Action Plan - PM Optimization Checklist



| ✓ | Failure Mode-Based |
|-------------|---|
| | Tasks address inherent design deficiencies or known failure modes |
| | 2. Records confirm that tasks successfully address deficiencies or failure modes |
| | 3. Data indicates other deficiencies and/or failure modes are present, but not addressed in the PM task list |
| If availabl | le, perform the following to support your analysis: |
| | 4. Analyze failure codes to determine operating issues vs. equipment failure |
| | Are the PM activities grouped by a single failure code or multiple failure codes? a. Impacts task frequency and how you address detectability and criticality |
| | 6. Analyze downtime data to review failure modes, loss allocation of changes, etc. |

| √ | Value-Added |
|----------|--|
| | 1. Does the task address a safety, environmental, or regulatory requirement? |
| | 2. Does performance data or equipment history verify the benefits of the task (e.g., uptime, quality rate, production rate)? |
| | 3. Is the task written to reduce the risk of a functional failure from occurring or the likelihood of it occurring? |
| | 4. Are adequate levels of corrective maintenance generated from the task? |

| ✓ | Comprehensive |
|---|---|
| | 1. Tasks include all components that could lead to the failure of the maintainable system/asset |
| | 2. Tasks include component servicing and adjustment, inspection, and repair |
| | 3. Activities include all information necessary (acceptable ranges, clearances, gaps, etc.) to make the inspection, initiate corrective repair and track data for the P-F curve a. Check with equipment SMEs for input. |

PM Optimization Checklist

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| √ | Organized |
|----------|--|
| | Tasks are organized into a logical sequence that facilitates efficient execution |
| | 2. Supporting data is organized to match the tasks, e.g., task lists, drawings, specification sheets, etc. |

| √ | Repeatable |
|----------|---|
| | Task written so all qualified maintenance technicians will perform the task consistently? a. Drawings, pictures and other details used? |
| | 2. Task complete and detailed enough to ensure effective performance of the task? |
| | 3. Task specifies the operating condition of the machine? |

| √ | Frequency |
|----------|--|
| 1 | . Is there one corrective work order generated for every five PM/PdM inspections? |
| 2 | 2. Does the current frequency prevent unplanned failures? |
| 3 | On condition frequencies are based on historical data used to create accurate P-F curves a. Calculate inspection time intervals based on criticality and detectability |
| 4 | . Hard time frequencies are based on OEM recommendations or historical data used to create accurate failure rate curves |
| 5 | 5. Failure finding frequencies are based on historical data used to determine mean time to failure (MTTF) |
| 6 | s. Service activities have been considered as needed |
| 7 | . PM to corrective ratios correlate to the asset detectability and criticality rating |
| 8 | Breakdown and trouble-call histories confirm the PM tasks are effective |

| ✓ | Duration |
|---|--|
| | Task durations determined and verified by direct observation? |
| | 2. Task durations routinely audited or tracked to detect deviations? |
| | 3. Task durations allow for combining tasks intelligently? |

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