

WAC 296-850-180 Appendix A—Operations for establishing beryllium work areas. This standard defines a beryllium work area as any work area where materials that contain at least 0.1 percent beryllium by weight are processed (1) during any of the operations listed in Appendix A of this standard, or (2) where employees are, or can reasonably be expected to be, exposed to airborne beryllium at or above the action level. Table A.1 in this appendix sets forth the operations that, where performed under the circumstances described in the column heading above the particular operations, trigger the requirement for a beryllium work area.

Table A.1—Operations for Establishing Beryllium Work Areas Where Processing Materials Containing at Least 0.1 Percent Beryllium by Weight

Beryllium metal alloy operations (generally <10% beryllium by weight)	Beryllium composite operations (generally >10% beryllium by weight) and beryllium metal operations	Beryllium oxide operations
Abrasive Blasting.	Abrasive Blasting.	Abrasive Blasting.
Abrasive Processing.	Abrasive Processing.	Abrasive Processing.
Abrasive Sawing.	Abrasive Sawing.	Abrasive Sawing.
Annealing.	Annealing.	Boring.
Bright Cleaning.	Atomizing.	Brazing (>1,100°C).
Brushing.	Attritioning.	Broaching with green ceramic.
Buffing.	Blanking.	Brushing.
Burnishing.	Bonding.	Buffing.
Casting.	Boring.	Centerless Grinding.
Centerless Grinding.	Breaking.	Chemical Cleaning.
Chemical Cleaning.	Bright Cleaning.	Chemical Etching.
Chemical Etching.	Broaching.	CNC Machining.
Chemical Milling.	Brushing.	Cold Isostatic Pressing (CIP).
Dross Handling.	Buffing.	Crushing.
Deburring (grinding).	Burnishing.	Cutting.
Electrical Chemical Machining (ECM).	Casting.	Deburring (grinding).
Electrical Discharge Machining (EDM).	Centerless Grinding.	Deburring (nongrinding).
Extrusion.	Chemical Cleaning.	Destructive Testing.
Forging.	Chemical Etching.	Dicing.
Grinding.	Chemical Milling.	Drilling.
Heat Treating (in air).	CNC Machining.	Dry/Wet Tumbling.
High Speed Machining (>10,000 rpm).	Cold Isostatic Pressing.	Extrusion.
Hot Rolling.	Cold Pilger.	Filing by Hand.
Lapping.	Crushing.	Firing of Green Ceramic.
Laser Cutting.	Cutting.	Firing of Refractory Metallization (>1,100°C).
Laser Machining.	Deburring.	Grinding.
Laser Scribing.	Dicing.	Honing.
Laser Marking.	Drawing.	Hot Isostatic Pressing (HIP).
Melting.	Drilling.	Lapping.
Photo-Etching.	Dross Handling.	Laser Cutting.

Beryllium metal alloy operations (generally <10% beryllium by weight)	Beryllium composite operations (generally >10% beryllium by weight) and beryllium metal operations	Beryllium oxide operations
Pickling.	Electrical Chemical Machining (ECM).	Laser Machining.
Point and Chamfer.	Electrical Discharge Machining (EDM).	Laser Scribing.
Polishing.	Extrusion.	Laser Marking.
Torch Cutting (i.e., oxy-acetylene).	Filing by Hand.	Machining.
Tumbling.	Forging.	Milling.
Water-Jet Cutting.	Grinding.	Piercing.
Welding.	Heading.	Mixing.
Sanding.	Heat Treating.	Plasma Spray.
Slab Milling.	Honing.	Polishing.
	Hot Isostatic Pressing (HIP).	Powder Handling.
	Lapping.	Powder Pressing.
	Laser Cutting.	Reaming.
	Laser Machining.	Sanding.
	Laser Scribing.	Sectioning.
	Laser Marking.	Shearing.
	Machining.	Sintering of Green Ceramic.
	Melting.	Sintering of Refractory Metallization (>1,100°C).
	Milling.	Snapping.
	Mixing.	Spray Drying.
	Photo-Etching.	Tape Casting.
	Pickling.	Turning.
	Piercing.	Water-Jet Cutting.
	Pilger.	
	Plasma Spray.	
	Point and Chamfer.	
	Polishing.	
	Powder Handling.	
	Powder Pressing.	
	Pressing.	
	Reaming.	
	Roll Bonding.	
	Rolling.	
	Sanding.	
	Sawing (tooth blade).	
	Shearing.	
	Sizing.	
	Skiving.	
	Slitting.	
	Snapping.	
	Sputtering.	
	Stamping.	
	Spray Drying.	

Beryllium metal alloy operations (generally <10% beryllium by weight)	Beryllium composite operations (generally >10% beryllium by weight) and beryllium metal operations	Beryllium oxide operations
	Tapping.	
	Tensile Testing.	
	Torch Cutting (i.e., oxy-acetylene).	
	Trepanning.	
	Tumbling	
	Turning.	
	Vapor Deposition.	
	Water-Jet Cutting.	
	Welding.	

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060, and OSH Act of 1970, § 18. WSR 23-07-119, § 296-850-180, filed 3/21/23, effective 4/1/23. Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060, and chapter 49.17 RCW. WSR 18-17-156, § 296-850-180, filed 8/21/18, effective 12/12/18.]