view, where the material hasn’t fully compacted. Unsuspecting individuals can easily be engulfed and buried if they were to step onto one of these areas.
• Never walk between a vehicle and the stockpile, load your vehicle by hand when backed into a stockpile - this would limit your ability to escape should the stockpile collapse or slough.

WATER HAZARDS

• Take notice of settling ponds and storm retention pond locations and stay back from the waters edge. The depth of these ponds can change dramatically over short periods of time.

• Some ponds may contain silt at the sides and bottom, and although it appears to be solid, may not be able to support your weight.

• If work must be perform on the pond or around the perimeter, personal flotation devices must be worn.

• Swimming, diving, wading and fishing is prohibited at all aggregate sites.
CONVEYORS

- Never walk or drive your vehicle under a running conveyor. You may be struck by falling material or get caught in a moving part.

- Observe an obey all signing on plant machinery. It has been installed to warn you of potential hazards.
ELECTRICITY

- Only authorized, properly trained personal may work on electrical wiring or equipment. If you are untrained... STAY AWAY!

ALWAYS...
- Unplug tools or devices before attempting to perform maintenance.
- Observe and obey locks, tags, signs, or other warning devices that warn you about electrical hazards.

NEVER...
- Reach blindly into area that may have energized parts.
- Handle, plug, or unplug equipment with wet hands.
- Use equipment that has defective parts, loose connections or damaged cords or broken or missing prongs.
Large stone or other material can fall from many locations on the plant equipment & conveyors.
To protect our employees and others from the accidental start-up of equipment, lock-out/tag-out procedures are used to warn personnel on the site and to ensure that all power or energy is properly disconnected, blocked, bled, or isolated.

- Observe and respect Lock-Out devices on machinery and equipment.
- **Always** follow the proper lock-out/tag-out procedure and **never** remove or ignore a lock or tag!
ROTATING PARTS

• Stay away from all motors, drive belts, drive shafts, and pulleys. Moving or rotating parts can catch you or the clothes you are wearing. If you need to walk around the plant, tuck-in or remove all loose clothing and jewelry.

NEVER…

• Remove or by-pass guards until the machine has been properly shut down and locked-out.
• Use machinery without the appropriate guards in-place.
• Wear loose fitting clothing or long hair around operating machinery.
• Reach under or around a guard

ALWAYS…

• Perform routine checks on all tools, equipment and machinery to ensure that all needed guards are in good condition. Repair or replace all guards that are damaged before using the machine.
• Follow proper lock-out procedures during maintenance & repair.
• Keep watches, rings, jewelry and other conductive items away from exposed electrical parts.
• Wear appropriate PPE.
STOCKPILE DUMPING PROCEDURES

Dumping procedures can vary from mine site to mine site, make sure to understand and follow the dumping procedure in place at each site you visit.

Stockpiles can be unpredictably soft, weak, loose, and have steep slopes, which may cause instability. Stockpiles are especially hazardous when there are activities at the top edge and the toe simultaneously. Follow these general safety tips:

- Pay attention to the stockpile and its surroundings. Take the time to inspect the pile from the ground and the dump area. NEVER assume that someone else has inspected it.
- Always dump in an area where there are no activities immediately below, above, or around the area.
- Never dump over a slope that is too steep. Rather, dump at least one truck length away from the edge if you suspect even the slightest problem.
- Watch the weather. Rain, melting snow, and freezing and thawing cycles can weaken the dump area and lead to unstable slopes and can weaken the pile.
DUMPING SAFETY

The condition of an active stockpile can change frequently throughout the work day, therefore it is essential that ALL individuals working on or around the stockpile pay attention to the condition of the pile during their entire shift. Inspecting the dump area before it is used and continuing regular inspections is the best way to prevent stockpile accidents.

1. Inspect The Pile From The Ground BEFORE Driving On It

Each driver should personally inspect the dump area prior to use. We recommend that the first load of the day be dumped at the base of the stockpile, if possible, rather than the top. This gives the driver an opportunity to inspect the pile from the ground level, where they can get a good look at the slope without standing near the top edge.

LOOK FOR:

- **Activity above or below the dump area** – Dumping trucks at the top of a pile can unexpectedly bury a vehicle or pedestrian located at the base (see Area A on the picture below). Loading out material at the toe can cause the slope of the pile to become too steep, making the top edge of the pile unstable for trucks that may be dumping at the top (See Area B on the picture below). Loading out material at the toe can also cause the pile to slough, which can cover a truck, loader or pedestrian at the base.

![Avoid these areas](image-url)
• **Overly steep slopes** – Material should be maintained at its’ natural “angle of repose” (natural slope). The natural angle of repose will be different for different types of material. Also watch for vertical faces where material has been loaded out at the toe.

![Angle of Repose TOO STEEP](image1.jpg)

![Angle of Repose OK](image2.jpg)

• **Condition of the Haul Roads leading up to the Dump area** – Watch for washouts, debris, ice, or snow on the road. And make sure all roads have berms at least axle height of your vehicle.

![Washouts](image3.jpg)

![Smooth Road With Good Berm](image4.jpg)

![Poor Haul Road](image5.jpg)

![Good Haul Road](image6.jpg)
2. Inspect The Dump Area Before Backing

After inspecting the pile from the ground, approach the dump area from left to right (when possible), keeping at least one truck width away from the berm. This allows you to visually inspect the dump edge before backing.

**LOOK FOR:**

- **Adequate lighting** of the dump area.

- **Washouts** from pile drainage.

- **Cracks along its top edge.** Especially those that are parallel with the face.

- **Appropriate dumping berm** or bumper blocks in place – The berm should be a minimum of axle height. Remember: The berm is not designed to stop a truck.
• Level dumping area (side-to-side) or slight upward slope toward the edge. This will help you to more easily control the truck when backing up.

• Sunken or soft areas – they can dramatically affect your truck’s center of gravity when you raise your box, increasing the chance of tipping.

IMMEDIATELY NOTIFY SITE PERSONNEL OF INADEQUATE OR UNSAFE CONDITIONS.

If there are any signs of pile weakness or a slope that is too steep, dump at least one truck length away from the edge (this is sometimes called “dumping short”). The weight of your truck near an unstable edge can be enough to break it loose and take you with it.
3. **Prepare To Back-Up**

Make your turn to back up at least one truck width away from the dumping berm to avoid overloading the edge.

- Make sure your seat belt is securely fastened.
- Make sure no vehicles or pedestrians are in your way.
- Keep at least two truck widths apart if more than one truck is dumping at a time to help prevent collisions and weakening of the dump area.
- Back up perpendicular or at a slight angle to the dumping berm so the truck’s left rear tire approaches the berm first. This can help you keep the truck from penetrating or going through the berm.
4. **Back-Up**
- Back up slowly and come to a gradual stop at the dump point. This prevents overloading the truck’s rear axle or causing the edge of the dump area to break away.
- Stop just before the truck reaches the berm or bumper block. **Do not expect the berm or bumper block to stop the truck.**

5. **Dump**
- Shift the truck into “neutral” and set appropriate brakes when dumping.
- Release the tailgate latch and raise the box in a smooth motion. Do not use the retarder brake when dumping.
- Contact kills! Make sure your truck is clear of overhead power lines, people, and other equipment before raising the truck bed and dumping the load.
- Watch for material stuck in the dump box, it can make the truck unstable.
- NEVER attempt to dislodge material in the box by climbing into it or standing below it while the box is raised. The material could come loose unexpectedly and crush or bury you.

6. **Leave The Dump Area**
- After making sure your truck is clear of overhead power lines, people, and other equipment, completely lower the truck bed before leaving the dump area.
- For better vision turn left (whenever possible) when leaving the dump area.
- Check the pan, tailgate, and side rails for loose material before you leave the site.
AKNOWLEDGEMENT OF RECEIPT

I have received a copy of the Aggregate Site Hazard Awareness Handbook and agree to read and abide by the safety guidelines, rules and policies contained herein. I also understand that failure to follow the enclosed safety information may result in me being prohibited from entering this aggregate site in the future.

AGGREGATE SITE NAME: __________________________

PRINT NAME: __________________________________

SIGNATURE: ___________________ DATE: _______

YOUR COMPANY NAME: __________________________
DISCLAIMER

We believe that the information contained in this Aggregate Site Hazard Awareness Handbook is accurate and consistent with applicable Mine Safety & Health Administration Regulations. The safety policies, procedures and other safety-related information are based on experiences as of the date of publication. They are neither necessarily all-inclusive nor fully adequate in every circumstance. Also, the information contained herein should not be confused with nor followed in violation of applicable laws, regulations, rules or insurance requirements.

Any questions regarding this publication should be forwarded to:

Safety Department
P.O. Box 781
Waukesha, WI 53187
262-524-1700

CRM

Construction Resources Management Inc.