



## **Maintenance Management Improvement Master Plan** (aka Mike's Ideal *Mike's World* Checklist)

### **Management Support**

1. Develop the maintenance vision
2. Communicate the vision to all
3. Develop the Master Plan
4. Assign priorities
5. Assign project champion responsible for keeping process on schedule
6. Assign responsible manager/supervisor for each task
7. Develop Gantt chart for easy tracking
8. Educate management team, maintenance and operations about maintenance management fundamentals
9. Educate technicians on Maintenance Management fundamentals
10. Publish progress and status on regular basis

### **Organization**

1. Review or create organization chart
  - a. Centralized shop, zone/area staffing, or combination
2. Review and revise command and control responsibilities and ownership as needed
3. Leadership and management training for maintenance managers
4. Review work schedules for maintenance employees: hours worked, days worked, and number of mechanics working. Look for opportunities to complete more proactive work
5. Review dispatching methods
  - a. Is work management directed or self-directed by technicians
  - b. Consider wireless equipment for work order management
6. Review management and supervision field/floor time. How can it be increased?
7. Review management/supervision meeting and office time. Is it excessive?
8. Review off shift needs and structure of organization
9. Communicate structure and purpose to both operations and maintenance personnel
10. Review tool needs and storage (personal and centralized)
11. Review transportation requirements (trucks, vans, buggies, etc.). Vehicles inspected on regular basis for safety, parts, and tools?

### **PM and PdM**

1. PMs established for all critical equipment
2. PM frequency developed and agreed jointly with operations
3. Schedule PM work a year in advance
4. Review and debate the need for dedicated PM crews including lubrication



5. Review basic PM structure
  - a. Inspect only
  - b. Inspect and minor repair
  - c. Inspect with minor and major repair
  - d. Develop run time PM program where appropriate
6. Review need for predictive maintenance program to include
  - a. Infrared, vibration analysis, ultrasonic, lubrication oil testing
7. Measure % of PM work completed as percent of all work completed
8. Measure % late PMs. Late PM is 10% of scheduled frequency
9. Audit PM program on continual basis

### **CMMS**

1. Review CMMS for current and future needs
  - a. Training for all users, maintenance and operations
  - b. Software upgrades or modifications
  - c. Hardware needs
  - d. Review speed requirements

### **Work Orders**

1. Develop work order process flow chart
2. Define method of data entry – clerk, mechanic, planner, etc.
3. Refine work order content – fault codes, comments, description, etc.
4. Work order writing training – mechanics, operations, and staff if needed
5. Work order written for all work – determine extent of standing or blanket work orders (limit to a minimum)

### **Assets and Equipment**

1. Develop and agree on asset identification method
2. Label assets
3. Populate data base with all critical assets and equipment
4. Complete warranty, picture, PM, drawings, history, sections of CMMS
5. Populate parts and supply section

### **Maintenance Control Function**

1. Determine number of planners needed
  - a. Hire or transfer planners
  - b. Provide planner training
  - c. Consider part time planners?
2. Locate and equip planner offices



3. Develop work order standard operating procedures
  - a. What does a “good” work order look like
4. Establish asset priorities for all critical plant equipment
5. Determine date to start planning work orders
6. Establish necessary planning meetings and frequency
7. Determine date to start scheduling planned work
8. Publish weekly work schedule
9. Measure work schedule compliance
10. Develop work order approval process

### **Training**

1. Review existing craft training program for content
2. Develop necessary OEM training needs
3. Develop ongoing technical training needs for technicians
  - a. Schedule annual mandatory technical training for all employees
4. Maintenance management, Planning and scheduling, Leadership and management, trouble shooting techniques, etc.

### **Management Control and Key Performance Indicators**

1. Review needs and develop scorecards and measurements for organization
  - a. Backlog, work distribution, downtime for maintenance, percent pm work orders scheduled and completed, percent work orders planned, schedule compliance, Pareto analysis of reactive work, overtime hours, percent PM hours worked, etc....
  - b. Establish audit procedures and process
  - c. Planner competency and knowledge

### **Procurement and Inventory**

1. Parts usage review
2. Review storage control options
  - a. Bar code of parts
  - b. Security and parts access
2. Satellite storage locations – needed or not – properly managed?
3. Vehicle stored parts and supplies
4. Critical spares identified
5. Evaluate free issue items for normal maintenance work
6. KPI's for supply room management
7. Integrate planning with stores – kitted parts packages