

APPENDIX F
Risk Management Program

1. Purpose. To establish policies and procedures for implementing Army's Risk Management Program within the Buffalo District. The objective of the program is to lower an activity's, or positions overall risk to the individual and the mission.
2. Scope. These policies and procedures apply to all jobs and activities carried out by Buffalo District personnel.
3. Background. Army has established and implemented a 5-step program to manage risks to personnel and assets. The five steps are as follows:
 - a. Hazard Identification. Jobs and activities are examined with all hazards to personnel and equipment identified.
 - b. Hazard Assessment. Each hazard is assessed and graded either qualitatively or quantitatively for the level of risk it poses.
 - c. Decision-Making. Managers and leaders evaluate the risks and determine means of mitigating the risks to their lowest practical level.
 - d. Control Mitigation. Mitigation plans are put into practice in the field.
 - e. Supervision. Leaders monitor field activities to determine the effectiveness of, and compliance with the hazard mitigation and control plan. Information is fed back to the hazard identification and decision-making steps to enhance the effectiveness of the risk management program.
4. Implementation. The Buffalo District shall implement this program in a two-step process.

- a. During periodic review, existing activity hazard analyses shall be modified to conform to this program.
- b. All new activity hazard analyses drafted subsequent to 1 July 1999 shall conform to this program. (Attachment 1)
- c. Job/Position hazard analyses will be prepared for all positions in the District. These will outline hazards unique to particular job series or an individual. (Attachment 4)
- d. Hazard Identification. A team consisting of the front-line supervisor along with actual workers should carry out the hazard identification process. The team should use the Hazard Identification Worksheet (Attachment 2) or its equivalent when conducting this process. When identifying hazards, the team should assume that no controls are in place.

5. Hazard Assessment. Each of the identified hazards shall be assigned a Risk Assessment Code (RAC) as per AR 385-10. A summary of the RAC process is provided in Attachment 2. The code shall be entered in the correct column on Attachment 1.

6. Decision-Making. Leaders shall review the results of the hazard assessment process and develop a Risk Management Plan. The Risk Management Plan shall be detailed as per the form at Attachment 3. In developing the plan, factors considered by leaders should include, but not be limited to:

- a. Does the task carry too much risk to be done by Corps personnel?
- b. Is it possible to implement controls to lower the risk to an acceptable level?

c. Would it be more effective to lessen the probability of an accident, or to lower the cost of the accident?

d. What types of controls are needed to adequately mitigate the risk.

e. How shall the controls be implemented?

f. How will the risk mitigation effort be monitored, measured, and adjusted?

7. Implementation of Controls. Hazard controls shall be implemented at the field level by local supervisors with the assistance of the Safety Office.

8. Supervision. Local supervisors shall monitor the implementation and execution of the hazard control plan. Supervisors shall take note of the level of compliance with the plan along with unanticipated difficulties in executing the controls. Any new hazards arising out of plan execution should be noted as well. All such information should be fed back to the Safety Office in a timely manner so that any needed adjustments to the plan may be made.

ATTACHMENT 1

ACTIVITY HAZARD ANALYSIS

ACTIVITY _____

ANALYZED BY _____

SO REVIEW _____

REVIEWED BY _____

PRINCIPAL STEPS	POTENTIAL HAZARDS	RAC CODE	RECOMMENDED CONTROLS
EQUIPMENT TO BE USED	INSPECTION REQUIREMENTS	TRAINING REQUIREMENTS	

GUIDE FOR PREPARATION OF AN ACTIVITY HAZARD ANALYSIS (AHA)

Overview.

a. An Activity Hazard Analysis is a procedure used to review job methods and identify hazards. These hazards may have been overlooked from the start or they may have developed after production work has started. Once the hazards are known, the best solution or control can then be developed.

b. The person best suited to develop the analysis is the foreman or line supervisor. The reasons being that the foreman has more than likely put in 5-10 years of doing the work that he is now supervising. He has made the mistakes, seen the hazards, and probably has the best suggestions on how to make the job safer and most beneficial. In addition, he is best qualified to break the job down into successive steps.

c. Once the analysis' rough draft is completed, it is suggested that it be reviewed by a safety person. The safety person should review the analysis on a technical level, check to see that no hazards were overlooked, and examine the control measures to see that the most effective measures are being used.

a. Step 1 - Selecting an activity to analyze.

(1) An activity is a sequence of separate steps that together accomplish a work goal. Some activities can be too broadly defined in general terms of what is accomplished. Making paper, building a new dorm, mining ore, are examples. Such broadly defined activities are not suitable for an activity hazard analysis. Similarly, an activity can be too narrowly defined in terms of a single action. Pulling a switch, tightening a screw, pushing a button are examples. Such narrowly defined activities are also not suitable for an AHA.

(2) Activities suitable for a hazard analysis are those assigned generally to a line supervisor and related to a particular phase of work. Erecting block walls, placing a roof and painting are good subjects for an activity hazard analysis.

b. Step 2 - Break Activity Down Into Successive Steps

(1) Now the activity is broken down into its principal steps. Usually you, the line supervisor or foreman, will rely on past experience with the type of work being analyzed. You know your work goal (end point), the beginning point, and what you

have to do to accomplish the work goal (steps). You should be able to visualize a logical procession step by step.

(2) Record the steps in their natural order of occurrence. Describe what is done, but not the details of how it is done. Usually three or four words are sufficient. Number the steps consecutively.

c. Step 3 - Identify Hazards and Potential Accidents

(1) Once the principal steps have been identified and logged on the form, identify the potential hazards encountered in each of the principal steps listed. Once again past experience will be relied upon heavily. Also, talking with workers about past accidents or near misses will be of help to you. At this point, evaluate hazards presented by other activities working adjacent to the activity being analyzed.

(2) The following is a list of questions that will also help you identify most of the hazards:

(a) Is there danger of striking against, being struck by or otherwise making injurious contact with the object?

(b) Can the employee be caught on, in, or between the object?

(c) Can the employee slip or trip? Can the employee fall on the same level or to another level?

(d) Can the employee strain themselves by pushing, pulling or lifting?

(e) Is there a possibility of electrical, health, or fire hazards associated with that principal step?

(3) It is estimated that with these questions you should be able to uncover 90% of the potential hazards. What about the other 10%? The other 10% is what makes the activity hazard analysis so unique. This is why the so called "generic analysis" is so incomplete. Factors which are unique to an activity (elevation, terrain, weather, etc.) may add to or change the potential hazards. All this must be taken into consideration when doing the analysis.

d. Step 4 - Develop a Control for Each Hazard Identified.

(1) This is where you come up with the methods of controlling the hazards identified in Step 3 of this procedure. There may be several solutions to controlling the hazard; we want the best solution (that which is most beneficial). Ask yourself "What are the benefits to this solution?" Sometimes the solution will solve that particular problem but create a new hazard for

that step or another step. Once again it is useful to ask workers for suggestions.

(2) The following are suggestions to help you come up with ideas for the best solution to your particular hazard:

(a) Change the physical conditions that create the hazard. "What change in physical condition will eliminate the hazard or prevent the accident?" A good example of this would be changing the surface in a work area to a non-slip type surface. Supplying ear muffs to a worker who must travel through an area in which noise levels exceed the standard would be another.

(b) Change the procedures of the Step. "What should the employee do or not do to eliminate the hazard or prevent this potential accident?" For example, "Is there another way for the employee to reach the work station other than going through the noisy area?" If there is, will it be more or less hazardous for the employee? You should consider work saving tools or equipment. For example, say an employee must lift and carry a heavy object to a workbench. All you need do is supply the worker with a workbench that has casters. Also, if two workers were to lift the object you would reduce the risk of back injury.

(c) Reduce the frequency that a task must be performed. Every task has some potential for an accident to occur. Therefore when you increase the times that the task is performed you increase the probability of an accident occurring.

(d) Training. If none of the previous suggestions are applicable, then the answer may be training the employees to do a task safely. Quite often we hear of accidents caused by lack of knowledge of proper safe procedures. This could mean a simple instruction from a foreman or line supervisor or could involve specialized training from an outside source. The latter is recommended for irregular work which may be unique.

(3) We have found that special attention should be given to newer employees (1 to 1 1/2 years). These employees have proven to be among the most likely to have an accident. This is why it is good practice for employers to give new employees good initial safety training.

(4) Once you have decided on a control for the hazard you must put it into a positive statement; i.e. Dust respirators will be supplied to the workmen. Electricity will be locked out by a mechanical device. In other words you will be committing yourself to perform the action you chose to control the hazard.

Update as Needed. It should be noted that the completed analysis is not set in stone. We all know that field changes take place every day. With these changes a new hazard may arise.

Also, a delay in a different activity could have you working next to that operation. This could add numerous hazards to your job. For an Activity Hazard Analysis to be most effective it must be updated as the activity progresses.

Attachment 3

Risk Assessment Code Summary

Risk Assessment Code Matrix

Hazard Severity	Accident Probability				
	A	B	C	D	E
I	1	2	3	4	5
II	2	3	4	5	6
III	3	4	5	6	7
IV	4	5	6	7	8

Hazard Severity	Accident Probability
Category: I Description: Catastrophic Definition: Death or permanent total disability, system loss, major property damage	Description: Frequent Level: A Individual Item: Likely to occur frequently in life of system, item, facility, etc.
Category: II Description: Critical Definition: Permanent partial disability or temporary total disability in excess of 3 months, major system damage, significant property damage	Description: Probable Level: B Individual Item: Will occur several times in the life of item Fleet or Inventory: Will occur several times
Category: III Description: Marginal Definition: Minor injury, lost workday accident, or injury or illness leading to compensation; minor system damage, minor property damage	Description: Occasional Level: C Individual Item: Likely to occur sometime in the life of the item Fleet or Inventory: Will occur several times
Category: IV Description: Negligible Definition: First aid or minor supportive medical treatment, minor system impairment	Description: Remote Level: D Individual Item: Unlikely but possible to occur in life of an item Fleet or Inventory: Unlikely, but can reasonably be expected to occur
	Description: Improbable Level: E Individual Item: So unlikely it can be assumed occurrence may not be experienced Fleet or Inventory: Unlikely, but can reasonably be expected to occur

POSITION HAZARD

Prepared by:
(Supervisor) _____

NAME: _____

ANALYSIS

Analyzed by:
(SOHO) _____

SSN: _____

ORG. CODE AND NAME: _____

JOB TITLE: _____

Date: _____

JOB NUMBER _____

LOCATION: _____

Clearances Required		
EM OPS Team <input type="checkbox"/>	First Aid/CPR <input type="checkbox"/>	Respirator <input type="checkbox"/>
CDL <input type="checkbox"/>	Crane Operator <input type="checkbox"/>	Diver <input type="checkbox"/>
HTRW <input type="checkbox"/>	Lifting <input type="checkbox"/>	
POSITION TASKS	POTENTIAL SAFETY AND HEALTH HAZARDS	RECOMMENDED CONTROLS
Identify the position (job) tasks that are performed 1. 2. 3. 4. 5.	SAFETY* CHEMICAL, BIOLOGICAL, PHYSICAL AGENT*	Develop specific controls for each hazard 1. 2. 3. 4. 5.
	Analyze each position task for potential hazards 1. 2. 3. 4. 5.	
EQUIPMENT TO BE USED	INSPECTION REQUIREMENTS	TRAINING REQUIREMENTS
List equipment to be used for each task 1. 2. 3. 4. 5.	List inspection requirements for the work activity 1. 2. 3. 4. 5.	List training requirements, including hazard communication 1. 2. 3. 4. 5.

GUIDE FOR PREPARATION OF A POSITION HAZARD ANALYSIS FOR
GOVERNMENT EMPLOYEES

Overview.

a. The purpose of the Position Hazard Analysis (PHA) is to systematically identify hazards and potential accidents associated with each job that may cause injury or occupational illness and specify controls to minimize their effect or guard against them in each job task.

b. The person best suited for developing PHA is the first line supervisor, foreman or team leader. He/she is aware of the requirements of the job, and the hazards associated with that position.

c. A PHA shall be written for each employee. An example form for your reference is attached. A review of potential office hazards and the controls used to eliminate them, should be discussed with the employee at orientation and during performance evaluation. The activities, equipment, materials, hazards and controls should be specific to the individual employee, so that when the position hazard analysis is reviewed with employees they may be aware of the potential hazards of their specific position and the controls to protect themselves. To provide sufficient detail, standard operating procedures (SOP's) may need to be written for specific routine tasks.

d. Step 1 - Select a position (ex. Survey Tech)

1) Fill in the name, SSN, job title and number, org code and location.

2) Identify routine tasks that are done by that individual.

e. Step 2 - Identify the potential safety and health hazards that are associated with task. (I.e. Backstrain from lifting gas cans)

f. Step 3 - Develop a control for the identified hazard, whether it be an engineering control, SOP, use of proper PPE (i.e. Two individuals will always lift gas cans)

g. Step 4 - Identify equipment to be used in the task (I.e. motorboat)

h. Step 5 - Identify the inspection requirements for the equipment to be used. (I.e. annually, daily, etc).

i. Step 6 - Identify the training that is necessary for the individual to safely carry out the task (i.e. motorboat operator).

The PHA will assist supervisors in providing a safe workplace for employees as required through systematic identification and control of hazards. It may be used as a guide for selecting individual training requirements and as a tool for use in safely conducting jobs which occur infrequently. Supervisors may want to use it as an aid in determining whether employees are following safety requirements.