

Impacts and Hazards Projects Alignment Process

Criteria for Establishing Objectives & Targets	Legal & Other Requirements	Technological Options	Financial	Business & Operational	Views of Interested Parties	Management Discretion	Total
Legal & Other Requirements	3	3	3	3	3	2	14
Technological Options	3	3	1	1	2	1	8
Financial	3	3	3	1	1	1	9
Business & Operational	3	3	3	3	1	1	11
Views of Interested Parties	3	3	3	3	3	1	13
Management Discretion	3	3	3	3	3	3	15

Instructions:

1. Add in the Criteria Descriptions on the left side (cells A2:A7).
2. Starting at the top row, compare the first criteria with each of the others in turn. If the value in the left column is more significant than the criteria it is being compared to, change the score in the box to "3". Otherwise, leave it as "1" and continue to the next comparison.
3. Once you have completed the first row, continue with the second row. Note that the corresponding score in the bottom (green) section is automatically changed when you change the top section (red) score.
4. If your team cannot reach consensus, score the comparison as "2". You will need to manually change the corresponding bottom section score.

Risk Assessment and Projects Alignment Tool

Activity	Location	Impacts & Hazards	EH&S Impact	Category	<u>Operational Conditions</u>	<u>Population at Risk</u>	<u>Frequency</u>	<u>Probability</u>	<u>Severity</u>	<u>Control Effectiveness</u>	<u>TOTAL SCORE for Significant</u>	<u>Legal & Other Requirements</u>	<u>Technological Options</u>	<u>Financial</u>	<u>Business & Operational</u>	<u>Views of Interested Parties</u>	<u>Management Discretion</u>	<u>OVERALL SCORE Establishing Objectives & Targets</u>	Risk Category
												14	8	9	11	13	15	← Business Value	

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Review Team:

Revision Log			
REVISION DATE	REVISION NO.	REVISION AUTHORITY	NATURE OF REVISION
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Risk Category: B = Business Continuity E = Environment H = Health S = Safety

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Kansas State University
College of Agriculture

RISK ASSESSMENT DEFINITIONS

ACTIVITIES - RISKS - IMPACTS

Activity		Activity within the exposure area associated with the operation of the Institution that includes the site, people and procedures. The activities can be categorized into defined tasks, geographical areas and stages in the delivery of services and planned or reactive work activities.
Location (Area of Impact)	Site Local Regional Global	Within the fence line Five miles from center of facility State Global
Environmental Aspect		Element or issue of KSU's activities, products or services that can interact with the environment.
Health & Safety Hazard		Source or situation with a potential for harm in terms of injury or illness
HSEQ Impact	Abbreviations	Any change to the environment, whether adverse or beneficial, wholly or partially resulting from KSU's activities products or services: W Water A Air N Noise HW Hazardous Waste L Land (Non hazardous waste landfill) NR Natural Resources (Depletion of natural resources, i.e. electricity, natural gas, etc.) BI Business Interruption SW Solid Waste BW Biological Waste EU Energy Usage
Category		Environmental Health and Safety Impact Category

RISK ASSESSMENT

Operating Conditions	Score	Consider the following in determining operating conditions:
	1	Normal -The process operates as per design (Includes normal maintenance activities)
	2	Abnormal - Upsets in operation to include failures in design or use.
	3	Emergency - The process is interrupted due to emergencies such as fires, explosions, weather, etc.

RISK ASSESSMENT DEFINITIONS

Population at Risk	Score	Individual(s) at risk, e.g., visitors, staff or near neighbors:
	1	One to nine individuals
	2	10 to 99 individuals
	3	>100 individuals
Frequency	Score	The number of occurrences of the health & safety hazard or the environmental incident:
	1	Little likelihood of occurrence
	2	Infrequently occurs during the day, week or month
	3	Routinely occurs everyday
Probability	Score	The likelihood of the health & safety hazard or environmental incident occurring:
	1	Remote chance of occurrence
	2	Likely event could eventually occur
	3	Expect event to occur
Severity Account for difference in healthy worker effect	Score	The magnitude of the health & safety hazard or environmental impact:
	1	Negligible EH&S or Financial Impact resulting in No Recovery Time
	2	Undesirable EH&S or Financial Impact resulting in Days of Recovery and/or undesirable Media Coverage
	3	Severe or Fatality Injuries, or Financial Impact resulting in Weeks or Months of Recovery, or an Environmental Impact that depletes Non-Renewable Natural Resources and has a High Cost of Total Ownership.
Control Effectiveness	Score	Measure of a system used to prevent a health and safety hazard or reduce an environmental risk:
	1	Full Control - All Steady State, Upset and Emergency Operating Practices and Conditions in Place, e.g., BMPs
	2	Controls in Place - Administrative and/or Engineering Controls could be Improved, e.g., SOP
	3	Unacceptable - Redesign Operation or Provide Additional Levels of Protection Needed to Reduce Risk, e.g., PPE
TOTAL SCORE for Significance		Operating Conditions x Frequency x Probability x Severity x Control Effectiveness = For a Score of 250 or greater, proceed to the Projects Alignment Evaluation to complete the assessment.
PROJECTS ALIGNMENT		
Legal & Other Requirements	Score	Regulatory Drivers
	1	Impact has a minimal effect on or relationship to Legal & Other Requirements
	2	Impact has some routine effects on or relationship to Legal & Other Requirements
	3	Impact has direct and significant effect on or relationship to Legal & Other Requirements

RISK ASSESSMENT DEFINITIONS

Technological Options

Score	Technical Feasibility
1	Impact has a minimal effect on or relationship to Technological Options
2	Impact has some routine effects on or relationship to Technological Options
3	Impact has direct and significant effect on or relationship to Technological Options

Financial

Score	Financial Feasibility
1	Impact has a minimal effect on or relationship to Financial
2	Impact has some routine effects on or relationship to Financial
3	Impact has direct and significant effect on or relationship to Financial

Business & Operational

Score	Business & Operational Feasibility
1	Impact has a minimal effect on or relationship to Business & Operational
2	Impact has some routine effects on or relationship to Business & Operational
3	Impact has direct and significant effect on or relationship to Business & Operational

Views of Interested Parties

Score	Stakeholder Involvement
1	Impact has a minimal effect on or relationship to Views of Interested Parties
2	Impact has some routine effects on or relationship to Views of Interested Parties
3	Impact has direct and significant effect on or relationship to Views of Interested Parties

Management Discretion

Score	Management Decision
1	Impact has a minimal effect on or relationship to Management Discretion
2	Impact has some routine effects on or relationship to Management Discretion
3	Impact has direct and significant effect on or relationship to Management Discretion

OVERALL SCORE for Establishing Objectives & Targets

SIGNIFICANCE TOTAL + ((Legal & Other Requirements x Value Prioritization Score) + (Technological Options x Value Prioritization Score) + (Financial x Value Prioritization Score) + (Business & Operational x Value Prioritization Score) + (Views of Interested Parties x Value Prioritization Score) + (Management Discretion x Value Prioritization Score))

Risk Category

Significant Aspects & Hazards Grouped by Risk
B = Business Interruption
E = Environment
H = Health
S = Safety

IMPACTS AND HAZARDS RISK ASSESSMENT FORM

Employee(s):		Asset #:	
Task Description:		Room #:	
Activity Description:		Building:	
OPERATING CONDITIONS			
Score	Operating Condition Parameters	Risk Level	Notes
1	Normal - Orocess operates as designed	3	
2	Abnormal - Upsets in operation, failures in design or use		
3	Emergency - Process interruption due to emergencies		
POPULATION AT RISK: Individual(s) at risk, e.g., visitors, staff or near neighbors			
Score	Population at Risk Parameters	Risk Level	Notes
1	One to nine individuals	3	
2	10 to 99 individuals		
3	>100 individuals		
FREQUENCY: The amount of time being spent being exposed to the health & safety hazard or the number of occurrences			
Score	Frequency Parameters	Risk Level	Notes
1	Little likelihood of exposure	3	
2	Infrequent exposure during the day, week or month		
3	Exposure occurs continuously everyday		
PROBABILITY: The likelihood of the health & safety hazard or environmental incident occurring			
Score	Probability Parameters	Risk Level	Notes
1	Remote change of occurrence	3	
2	Likely event could eventually happen		
3	100% change of occurrence		
SEVERITY: Magnitude of the health & safety hazard or environmental impact			
Score	Severity Parameters	Risk Level	Notes
1	Negligible EH&S or financial impact resulting in no recovery time	3	
2	Undesirable EH&S or financial impact resulting in days of recovery and/or undesirable media coverage		
3	Severve injury, multiple injuries, fatality or financial impact resulting in weeks or months of recovery		
CONTROL EFFECTIVENESS: Measure of a system used to prevent a health & safety hazard or reduce an environmental risk			
Score	Control Effectiveness Parameters	Risk Level	Notes
1	Full Control - All steady Sstate, upset and emergency operating practices and conditions in place, e.g., BMPs	3	
2	Controls in Place - Administrative and/or engineering controls could be improved, e.g., SOP		
3	Unacceptable - Redesign operation or provide additional levels of protection needed to reduce risk, e.g., PPE		
IMPACTS & HAZARDS SCORING		Total Score	Notes
Total Score = OC x PAR x F x P x S x CE		729	
SIGNIFICANCE DETERMINATION RANGES			
Priority A (Score is >300)			
Priority B (Score is in the 100 – 299 Range)			
Priority C (Score is <100)			
Responsibility and Accountability			
Prepared By:		Date:	
Reviewed By:		Date:	
Approved By:		Date:	

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