MSSC Green Production

Green Production Syllabus Outline

Unit 1 Train workers in Environmental Issues

* Describe “green” manufacturing. This includes the importance of worker training in new green trends and the impact of production workers
* Identify the benefits of environmental assurance programs for workers, companies and society
* Discuss why worker training in environmental issues must be current and up to date
* Discuss why environmental training for workers should be documented. Requires documentation to make sure that the company addresses all important environmental issues
* Describe why environmental training should include information on the latest technology advancements in manufacturing
* Discuss why green manufacturing is a good business practice
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Unit 2 Implement & Promote Environmental Programs, Projects, Policies or Procedures

* Document required regulatory compliance information
* Review and understand environmental policies and procedures that are communicated and posted
* Identify and report poor environmental practices
* Report environmental violations
* Speak up if your company’s environmental assurance materials are not clear and easily understandable
* Access environmental assurance materials in your plant

Unit 3 Conduct Environmental Incident and Hazard Investigations

* Conduct s basic investigation. This includes identifying near misses, and understand the critical role of “ root cause” analysis
* Help to document findings that are timely and correct. This includes using all the senses of sight, sound and smell to collect important information
* Help ensure corrective actions are included in findings. Corrective actions are an important part of documentation
* Provide input to auditors. This will help to ensure that corrective actions are being taken

Unit 4 Conduct Preventive Environmental Inspections

* Identify, report, and document conditions that present s threat to the environment
* Identify, report, and document possible environmental hazards in the work area
* Take corrective actions to eliminate potential hazards
* Provide required documentation and follow policies for compliance and non-compliance
* Provide input into preventive investigations

MSSC Definition of “Green Production”

The MSSC has developed a definition of “Green Production,” which is the result of research into multiple authoritative sources and consultation with industry experts. That definition follows below:

**Short Definition:** Green production is defined as workplace activities across all industries within the manufacturing sector that require the use of equipment, technologies, and processes that will improve the environmental performance of manufacturing companies.

**Extended Definition:** Green production is defined as manufacturing workplace activities across all industries of manufacturing that require the use of tools, equipment and technologies as well as methods, procedures and practices that directly or indirectly have a positive environmental or natural resources conservation impact. These include:

* Conservation (e.g., energy, water, energy-efficient materials use of recycled materials in products)
* Emissions purification ( e.g., waste, air, water, gas, chemicals)
* Renew-ability, recycle-ability, and final disposal of products to maximize lifecycle efficiency of the resources, raw materials, products , and processes involved in manufacturing
* Regulatory compliance, environmental assurance programs, and training

**Note:** this definition of “Green Production” is NOT limited to “green” manufacturing facilities/jobs exclusively associated with the production of “green” goods (e.g., wind turbine blades, solar panels, nuclear plants-related products). It includes all 20 North American Industrial Classification System ( NAICS ) codes for manufacturing (e.,g,.food, metal, transportation equipment, machinery, furniture.)

**Sources:** Bureau of Labor Statistics; the joint UNEP-ILO-ITUC Green jobs initiative; California :Green Industries and Jobs in California” Special State government Report; US Legal Definition: IBM Supply Chain Environmental Strategy; Manufacturing Extension Partnership (MEP) Next Generation Manufacturing Survey; President’s Council of Advisors on Science and Technology (PCAST)