











Date Revised:	March 2021	Overall Task Risk Rating:	Before Controls	A	After Controls	C
Description:	An asphalt milling machine is used. Beside and behind the milling machine, other crew members check for the required grade. A mechanical sweeper is typically used to pickup any remaining materials. Asphalt grindings are loaded into dump trucks by directly by conveyor from the milling machines or dumped into the truck from a mechanical sweeper. There will be traffic control measures involved and a signal person will be used to backup dump trucks to milling machines equipped with loading conveyors.					
Location(s):	Construction Projects					
Associated Documents: Hazardous Agents WTS, Noise WTS, Traffic Control WTS, Driving and Vehicle Operation WTS, Equipment and Machinery Operation WTS, Night Work WTS, Manuel Material Handling WTS, Fit for Duty Policy						

RED FLAGS (HOLD WORK UNTIL CORRECTED):

Note:

- Do not commence work if there is inadequate Traffic Protection
- Do not commence work if the Operator is not trained nor authorized

PERSONAL PROTECTIVE EQUIPMENT (CSA APPROVED)

									
Head Protection	Foot Protection	High-Vis Protection	Hearing Protection	Hand Protection	Eye Protection	Respiratory Protection	Skin Protection	Face Protection	Fall Protection
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Note:

- All personnel involved with paving equipment and asphalt handling must wear long pants and shirts with sleeves.
- Additional PPE may be required based on project specific hazards - saw cutting asphalt will require eye, face and respiratory protection; hand protection may be required depending on task.
- For night work ensure workers are visible. Leg Bands are provided for night work. Ensure workers high visibility PPE is clean and has maximum reflectivity. High visibility coveralls meeting CSA Class 3 are also available to workers.

SAFE WORK PRACTICES (SWP)

General Milling Practices:

- The Foreman/Superintendent is to complete the GAZZ card and communicate potential hazards and controls with the workers
- Start the work only when you are certain that you understand the work, the hazards and you have implemented the appropriate controls
- Unsafe conditions and situations must be reported to Foreman/Superintendents immediately (and stop work until the hazard is controlled)

Traffic Control:

- Traffic protection measures shall be implemented in accordance with Ontario Traffic Manual Book 7
- Refer to the Traffic Control WTS for more information

Equipment and Machinery Operation:

- Do not leave the machine unattended while running
- Machine operators must signal any time they intend to resume travel from a stationary position
- Never operate a machine at excessive speeds that may cause ground personnel to work carelessly

Night Work:

- Ensure lighting is adequate for visibility of the workers and for the workers to complete the task at hand
- Lighting used to illuminate the worksite shall not be aimed at drivers (making it more difficult for them to see their intended path)
- Refer to Night Work WTS for more details

Signalers:

- Signalers are required for backing vehicles when the operator's view of the path of travel is obstructed
- Signallers are required when the dump truck with a raised box is within the 3 meters of overhead powerlines/structures

Path of Travel:

- Be aware of the sequence of operation and stay out of the Path of Travel of moving vehicles and equipment
- Do not walk between the grinding/milling machine and reversing trucks
- Exercise caution when trucks are backing up, the truck driver may not be familiar or experience with grinding operations

Environmental Considerations:

- Be aware of heat stress related hazards while working outside in the summer season
- For more information, refer to the Hazardous Agents WTS

Manual Material Handling:

- Sweeping and shovelling can result in a Repetitive Strain Injuries (RSI) - when possible workers should rotate between repetitive job tasks

Dust Control:

- Water will be used in the milling machine and street sweeper

Inspections:

- A pre-operational safety inspection is to be completed prior to using equipment
- Do not use defective equipment or machinery, inform your foreman / superintendent - they will arrange for the equipment to be serviced
- Before starting machines or equipment, ensure guards and safety devices are in place, adjusted and functioning properly

Training:

- Employee Orientations (including roles, responsibilities, applicable workplace task standards, WHMIS, etc.)
- Only trained, authorized personnel are allowed to operate vehicles / machinery / equipment
- Only trained, authorized personnel are allowed to perform maintenance / repairs

PPE:

- Workers on construction projects must wear, at a minimum, head, foot, eye and high visibility PPE
- Wear the appropriate personal protective equipment for the job at hand (i.e. hearing protection, etc...)

JOB HAZARD AND RISK ANALYSIS		RISK RATING SYSTEM	
		A High risk of injury or equipment / property damage.	
		B Medium risk of injury or equipment / property damage.	
		C Low risk of injury or equipment / property damage.	
TASK HAZARDS	RATING BEFORE CONTROLS	TASK CONTROLS	RATING AFTER CONTROLS
• Airborne Dust	B	<ul style="list-style-type: none"> • Milling machine and sweeper will apply water in quantities necessary to prevent airborne dust • Workers will wear appropriate PPE 	C
• Mobile Equipment and Vehicles / Lack of Spotter	B	<ul style="list-style-type: none"> • Signalers are required for backing vehicles when the operator's view of the path of travel is obstructed • Signallers are required when equipment is within the safe limits of approach to overhead powerlines 	C
• Traffic	B	<ul style="list-style-type: none"> • Book 7 Traffic control measures will be implemented. A full closure is utilised when necessary. 	C
• High Noise Levels	B	<ul style="list-style-type: none"> • Workers exposed to high noise levels must use hearing protection (CSA approved Ear plugs / Ear muffs) • Workers shall wear appropriate hearing protection where the potential exposure of noise cannot be reduced below the occupational exposure limit of 85 dBA over an 8-hour period 	C

<ul style="list-style-type: none"> Heat Stress 	A	<ul style="list-style-type: none"> Drink water throughout the day (don't wait until you're thirsty) Taking rest breaks as needed (in a cool, shady spot) When possible, do the heaviest work at the coolest times Use the Buddy System – watch for signs of heat related illnesses in your co-workers If you think someone has heat stroke or heat exhaustion: call 911, inform the Foreman /Superintendent and begin First Aid 	C
<ul style="list-style-type: none"> Lack of, or Improper, Training and Education 	C	<ul style="list-style-type: none"> Machine Operators must be authorized and trained Only trained and competent personnel are permitted to perform maintenance 	C
<ul style="list-style-type: none"> Poor Housekeeping 	C	<ul style="list-style-type: none"> Keep a clean working area Ensure proper clean up / wash procedures followed 	C
<ul style="list-style-type: none"> Musculoskeletal disorders (MSD) & Repetitive Strain Injuries (RSI) 	C	<ul style="list-style-type: none"> When possible, workers should rotate between repetitive job tasks 	C
<ul style="list-style-type: none"> Lack of Inspection 	C	<ul style="list-style-type: none"> A pre-operational safety inspection is to be completed Do not use defective equipment or machinery, inform your foreman / superintendent 	C

SAFE JOB PROCEDURES (SJP)

<p>Pre-Task Commencement:</p> <ol style="list-style-type: none"> 1. Gather and wear the required PPE for the task 2. The Superintendent/Foreman will complete the Daily GAZZ Card and conduct a crew huddle to review with all workers the shift's tasks and any associated hazards and control strategies 3. Ensure all workers understand the GAZZ Card contents, and sign off in acknowledgement 4. Ensure controls are in place prior to commencing work so hazards are mitigated / eliminated 5. The Superintendent/Foreman will complete a Traffic Protection Form and ensure that traffic protection measures are in place in accordance with Ontario Traffic Manual Book 7 and communicate the hazards and controls to workers when workers have the potential to be endangered by traffic (refer to Traffic Control WTS for more detail) 6. Determine what equipment / machinery / tools and material, are required for the completion of the task 7. Inspect all equipment / machinery / tools prior to use and document the inspections on appropriate forms when required 8. Ensure preventative maintenance activities have been completed where required, prior to using equipment / machinery / tools 9. If equipment / machinery / tools are observed to be damaged, remove it from use and notify the Foreman / Superintendent 10. Install fencing and hording where needed 11. Locate utilities – Call Before You Dig (when necessary) 12. Overhead hazards (i.e. powerlines) will be identified, signs posted and a signal person appointed as required 13.
<p>During Task - Milling:</p> <ol style="list-style-type: none"> 1. If milling of the asphalt is required then the milling machine will be positioned in line with the asphalt surface needing to be milled 2. The empty dump truck will back up to the milling machine following the directions of a Signaler 3. The milling machine will begin forward movement milling the asphalt surface. 4. The milled asphalt is thrown from the milling machine conveyor chute into the back of the dump truck. 5. The dump truck moves forward keeping pace with the milling machine, with the direction of the Signaler 6. When the truck is loaded the Signaler directs the truck to leave and a new truck backs up to the milling machine.

7. Street sweepers are used to clean up debris

Task Completion:

1. Ensure all tools are cleaned and stored appropriately in the designated locations
2. Implement any housekeeping or maintenance as required
3. Ensure equipment is properly shut down, secured from movement and parked in a safe location off the travelled portion of the road where possible or clearly marked by traffic control devices to ensure safe movement of traffic.