OKLAHOMA CITY COMMUNITY COLLEGE

JOB SAFETY ANALYSIS PROGRAM

EFFECTIVE DATE: April 7, 2008
REVIWED: October 30, 2009

1.0 Purpose. The purpose of a Job Safety Analysis ("JSA") is to identify potential hazards in the workplace and establish proper work procedures to reduce injury to employees. JSA is a process of breaking down a specific job into its component steps and listing them in order. From this point, it can be determined whether the job could be done without any hazards, as well as the steps to take to eliminate the hazards. The JSA process requires a written plan for conducting the JSA and ongoing documentation of the overall process.

2.0 Scope. This Program shall cover all Oklahoma City Community College ("OCCC") employees during work activities.

3.0 Identification of hazards. A JSA is used to review job methods and uncover hazards that:

- **3.1** May have been overlooked in the layout and design of a building, design of machinery, equipment, tools, workstations, and processes;
- **3.2** Result of changes in work procedures or personnel;
- **3.3** May have developed after production has started.

4.0 Benefits of JSA. The benefits of performing a JSA include but are not limited to:

- **4.1** Reduce absenteeism;
- **4.2** Encourage employee participation in workplace safety;
- **4.3** Increase productivity;
- **4.4** Giving pre-job instruction of irregular jobs;
- **4.5** Identifying safeguards;
- **4.6** Positive attitudes about safety.

5.0 Implementation of JSA. The JSA is an ongoing process and a perpetual working tool. A JSA may be used:

- **5.1** To identify specific job-related skill deficiencies for which additional training may be needed;
- **5.2** To demonstrate or determine specific training an employee has received;
- **5.3** As a basis for a job inspection or job monitoring;
- **5.4** As an informational tool for accident investigations;
- **5.5** As part of a continuing education program on employee safety and health awareness;
- **5.6** To determine the degree of risk of exposure to bloodborne pathogens;
- **5.7** As a training tool;
- **5.8** In providing documentation of training in the event of an accident;
- **5.9** To help employees learn more about their job functions;
- **5.10** To give the supervisor additional information about the skill level and experience of the employee.

6.0 Jobs Appropriate for a JSA. A JSA can be conducted on any job in the workplace; however priority should go to the following types of jobs:

- **6.1** Jobs with the highest injury or illness rate;
- **6.2** Jobs with the potential to cause severe or disabling injuries or illness, even if there is no history of previous accidents;
- **6.3** Jobs in which one simple human error could lead to a severe accident or injury;
- **6.4** Jobs that are new to the workplace or have undergone changes in processes and procedures; and
- **6.5** Jobs complex enough to require written instructions.

7.0 Development of JSA. The five basic steps in the development of a JSA include:

7.1 Each job duty must be broken down into a sequence of steps. Each step describes, in order, the activities required to successfully complete the job duty;

7.2 Existing and potential hazards associated with each step are identified and described;

7.3 Reducing or eliminating actions or procedures are determined for each hazard. These actions or procedures serve as the basis for reducing or eliminating accidental injuries. The person(s) preparing the analysis should look carefully for ALL hazards and not just the obvious ones. The entire work environment should be studied;

7.4 Commit all information and solutions to writing as it is identified; and

7.5 The final form JSA should be a collaborative effort between the supervisor and the employee.

8.0 JSA Form. The JSA form is the working document for the entire process. It is important that the utmost care be given to complete the form in its entirety. OCCC JSA form is attached to this written program as Appendix A.

9.0 Correcting a Hazard. Eight questions for correcting a hazard include:

9.1 Has a true hazard been identified?

9.2 Has it been corrected?

9.3 Which methods would best identify similar hazards?

9.4 Is there a responsible person?

9.5 Does that person have the authority to correct the hazard?

9.6 Does that person possess the skills, knowledge and ability to correct the hazard?

9.7 Does the person have adequate resources?

9.8 Is that person motivated to correct the hazard?

10.0 Guidelines for Hazard Identification.

10.1 Encourage open communication by all employees with surveyors;

10.2 Cover every part of the worksite with inspections at regular intervals;

10.3 Train in-house inspectors to recognize hazards;

10.4 Track identified hazards to their correction;

10.5 Involve safety and health professionals in plans;

10.6 Research the hazards associated with new materials and equipment before introducing them into work processes;

10.7 Replace hazardous materials with less hazardous ones, if possible;

10.8 Perform routine hazard analysis to identify any "hidden" hazards;

10.9 Repeat the process hazard analysis at regular intervals to ensure that current processes are analyzed.

11.0 Development of Solutions. Develop a recommended safe job procedure to prevent occurrence of potential accidents. Several solutions that should be considered include:

11.1 Find a new way to do the job. If a new way to do the job does not exist or cannot be found than try to change the physical conditions of the job to eliminate the hazards;

11.2 Change the physical conditions that create the hazards;

11.3 Change the work procedure. When changing the work procedure is the best solution, find out what the employee can do during the job to eliminate hazards or prevent potential accidents. The employee should be able to suggest ways to improve the safety on their worksite;

11.4 Reduce the frequency of job or task. Reducing frequency of a job contributes to safety only in that it limits the exposure. Every effort should still be made to eliminate hazards and to prevent potential accidents by changing physical conditions or revising job procedures or both;

11.5 Recommended safe operating procedures should be listed on the Job Safety Analysis Form as well as the required or recommended personal protective equipment for each step of the job.

12.0 Employee Reporting of Hazards. Every employee is expected to watch for and report hazards and potential hazards to their supervisor and/or the Office of Risk Management/Environmental Health and Safety. Potentially hazardous conditions or practices may be reported by using the Hazard Observation and Safety Suggestion Report attached to this written program as Appendix B. Reports of hazards may be done confidentially to the Office of Risk Management/Environmental Health and Safety. The reporting of a hazard will not lead to any official or unofficial harassment or reprisal of the employee that reported the hazard.

13.0 Hazard Control Measures. The order of precedence and effectiveness of hazard control is the following:

13.1 Engineering Controls. Engineering controls include the following:

13.1.1 Elimination/minimization of the hazard;

13.1.2 Enclosure of the hazard using enclosed cabs, enclosures for noisy equipment, or other means;

13.1.3 Isolation of the hazard with interlocks, machine guards, blast shields, welding curtains, or other means; and

13.1.4 Removal or redirection of the hazard such as with local and exhaust ventilation.

13.2 Administrative controls. Administrative controls include the following:

13.2.1 Written operating procedures, work permits, and safe work practices;

13.2.2 Exposure time limitations;

13.2.3 Monitoring the use of highly hazardous materials;

13.2.4 Alarms, signs, and warnings;

13.2.5 Buddy system; and

13.2.6 Training.

13.3 Personal Protective Equipment. Personal protective equipment such as respirators, hearing protection, protective clothing, safety glasses and hard hats, is acceptable as a control method in the following circumstances:

13.3.1 When engineering controls are not feasible or do not totally eliminate the hazard;

13.3.2 While engineering controls are being developed;

13.3.3 When safe work practices do not provide sufficient additional protection; and

13.3.4 During emergencies when engineering controls may not be feasible.

14.0 Common Hazards and Descriptions. Common hazards and their descriptions are located on Appendix C attached to this written program.

Effective Date: April 7, 2008

Appendix A
OCCC JOB HAZARD ANALYSIS FORM

Job Title:	Job Location:	Analyst:	Date:
Task:	Task Description:		
Hazard Type:	Hazard Description:		
Consequence:	Hazard Controls:		
Rational or Comment:			

Appendix B
Hazard Observation and Safety Suggestion Report

Name:_____ Job Title: _____ Department: _____ Check Box if wish to remain confidential ☐	 Supervisor: _____
Nature of Hazard or Potential Exposure:	
Safety Suggestions:	
Is additional health of safety training needed? ☐ Yes ☐ No	
Date report prepared:	Date give to supervisor or Risk Management/Environmental Health and Safety Office:
To be completed by supervisor or Coordinator of Risk Management/Environmental Health and Safety. Action taken or measure to prevent occurrence of accident:	
Date completed:	Signature:

Appendix C
Common Hazards and Descriptions

Hazards	Hazard Descriptions
Chemical (Toxic)	A chemical that exposes a person by absorption through the skin, inhalation, or through the blood stream that causes illness, disease, or death. The amount of chemical exposure is critical in determining hazardous effects. Check Material Safety Data Sheets (MSDS), and/or OSHA 1910.1000 for chemical hazard information.
Chemical (Flammable)	A chemical that, when exposed to a heat ignition source, results in combustion. Typically, the lower a chemical's flash point and boiling point, the more flammable the chemical. Check MSDS for flammability information.
Chemical (Corrosive)	A chemical that, when it comes into contact with skin, metal, or other materials, damages the materials. Acids and bases are examples of corrosives.
Explosion (Chemical Reaction)	Self explanatory.
Explosion (Over Pressurization)	Sudden and violent release of a large amount of gas/energy due to a significant pressure difference such as rupture in a boiler or compressed gas cylinder.
Electrical (Shock/Short Circuit)	Contact with exposed conductors or a device that is incorrectly or inadvertently grounded, such as when a metal ladder comes into contact with power lines. 60Hz alternating current (common house current) is very dangerous because it can stop the heart.
Electrical (Fire)	Use of electrical power that results in electrical overheating or arcing to the point of combustion or ignition of flammables, or electrical component damage.
Electrical (Static/ESD)	The moving or rubbing of wool, nylon, other synthetic fibers, and even flowing liquids can generate static electricity. This creates an excess or deficiency of electrons on the surface of material that discharges (spark) to the ground resulting in the ignition of flammables or damage to electronics or the body's nervous system.
Electrical (Loss of Power)	Safety-critical equipment failure as a result of loss of power.

Ergonomics (Strain)	Damage of tissue due to overexertion (strains and sprains) or repetitive motion.
Ergonomics (Human Error)	A system design, procedure, or equipment that is error-provocative. (A switch goes up to turn something off).
Excavation (Collapse)	Soil collapse in a trench or excavation as a result of improper or inadequate shoring. Soil type is critical in determining the hazard likelihood.
Fall (Slip, Trip)	Conditions that result in falls (impacts) from height or traditional walking surfaces (such as slippery floors, poor housekeeping, uneven walking surfaces, exposed ledges, etc.)
Fire/Heat	Temperatures that can cause burns to the skin or damage to other organs. Fires require a heat source, fuel, and oxygen.
Mechanical/Vibration (Chaffing/Fatigue)	Vibration that can cause damage to nerve endings, or material fatigue that results in a safety-critical failure. (Examples are abraded slings and ropes, weakened hoses and belts.)
Mechanical Failure	Self explanatory; typically occurs when devices exceed designed capacity or are inadequately maintained.
Mechanical	Skin, muscle, or body part exposed to crushing, caught-between, cutting, tearing, shearing items or equipment.
Noise	Noise levels (>85 dBA 8 hr TWA) that result in hearing damage or inability to communicate safety-critical information.
Radiation (Ionizing)	Alpha, Beta, Gamma, neutral particles, and X-rays that cause injury (tissue damage) by ionization of cellular components.
Radiation (Non-Ionizing)	Ultraviolet, visible light, infrared, and microwaves that cause injury to tissue by thermal or photochemical means.
Struck By (Mass Acceleration)	Accelerated mass that strikes the body causing injury or death. (Examples are falling objects and projectiles.)
Struck Against	Injury to a body part as a result of coming into contact of a surface in which action was initiated by the person. (An example is when a screwdriver slips.)
Temperature Extreme (Heat/Cold)	Temperatures that result in heat stress, exhaustion, or metabolic slow down such as hypothermia.
Visibility	Lack of lighting or obstructed vision that

	results in an error or other hazard.
Weather Phenomena (Snow/Rain/Wind/Ice)	Self explanatory.