

HOW TO PREPARE FOR THE GREEN SUPPLIERS NETWORK TECHNICAL REVIEW

As a partner in the Green Suppliers Network, you will participate in a confidential, technical review designed to identify strategies for improving your manufacturing process lines and using materials more efficiently. Working in collaboration with the U.S. Department of Commerce, the U.S. Environmental Protection Agency (EPA) established the Network to help small and medium-sized manufacturers stay competitive and profitable while reducing their impact on the environment. Lean manufacturing techniques coupled with sound environmental strategies will provide you with the *Lean and Clean Advantage*—the hallmark of the Green Suppliers Network.

WHO CONDUCTS THE NETWORK TECHNICAL REVIEW?

The Green Suppliers Network review team, composed of experts from your local Manufacturing Extension Partnership (MEP) Center and state environmental program, will lead a two- to three-day comprehensive onsite evaluation of one operational process or product line from start to finish. Our experts work with your self-selected team throughout the entire review process. You will have full disclosure of who will be entering your facility.

WHO SHOULD PARTICIPATE FROM MY FACILITY?

You will work with the Green Suppliers Network review team to select appropriate team members. Typically your team should include managers and personnel from your engineering, environmental health and safety, and purchasing departments, as well as operational personnel and decision-makers from your headquarters. The make-up of every review team varies—your team should represent the objectives and goals of your review.

WHAT HAPPENS DURING THE REVIEW?

Your review will take place over a two- to three-day period following an introductory half-day pre-assessment visit. The pre-assessment is an opportunity for you and the Green Suppliers Network review team to identify areas of focus for the review.

After the pre-assessment, the local review team will work with you to collect baseline data and train your staff on tools and techniques of the *Lean and Clean Advantage*. Our experts will provide you with an in-depth training session on value stream mapping and process-mapping methods that can be applied to other process lines. During the second and third day, you and the



review team will map out both current and future states of the selected process, collect appropriate data, and collaborate on developing practical solutions. You also will have the opportunity to explore issues related to energy efficiency and worker health, safety and exposure risks.

After the assessment you will receive a confidential report identifying opportunities for improvement with a cost-benefit analysis. The review team will work with you to help prioritize opportunities and discuss an implementation strategy.

WHAT DATA AND RECORDS WILL I NEED TO HAVE ON HAND?

The review team will work with you to determine which data sources are required for the assessment. Below is a list of possible sources the review team may ask you to provide. Many assessments only require some of these records.

- **Annualized electricity data** or, at a minimum, a copy of two invoices—ideally, one for winter and one for summer—for electricity purchased.
- **Quarterly water data** or, at a minimum, the annual cost of water and sewer purchased for the last full year of records and a copy of two quarterly invoices—ideally, one for winter and one for summer.
- **Listing of all air, water, liquid, or hazardous waste permits** and environmental reports submitted to environmental regulatory agencies.
- **Annual cost of hazardous waste disposal services** for the last full year of records and one invoice from each vendor you contract with for hazardous waste management.
- **Annual cost of solid waste disposal services** (and/or residual wastes) for the last full year of records and one full copy of an invoice.
- **Purchasing records** for your major raw material inputs for the process or product line being reviewed.
- **Listing of any liquids that require special handling**, including solvents, solvent-based cleaning solutions or degreasers, hydraulic oils, cutting/quenching oils, lubricating oils and biocides, and the amounts in gallons purchased over the last full year.
- **Listing of all materials recycled** and the monthly volume and any revenue generated as a result of the recycling.



In addition, the following records, if available, can further assist the review team:

- **Usage records that link raw material or resource inputs** to the number of parts or products used or a unit of time smaller than one day—for example, it might take 10 gallons of water to produce 100 units of a product.
- **Usage records that provide the amount of electricity or water used to run a piece of, or all of, the machinery for the product or process line under review.** This information can be extremely useful because energy and water use for a specific process line typically only makes up a percentage of your total resource use for your facility. Detailed usage records help review team members understand actual resource use for the process line being reviewed. Such records may only be available if the process line is “metered” separately from the rest of the facility or explicit records are tracked by some other means.

Visit www.greensuppliers.gov to download the Green Suppliers Network environmental benefits calculator to organize data and track your company’s project implementation progress.

HOW WILL THE INFORMATION BE USED?

The information you provide for the review team will be used to assemble a baseline inventory for all your process inputs and outputs in the form of a “current state” value stream map. The map will effectively inventory your raw materials, energy, and water use; help you visualize and better understand how much of these inputs are actually needed to produce your product by finding the root cause of all wastes; and assist you in prioritizing opportunities for improvement established in a “future state” value stream map.

No one will see your facility-specific data, except the Green Suppliers Network review team. It will remain confidential.

WHAT DO I GET IN RETURN?

Following your technical review, you will receive a written report from the Green Suppliers Network review team that will include a set of recommendations that, when implemented, can result in increased efficiencies, environmental improvements, and cost savings. All of the cost savings identified in the report remain with you—the supplier—and the results are confidential.

“A \$4,500 investment in the Green Suppliers Network review has yielded \$1,000 per month due to waste minimization, and an operating profit increase of \$25,000 a month, representing a 45% productivity improvement, for a total of \$26,000 per month in improved operating income.”

—John Whalen, Facility General Manager, **Sermatech**



Some examples of recommendations that your review team could make are:

- Altering the layout of your facility floor to reduce part travel distance to reduce the risk of parts damage.
- Adopting cascade rinsing for your parts washing operations to reduce water use.
- Re-engineering the openings of curing ovens to restrict airflow and reduce energy consumption.
- Controlling the environment of your workplace to reduce the risk of product flaws.
- Identifying environmentally preferable alternatives to solvents to reduce hazards in the workplace.
- Redesigning part templates to reduce scrap and wastes.
- Cross-training personnel on best management practices and standard work practices to achieve greater efficiency.

These recommendations are just a sample of the many cost saving opportunities your review team could identify.

WHAT HAPPENS AFTER THE REVIEW?

After the review, you may choose to work with the Green Suppliers Network review team under an independent arrangement to implement opportunities and measure results.

One year after review you will be asked to fill out a survey to document your achievements. The Green Suppliers Network calculator is designed to help you answer these survey questions.

WHAT SETS THE GREEN SUPPLIERS NETWORK APART?

What sets the Green Suppliers Network apart from other similar programs is that the Network technical reviews are customized to your unique needs and challenges. Your employees will be trained to apply the *Lean and Clean Advantage* to other process areas, which will facilitate continuous improvement across all of your manufacturing operations. And the benefits don't end with the onsite review. Partners have experienced a minimum of a 3:1 return on the investment of the review, with some seeing returns of up to 30:1. To date, the program has allowed suppliers to identify millions of dollars in achievable annual savings. Your small investment will yield significant savings—not only in terms of dollars—but in the health of your community and workers.