

GEM is a minority-owned, small disadvantaged business offering a full range of engineering and technical services, including maintenance planning services. To develop an integrated maintenance program or simply add a missing key element, GEM has experienced preventive maintenance (PM) specialists available to serve your needs.

CORE CAPABILITIES

GEM provides maintenance planning services based on the integration of three separate elements into a comprehensive PM program. These elements have been categorized as **Input, Processes, and Controls:**

INPUT

- Failure Evaluations
- Life Cycle Cost Evaluations
- Maintenance Data Bases
- Spare Parts Programs



Evaluation of 250 HP, Oil Fired, Hot Water Boiler Following Fire Damage from Failure of Fuel Oil Metering Valve

PROCESSES

- Predictive Maintenance
- Preventive Maintenance
- Corrective Maintenance
- Time Directed Maintenance
- Condition Monitoring
- Post Maintenance Testing

CONTROLS

- Administrative Procedures
- Work Instructions
- Work Orders
- Maintenance Assessments
- PM Specifications

GEM evaluates these elements jointly rather than independently.

In this manner, the elements are logically integrated into an overall PM program. Maintenance frequencies and schedules are tailored to the equipment's safety significance and value. The type of maintenance (predictive, preventive, corrective, run-to-failure) is thereby optimized.

In addition to planning, GEM provides maintenance implementation services such as development of technical and administrative procedures, work instructions, and work assessments. All these elements are vital parts of a successful Integrated Maintenance Program.

PERSONNEL EXPERIENCE

The typical GEM PM Specialist has 10-15 years or more of progressive experience. Using "seasoned" professionals provides additional assurance that our clients will be satisfied with the services rendered. GEM's PM Specialists are not maintenance technicians or skilled craftsmen; instead, they are staff selected for their extensive technical and quality assurance experience. In fact, many of GEM's PM Specialists have mechanical, electrical, and civil engineering degrees.

MAJOR PROJECTS

Y-12 Maintenance Support

GEM personnel with security clearances provided technical support to the Y-12 National Security Complex to identify critical equipment to be maintained, preventative maintenance actions, post maintenance testing, and spare parts requirements.

Implementation of identified maintenance activities was then planned in conjunction with Y-12 site operations personnel.



Site-Wide Maintenance Support at Y-12 National Security Complex

Maintenance Improvement Program

GEM provided support to the Blount County School System in East Tennessee for facility condition assessments, inspection of critical equipment, development of maintenance procedures, life cycle cost studies, and database support for a computerized maintenance management system.



Maintenance Improvement for Blount County School System

CONTACT GEM

Please contact GEM for further information about our past and current projects and our full range of maintenance services.

GEM is a Minority-Owned Small Disadvantaged Business

2033 Castaic Lane, Knoxville, TN 37932

Tel: (865) 560-9434 • Fax: (865) 560-9404 • Website: www.gemserve.com