

MoIAC Pre-Audit Form



**Missouri Industrial
Assessment Center**



U.S. Department of Energy

Energy Efficiency and Renewable Energy

Bringing you a prosperous future where energy is clean, abundant, reliable, and affordable

Director: Bin Wu, Ph.D., Professor, College of Engineering, Department of Industrial and Manufacturing Systems Engineering
E3437 Lafferre Hall, University of Missouri-Columbia, MO 65211, USA. Voice: 573-882-5540. Fax: 573-882-2693. Email: wubi@missouri.edu

Assistant Director: Sanjeev K. Khanna, Ph.D., Professor, College of Engineering, Department of Mechanical and Aero Space Engineering
E3413 Thomas and Nell Lafferre Hall, University of Missouri-Columbia, MO 65211, USA Voice: 573-884-9109 Email: khannas@missouri.edu

Faculty Specialist: James S. Noble, Ph.D., Professor, College of Engineering, Department of Industrial and Manufacturing Systems Engineering
E3437J Thomas and Nell Lafferre Hall, University of Missouri-Columbia, MO 65211, USA Voice: 573-882-9561 Email: noblej@missouri.edu

Ways to submit this form:

1. Fill up the form and fax it to 573-882-2693 Attn: Dr. Bin Wu
2. Print and return this form by mail to:
Dr. Bin Wu
University of Missouri-Columbia
Department of Industrial and Manufacturing Systems Engineering
E3437 Thomas and Nell Lafferre Hall, University of Missouri-Columbia, MO 65211
3. Return to:

Please fill out the following blanks:

Company Name: _____

Address: _____

Phone: _____

Fax: _____

SIC/NAICS Code: _____

CONTACTS

Name: _____	Position: _____
Phone (Ext.): _____	E-Mail: _____

Name: _____	Position: _____
Phone (Ext.): _____	E-Mail: _____

Name: _____	Position: _____
Phone (Ext.): _____	E-Mail: _____

MoIAC Pre-Audit Form

Products Produced:

Raw Materials:

Gross Production per year:

A) Amount in US dollars: \$ _____

B) Number of pieces: _____

Safety Needs/Issues/PPI etc:

Are there any particular problems or areas with respect to pollution prevention, waste products, or energy consumption that you would like the team to pay special attention to?

Additional Comments:

May we take photographs in your plant? Yes No Some Area

Plant Operations: Please include information on hours of operation as indicated below.

	Shift Start	Shift End	Hours per Shift	Number of Employees	Days per Year	Weeks per Year
Shift 1						
Shift 2						
Shift 3						
Shift 4						
Office						

MoIAC Pre-Audit Form

Plant Information:

Plant Square Footage: _____

Plant Layout: *Please provide a drawing or sketch of your plant layout indicating major processes and equipment, etc.*

MoIAC Pre-Audit Form

Process Description(s): In order to develop a good understanding of your process(es) and operations, and thus be able to better accomplish our task of developing suggestions for your consideration, it would be helpful to review a schematic or flow chart of the processes from raw material receipt through product manufacture and final product packaging and shipping. If you have drawings of your processes which will help us accomplish this task, please attach them to these forms; or if unavailable please sketch them below and on any attached sheets that might be necessary.

MoIAC Pre-Audit Form

Pollution Prevention: Please provide information relative to pollution prevention areas such as solvents, coatings, abrasives, lubricants, chemical surface preparation solutions, air releases, wastewater treatment, and general landfill waste information. Record NA if not applicable.

Waste Material	Source	Pounds per Year	Current Disposal or treatment Methods	Cost

Do you have a current Pollution Prevention Plan? Yes No

If Yes, please attach a copy of the report with this form

If No, please list issues with which you would like our assistance:

Water Consumption and Treatment:

Water sources, volumes, and costs:

Is water treated in-house? Yes No Is water recycled in-house? Yes No

Describe in-house water treatment facilities if any (filtration, RO, pH, flow rates etc.):

Sewage volume and associated costs:

MoIAC Pre-Audit Form

Electricity Consumption:

Annual consumption: *Please provide bills for the last 12 months to help us develop an understanding of your typical yearly electricity consumption and its' variation with season.*

Power company: _____

Number of meters: _____

Approximate annual cost: _____

Are you aware of any power factor issues? Yes No

Additional information: _____

Fossil Fuel Consumption:

Supplier(s): _____

Types of fuels used (e.g. natural gas, propane, fuel oil, other): _____

Volume of fuel used: _____

Cost of fuel: _____

Are fossil fuels used in your process(es)? Yes No

Processes in which fossil fuels are used: _____

Additional information: _____

MoIAC Pre-Audit Form

Major Energy Consuming Equipment: Please provide information on the equipment and processes which are responsible for consuming the major portions of energy in your plant.

Compressors (Size and number, HP, type, pressure, service factor, synthetic or hydrocarbon lubricants):

Pumps (Size and number, HP, type, pressure):

Boilers (Size, fuel, steam or hot water, service factor - time and application of use):

Furnaces / Ovens (KW or BTU, application, service factor):

Chillers, Refrigerators and Cooling Towers (KW, tonnage, coolant temperature, service factor etc.):

HVAC Equipment (tonnage, when and where used, temperature of cooled areas) :

--

Large Motor Drives (HP, VFD), Where used:

--

Welding and Join equipment:

--

Other energy intensive equipment (#, Function, type, Btu, or KW, average load):

--