

## **PREDICTIVE / PREVENTIVE MAINTENANCE IS A WISE INVESTMENT**

Our Service Division will help you solve your equipment maintenance problems. A McGill AirClean Predictive/Preventive Maintenance Plan (PMP) is the foundation for a comprehensive pro-active maintenance program that will enhance the performance and reliability of your air pollution control system.

As your air pollution control equipment ages, the maintenance to keep your system in proper operating condition increases. Regularly scheduled inspections are one way to avoid problems before they turn into downtime or costly repairs. Preventive maintenance carried out at planned intervals will extend equipment life, reduce failures, and increase equipment reliability.

Too little maintenance may save money initially, but will invariably lead to high costs in the long run. The key is to optimize your maintenance by implementing a Predictive / Preventive Maintenance Plan from McGill AirClean.

Preventive maintenance is time-interval based and is effective if the life span and maintenance intervals for the equipment are well known. Predictive maintenance is performance- and condition-based. This approach pulls together operating data, design data, maintenance logs and condition-based assessments in order to schedule (predict) future maintenance. The predictive maintenance approach provides an estimate of when equipment failures may occur. The predictive maintenance plan reduces your costs by reducing the overall amount of maintenance that is performed.

The McGill AirClean PMP program combines the two approaches to maximize the efficiency of your efforts. We provide you with a preventive maintenance schedule, a report on the current condition of your equipment based on collected data, and a predictive maintenance plan. A central database will be established to store all maintenance information.



**A McGill AirClean field engineer reviews a project with a customer.**

### **FEATURES**

- Ability to predict component failures and future maintenance needs based on actual performance assessments
- Inspections performed at properly scheduled intervals
- Regularly scheduled lubrication
- Remote computer link-ups for on-line service
- Guaranteed service dates
- Modem and on-site service, making our service personnel more familiar with your equipment
- Discounted service rates
- Continuing refresher training for your personnel
- Field service reports documenting equipment condition
- Notification of possible equipment upgrades
- Reports alerting you of potential maintenance needs and prompting you to stock only required spare parts
- Typically 30 to 90 days advance scheduling

### **BENEFITS**

- Reduces maintenance costs
- Optimizes maintenance expenditures
- Minimizes downtime
- Reduces operating costs

# THE MCGILL AIRCLEAN PREDICTIVE AND PREVENTIVE MAINTENANCE PLAN (PMP)

## On-Site Inspections

The PMP begins with a complete on-site inspection of your air pollution control system. McGill field engineers then provide a detailed report of the present condition of your equipment and recommendations on actions required to bring your system to optimum performance.

Several times a year a McGill AirClean field engineer visits your site for an inspection, either with the unit in operation or off-line. Routine maintenance, replacement of expendable components, lubrication, tuning, and adjustments are performed in conjunction with your personnel. (This is an excellent opportunity for “refresher” training.) At the conclusion of the trip a “debriefing” is held and a complete, detailed report is submitted.

### SAMPLE

(Excerpt from a Field Service Report)

#### Recommendations:

- Lower solenoid valve on Field #1 Upper rapping box needs to be replaced.
- Door gasket material on rapping box access doors needs to be replaced.
- Door gasket material on module access and outlet transition doors needs to be replaced.
- Loose and missing insulation in top boxes needs to be replaced.

## On-Line (modem) Inspection

McGill AirClean field engineers also log on to your PC via a modem connection on a regular basis to check all major operating systems and review the activity in your PMP. Each on-line inspection is followed by a detailed report.

### SAMPLE

(Segment of an On-Line Report)

Process Data		Date: 12-07-01
EP Inlet Temp = 616° F	Duct Pressure = 6.68" H <sub>2</sub> O	North Fan Control Output = 97.1 %
EP Outlet Temp = 466° F	Duct Pressure Setpoint = 6.60"	South Fan Speed = OFF
Reaction Chamber Temp = 2192° F	Lime Feeder = 4.0 %	South Fan Current = OFF
	North Fan Speed = 829RPM	South Fan Control Output = 0.0%
	North Fan Current = 226A	

During each on-line inspection, our field engineers review operating trends, adjust tuning parameters, and make program changes required to keep your equipment operating as designed.

Products and services depicted are current at time of publication. A quality-conscious manufacturer, McGill AirClean Corporation continually seeks ways to improve its products to better serve its customers. All designs, specifications, and product features are subject to change without notice.

## The Predictive/Preventive Maintenance Plan

McGill AirClean field engineers review equipment histories, all field reports, operating specifications, and the operation and maintenance manual in order to determine a complete Predictive Maintenance Plan.

## The PMP Maintenance Schedule

The PMP maintenance schedule itemizes each activity required to keep each element of your pollution control system in operation. The PMP schedule includes inspections, lubrications, adjustments, calibrations, tuning, alignment checks, minor cleaning, and parts replacement.

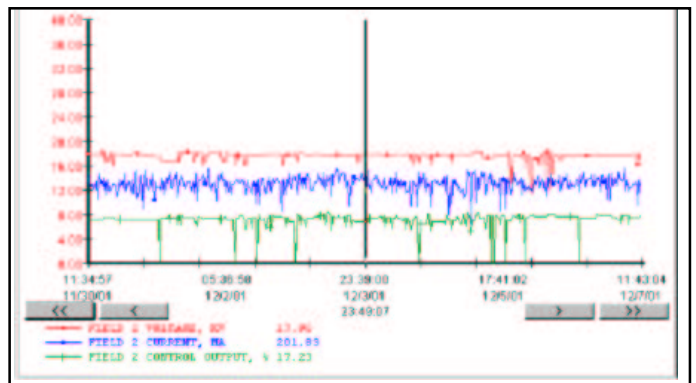
PMP MAINTENANCE SCHEDULE					
Device Description	Recommended Interval	Maintenance Time Required	On/Off Line	Actual Date	Done By
T/R Oil Samples	Annually	0.5 hr	On-line		
Door Gaskets	5 Years	1 Day	Off-line		
Insulator (Clean)	As Required	4 hrs	Off-line		

## Reporting/Accountability

McGill AirClean engineers download the PMP schedule to your PC. The schedule provides for accountability, requiring each item to be initialed and dated when completed, providing a comprehensive maintenance log.

McGill AirClean field engineers customize trend screens to print out all key operating parameters either weekly or monthly so you see all critical performance changes at a glance.

### SAMPLE (Trend Screen)



The McGill AirClean Predictive/Preventive Maintenance Plan is the lowest-cost method to maintain your equipment and ensure on-line reliability. Call your McGill AirClean Service Division representative today.

**McGill AirClean Corporation**

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