



## Multi-State Advanced Manufacturing Consortium

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### MSAMC Master Performance Based Objectives (PBO) Review Template

#### Instructions

The following tab lists PBOs for the topic area **Preventive Maintenance**. Please review each of the PBOs, and rate each PBO with one of the following ratings:

**1 = Skill or understanding is required for employees.**

**2 = Skill is useful, but is not crucial for employees.**

**3 = Skill is not useful for employees, or isn't relevant for typical work assignments.**

**0 = PBO is unclear.**

Additionally, for each PBO, note any comments or recommendations that you may have about how to improve the PBO. If any PBOs or skill sets seem to be missing from the list, please add them in the space at the bottom of the list.

#### Please enter your information below

Name:	
Company/Plant:	
Department/Division:	
Industry/Segment:	
Email:	
Phone:	



## Preventive Maintenance

### M-S AMC Industry Partner PBO Review

Please review the following PBOs to identify the appropriate skill set for a given job title / category / classification (see row 10 below).

\* In the "Importance" column, identify how important each PBO is for someone in the relevant position. For each PBO, type 1 if the PBO must be covered in the coursework, enter 2 if the PBO is helpful but not necessary and would not impair the performance of the employee in the workplace if missed, and enter 3 if the PBO would not benefit the student or doesn't apply to the typical work assignments. If you don't understand the PBO, enter 0.

\* Note any comments or feedback for improving each PBO (in the "Comments" column).

**Note: It is the intention of competency based instruction to have each student individually demonstrate their proficiency of the skills indicated.**

Reviewing PBOs for **TYPE JOB TITLE HERE** (from whose perspective are you rating PBO importance?)

Sub-Topic	Level	Topic	PBO ID	Performance Based Objective (PBO)	Importance 1 = Need 2 = nice to have 3 = N/A 0 = Don't understand	Comments <i>Notes to improve the PBO, PBO is unclear, etc.</i>
	1	PM	1	Identify, Explain, and Demonstrate safe practices when doing general preventative maintenance including common slip hazards, hydraulic system injection hazards, and chemical hazards.		
	1	PM	2	After completing assigned work, students will ensure that the work area is left clean and free of debris, maintenance supplies, parts and tools.		
	1	PM	3	Monitor floor management development system by doing the following: - Maintain neat work area - Replace used tools and equipment in designated areas - Establish minimum and maximum quantities acceptable for floor area - Maintain recycle and waste segregation - Identify principles of a 5S program		
	1	PM	4	Perform equipment checks, including: - Perform visual inspection of equipment - Check gauges - Check for abnormal readings and conditions - Verify current readings - Check valve positions, abnormal noises, leaks, and temperatures		
	1	PM	5	Change air and oil filters as prescribed, and demonstrate the proper disposal of used filters.		
	1	PM	6	Maintain oil and grease levels by doing the following: - Check sight glass-hydraulic oils - Check grease canisters - Check air lubricators - Check gear box oils		
	1	PM	7	Collect oil samples for analysis by performing the following steps: - Secure sample collection kit from store room - Clean port before taking sample - Take sample from equipment - Label sample container - Prepare sample for shipment to send to lab for analysis		

	1	PM	8	Interpret oil analysis data and take action by accomplishing the following steps: - Read and interperet oil analysis data - Determine root cause of contamination - Initiate work orders as required - Locate and eliminate source of contamination - Schedule a repair if contaminated		
	1	PM	9	Troubleshoot automatic lubrication systems by: - Identify types of lubrication systems - Identify components of a series type, automatic lube system - Troubleshoot series type, automatic lube system		
	1	PM	10	Using manufacturers' literature/recommendations or other typical plant resources, select the appropriate lubricant for a track.		
	1	PM	11	Using manufacturers' literature/recommendations or other typical plant resources, identify the check frequencies for given equipment.		
	1	PM	12	Given the criticality of a lubed component, failure, repair frequency, and monitoring equipment, estimate the check frequency.		

**Additions: Please add any additional objectives that we may have overlooked.**



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[20150608\\_pbo\\_review\\_ind\\_preventive\\_maintenance](#)

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