# EMS Permit Pilot Project
# Follow-up Environmental Assessment
# Aeroflex Colorado Springs

## *Report Addendum*

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# 1.0 INTRODUCTION

The Colorado Department of Public Health and Environment (CDPHE) is reviewing the efficacy of its environmental management system (EMS) permit pilot project to evaluate whether or not environmental improvements, operating flexibility and regulatory efficiencies can be gained from combining the regulatory requirements of a facility under one cross-media EMS-based operating permit. Legislation was adopted in 2004 that gives CDPHE the authority to pilot this process using industry volunteers.

Aeroflex agreed to participate in this EMS permit pilot project. A baseline environmental assessment was conducted at the facility in September 2004. The intent of the environmental baseline assessment was to determine the environmental footprint of the facility, gather baseline data related to environmental impacts and assess environmental programs in place at BATC. Additionally, an Environmental Management System (EMS) audit was conducted in February 2005 to assess the status of the EMS.

A follow-up environmental assessment was conducted at BATC on June 27, 2006 and a report was issued on July 24, 2006 describing the results of that assessment.

This report serves as an addendum to the July 24, 2006 Follow-up Assessment Report, provides updated information on the status of environmental improvement projects at Aeroflex, and provides three years of environmental metrics.

Included in this addendum are notations on significant changes made to operations, if any, and progress made with continual improvement projects. A brief summary of metrics that were collected during the baseline and follow-up assessments also are included. Detailed information about the operations and practices in place at Aeroflex may be found in the baseline environmental assessment, the EMS audit and the follow-up assessment reports.

# 2.0 ENVIRONMENTAL UPDATE

The baseline assessment provided detailed descriptions of Aeroflex operations and its overall environmental footprint. The EMS audit evaluated the structure and function of the management system and identified strengths and areas for improvement. The follow-up assessment provided an update of the operations and noted any significant changes made as a result of the EMS permit pilot project. This addendum provides a summary of changes made to operations since the follow-up assessment and provides 2004, 2005, and 2006 environmental data.

## 2.1 ENVIRONMENTAL ASSESSMENT

There have been no changes to the operations at Aeroflex that have impacted environmental compliance or regulatory status since the follow up assessment was conducted in June 2006. Aeroflex continues to participate in the Colorado Department of Health and Environment's (CDPHE) Leadership Program at the Gold level in addition to participation in the Environmental Management System Permit Pilot Program. A combined air and wastewater EMS permit was issued in 2005 and will be in effect for three years. Conventional permits are still in effect and are being maintained.

Aeroflex has been in the process of expanding its workforce. The number of employees has increased to 293 which represents a gain of 25% since the pilot program began in 2004. This has required a significant amount of time and preparation by the EH&S department to provide new employee training in addition to the annual EH&S refresher training.

## 2.2 CONTINUAL IMPROVEMENT PROJECTS

Aeroflex has been working on several projects to enhance overall environmental performance. These projects were described in the follow-up assessment report. A brief update is provided below.

### 2.2.1 Recycling

Aeroflex has expanded its extensive recycling program to include almost everything at the facility: paper, plastics, batteries, printer cartridges, bubble wrap, etc. Dross and gold scrap are recycled in New Jersey, and Veolia transports universal wastes for recycling. The employees are encouraged to recycle batteries and paper at the site.
Quantifying the recycling activities has been challenging but the EH&S Department is exploring methods for tracking and reporting recycling metrics.

### 2.2.2 Pollution reduction

The facility has identified energy conservation as one of its primary objectives and target. Lighting at the facility was upgraded in 2005 with more efficient ballasts and "green" fluorescent bulbs. Other areas of energy efficiency are being explored.

### 2.2.3 Community outreach

Community outreach has seen the greatest improvement since the baseline assessment was conducted. The facility implemented a community outreach/public advisory group to facilitate communication of environmental performance to various stakeholders. The meetings provide a way to address any issues and/or concerns to Aeroflex directly, and get immediate feedback. Annual meetings are planned to promote on-going dialogue. The date for the 2007 meeting is pending.

## 2.3 ENVIRONMENTAL MANAGEMENT SYSTEM

Aeroflex has observed improvement in the structure and function of the EMS during the course of the pilot program. Aeroflex identified gaps in the management system and procedures to correct the deficiencies are being explored. Significant improvements include the following:

- Objectives and targets are identified and documented.
- Environmental programs have been put in place to achieve those objectives.
- Management review meetings have been reinstated on a quarterly basis.

The cycle of continual improvement is evident; the EMS has proven to be a valuable tool for enhanced environmental management and performance**.**

## 2.4 METRICS

Table 1 presents a summary of metrics that are tracked by Aeroflex. It is important to note that these metrics do not necessarily reflect improvement or degradation of the environment due to Aeroflex's practices and are limited by the fact that only two years have elapsed since the baseline assessment. Ideally, metrics should be tracked over a longer period of time. However, these metrics do provide a measure of performance that can be useful for setting objectives and targets. For example, Aeroflex management identified a 5% reduction in solid waste, water usage, electrical usage and hazardous waste as a goal for 2006. The metrics for 2006 indicate mixed results. These data are normalized using the number of man hours worked to adjust for the different projects and product lines.

**Table 1: Environmental Metrics**

| Natural Resource/Activity | Baseline 2004 | 2005 | 2006 | % Change Since 2004 |
|---|---|---|---|---|
| **Air Emissions**: | | | | |
| VOC (TPY) | 10,721 | 9,999 | 10,417 | (3%) |
| HAP (TPY) | 110 | 110 | 110 | 0% |
| **Hazardous Waste** (lbs.) | 4,484 | 3,672 | 2,284 | (49%) |
| **Universal Waste** (lbs.) | 163 | 45 | 150 | (8%) |
| **Solid Waste** (yards) | 240 | NA | NA | NA* |
| **Energy Use:** | | | | |
| Electricity (KWH) | 7,271,400 | 7,602,400 | 7,813,800 | 7% |
| Natural gas (in dTherm) | 106,440 | 109,960 | 93,233 | (13%) |
| **Other fuel: Nitrogen** (cubic feet) | 39,625,549 | 38,450,000 | 34,357,500 | (13%) |
| **Water Usage** (gallons) | 5,200,071 | 6,383,677 | 7,139,286 | 37% |
| **Normalizing factor** | 0.9 | 0.82 | 0.86 | |

NA = Not Available

***** Aeroflex obtained a new waste transporter in 2005. Waste is now separated into three different categories; cardboard, cafeteria/office and paper. However, the transporter does not weigh the contents of the different bins, thus metrics are not available.