OPERATIONAL GUIDANCE FOR WATER SYSTEMS DURING MILLING OPERATION

PROJECT PREPARATION

- Are there an adequate number of trained personnel for safe operation?
  - According to OSHA, each company needs to have a silica program to ensure that all employees have been trained in silica standards.

- Plan how water will be provided on the job site.
  - Ensure that water truck has enough capacity. Are permits and the proper hose and pumps on the job site?

- Know the work area. Insure work area is adequate to safely maneuver transport vehicle in work zone.

- Consider environmental conditions, such as freezing temperatures.
  - Possibly locate source for heated water or antifreeze for water tank.

- Ensure that the water filling points are accessible from the front and rear of the machine on narrow lane closures.

- Ensure that there are proper lighting and markers on the water truck for night operation.

- During winter months, make sure that the water system is winterized to ensure proper operations in cold weather and during shutdown overnight.

- If working at night, provide adequate lighting for safe operation. Have preparations been made to perform maintenance and inspections, and safely transfer water?

SAFE OPERATORS KNOW THE WORK AREA AND ANY POTENTIAL HAZARDS.

SAFETY RESOURCES

For cold planer Safety Manuals visit: http://shop.aem.org

Permission is granted to copy this bulletin, provided that it will be distributed without charge for educational purposes only, and that the bulletin is copied in its entirety, including this notice.

www.aem.org
www.asphalt Pavement.org
Best Practices Bulletin 1/12
PREPARE FOR SAFE OPERATION

Before you begin to operate the machine, take time to check that it is in good working condition.

- Check and use all available protective and safety devices, such as railings, safety tread, hand-holds, and interlock devices.
- Perform daily and periodic service procedures as instructed by the equipment manufacturers.
- Check for broken, missing or damaged parts and loose or missing fasteners. Make any necessary repairs.
- Check that no warning tags have been placed on the machine.
- Check that warning signs, special instructions, and operator’s manuals are readable and in the proper location.
- Ensure all doors, safety devices, guards, and covers are in place and secured properly.

Operator training

- The operator must demonstrate a thorough understanding of the dust suppression systems on the machine:
  - Water system operation
    - Water application locations within the machine
    - Flow rates
    - Spray patterns
    - Anticipated water usage per unit time or per unit square yard.
    - Maintenance - ensure correct nozzles per manufacturer’s specifications.
    - Troubleshooting
    - Check in-line water filter
  - Visual inspection of seals, flashing, and enclosures, to ensure minimal dust leakage.

OPERATION

- Maintain clean water supply to the milling machine. Maintaining a clean water supply will reduce the chances of clogging strainers and nozzles.
- Monitor clean nozzles and water switch or flow control settings and system pressure to ensure proper application rate.
- Monitor conveyor belt speeds. Slow conveyer speed can cause material to stay in the housing longer, thereby reducing production and possibly creating more airborne dust.
- Inspect and replace cutting tools (bits/teeth) as needed. Dull teeth reduce cutting efficiency, thereby reducing production and possibly creating more airborne dust.
- Front moldboard setting: lower front moldboard and / or primary conveyor to maximize housing exit window area. Reducing the exit window area will keep material in the housing longer, reducing production and creating more airborne dust.
- Make sure that the cutter drum kicker paddles are in good condition. Worn-out paddles will allow material to stay in the drum housing longer, reducing production and creating more airborne dust.
- Inspect the flashing that seals the conveyor frame to the belt. If worn and not replaced, dust / material exits the conveyor prematurely and can cause significant dust issues.

WARNING

TO AVOID INJURY:

- Read and understand manuals before operating.
- Keep hands clear of moving conveyor.
- Keep crew clear during machine movement.
- Stay away from cutter and discharge areas.