Standard Operating Procedure (SOP)
Preventive Maintenance Scheduling and Planning

This SOP details the processes for **preventive maintenance scheduling and planning**, including identification of critical equipment, establishing maintenance intervals, resource allocation, task prioritization, documentation of maintenance activities, and ongoing evaluation of maintenance effectiveness. The goal is to minimize equipment downtime, extend asset life, and ensure operational reliability through systematic and timely preventive maintenance practices.

1. Purpose

To establish standardized procedures for the effective scheduling, planning, execution, and documentation of preventive maintenance (PM) across all critical assets.

2. Scope

This SOP applies to all personnel responsible for equipment maintenance, including facility managers, maintenance planners, technicians, and supervisors.

3. Responsibilities

- **Maintenance Manager:** Oversee implementation and ongoing improvement of the PM program.
- **Maintenance Planner:** Develop and maintain the PM schedule, assign resources.
- **Technicians:** Execute assigned PM tasks and report findings.
- **Operations Team:** Support access to equipment and provide operation insights.
- **Documentation Staff:** Record all maintenance activities for tracking and review.

4. Procedure

4.1 Identification of Critical Equipment

1. Develop and maintain an equipment master list.
2. Assess equipment based on:
    - Impact on safety and operations
    - Frequency of use
    - History of failure/repair costs
3. Classify assets as critical, major, or minor for prioritization.

4.2 Establishing Maintenance Intervals

1. Refer to OEM (Original Equipment Manufacturer) recommendations and legal requirements.
2. Analyze equipment history and performance data to determine optimal maintenance intervals.
3. Document frequency (e.g., weekly, monthly, quarterly) for each asset.

4.3 Resource Allocation

1. Estimate labor hours and required skills for each PM task.
2. Ensure availability of spare parts and tools ahead of scheduled tasks.
3. Communicate schedules and roles to all involved personnel.

4.4 Task Prioritization

- Prioritize PM tasks based on equipment criticality and operational impact.
- Utilize a risk-based approach for task ordering if conflicts arise.

4.5 Scheduling Maintenance Activities

1. Create PM schedules using a computerized maintenance management system (CMMS) or manual planner.
2. Distribute work orders ahead of scheduled dates.
3. Minimize production disruption by aligning PM activities with planned downtime when possible.

4.6 Execution and Documentation

1. Technicians perform tasks as per work order instructions and safety protocols.
2. Record task completion, findings, issues, and required follow-ups in the CMMS or PM log.
3. Report urgent findings to the maintenance manager immediately.

4.7 Evaluation and Continuous Improvement

1. Regularly review PM records and equipment performance metrics (e.g., MTBF, downtime).
2. Identify trends, recurrences, and opportunities for improvement.
3. Update maintenance intervals, asset priorities, and procedures as required.

5. Documentation and Records

Record Type	Responsible	Retention Period
Maintenance Schedules	Maintenance Planner	3 years
Completed Work Orders / PM Logs	Technicians/Documentation Staff	3 years
Asset Criticality Assessments	Maintenance Manager	3 years
Continuous Improvement Reports	Maintenance Manager	3 years

6. References

- OEM Manuals and Standards
- Company Maintenance Policy
- Applicable Regulatory Guidelines

7. Revision History

Revision	Date	Description	Approved By
1.0	2024-06-06	Initial release	Maintenance Manager