



Safety/Sustainability Training for Small Businesses

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IMEC GRANT

- Preventing accidents or injuries and introducing renewable resource practices are important to business.
- A program, funded by the Illinois Manufacturing Excellence Center (IMEC) has been developed to provide the targeted group of very small manufacturers (NAICS code 31-33) located in the Northern Illinois region.



Scope of Services

- Packages of services are being offered to the target group of manufacturers:
 - Environmental Sustainability Assessment
 - Hazard Communication Assessment
 - Job Safety Analysis/Personal Protective Equipment
 - Industrial and Office Job Station Ergonomics



Aims

1. Assist the very small manufacturer
This project will provide consulting services on specific ESH issues without cost to the business.
2. Provide real world experience to EHS Students
This project will provide NIU students with opportunities to apply class room skills to the real world and gain workplace experience.



Methodologies

- Industrial Hygiene Instruments
- Task Evaluations (ergonomics)
- Job Hazard Analysis (JHA)
- Note-Taking
- Photos
- Documentation



IH Instruments



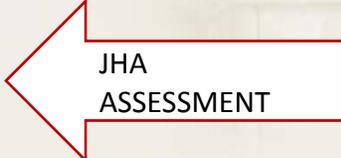
Sample Documentation



**PPE
ASSESSMENT**

Personal Protection Equipment (PPE) Assessment Worksheet NIU-Technology-EHS 2014

Date:		Assessment conducted by:
Name of Workplace:		Initials:
Work Area(s) Addressed:		
	EYE HAZARDS: Activities that can cause injury may include: abrasive blasting, chipping, chiseling, cleaning, cutting, drilling, grinding, welding, sanding, sawing, working with chemicals or acids, UV light, metal working, wood working, etc.	Can hazard be eliminated without the use of PPE? <input type="checkbox"/> Yes <input type="checkbox"/> No
	Work Activity(s):	Description of the Hazard Exposure:
		<input type="checkbox"/> Safety glasses <input type="checkbox"/> Dust-Tight goggles <input type="checkbox"/> Safety goggles <input type="checkbox"/> Welding shield <input type="checkbox"/> Shading <input type="checkbox"/> Face Shield <input type="checkbox"/> Side Shield <input type="checkbox"/> Other:
	HEAD/NECK HAZARDS: Activities that can cause injury may include: building maintenance, confined space operation, cleaning, cooking, construction, electrical wiring, welding, working around floor structures, painting, utility work, etc.	Can hazard be eliminated without the use of PPE? <input type="checkbox"/> Yes <input type="checkbox"/> No
	Work Activity(s):	Description of the Hazard Exposure:
		<input type="checkbox"/> Face Shield <input type="checkbox"/> Protective Helmet <input type="checkbox"/> Welding Shield <input type="checkbox"/> Type A (low voltage) <input type="checkbox"/> Harness <input type="checkbox"/> Type B (high voltage) <input type="checkbox"/> Bump Cap <input type="checkbox"/> Type C <input type="checkbox"/> Other:



**JHA
ASSESSMENT**

Job Hazard Analysis (JHA) NIU - Technology - EHS

Date:		JHA Number:	<input type="checkbox"/> New JHA <input type="checkbox"/> Revised JHA
Location:		JHA Prepared by:	Tools/Equipment Involved:
Department:		Job Title:	
Dept. Supervisor:		Employees Consulted:	

Note: A. Identify and determine all steps involved in the job.
 B. Identify safety hazards and/or injury sources related to each task.
 C. Determine the best way to remedy the hazards identified.

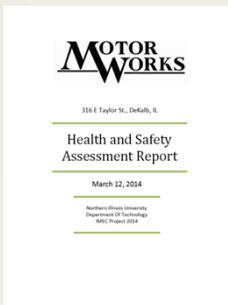
A. Activity Sequence of Job Steps	B. Potential Hazard Injury Sources	C. Procedure or Corrective Action

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Pilot Program

Motorworks

- A local motor shop in DeKalb, IL allowed the department to conduct IH monitoring, ergonomic assessments, and a general safety walkthrough.



3161 Taylor St., DeKalb, IL
Health and Safety Assessment Report
 March 12, 2014
 Northern Illinois University
 Department of Technology
 4802 Poplar 2014

Pilot Program Challenges

- A practice visit; was not in NAICS classification system specified in the grant.
- Offered several deliverables rather than one specific work package.



Challenges

Outreach

- Over the course of the semester the response from companies has been lower than expected.
- The facilities that have been interested in the grant program do not qualify according to the North American Industrial Classification System (NAICS) Codes 31-33
- There is much time spent in the assessment of companies' eligibility, scheduling, and commitment of dates.



Challenges

Outreach Cont'd

- Smaller manufacturers may not have their own websites like larger manufacturers.
- “Title 13 U.S Code Section 9 (a) prohibits the U.S. Census Bureau from releasing information on a specific business including NAICS and SIC codes”
 - Therefore, information not readily available through a web search.



Challenges

Industrial Hygiene Instrumentation

- Many industrial hygiene instruments had challenges with compatibility to their own software.
- Several hours have been dedicated to correcting the issues contacting manufacturers directly and spending hours on phone calls with customer support.



Challenges

Paperwork

- Analyzing existing documentation sheets and customizing safety sheets for individual locations.
- Process takes much time formatting, reviewing, and finalizing.
- The safety sheets may not always be appropriate in a situation.



Lessons Learned

- Cast a wider net
 - Approach the U.S. Small Business Administration (www.sba.gov).
 - Reach out to different organizations
- For future grant service opportunities, integrate project management techniques focusing on project life cycle in the defining, planning and executing stages as well as work breakdown structures for packages and deliverables of those packages.
- Recruit more student support for participation.
- Troubleshoot instrumentation in the development stages of the project.



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THANK YOU!

