



## Task Risk Assessment Appendix A

### Risk Assessment Matrix

<b>Step 1: Identify the potential consequence for <u>each</u> impact.</b>				<b>Step 2: Determine likelihood of <u>each</u> consequence based on past occurrence.</b>					
<b>Consequences</b>				<b>Likelihood</b>					
(types of consequences are mutually exclusive)				1	2	3	4	5	
<b>Safety Impact*</b>	<b>Environmental Impact**</b>	<b>Business Impact***</b>	<b>Image Impact</b>	No evidence of occurrence in Industry  (extremely remote)	History of occurrence in fertilizer industry in past ~30 yrs  (remote)	History of occurrence at Mosaic in the past 10 years  (seldom)	History of multiple occurrences at Mosaic past 3 years  (occasional)	Happens several times per year at the location  (expected)	
A	Fatality OR Release of materials that pose a widespread threat to the health and safety of members of the public. (including evacuation or shelter in place)	Release of material that poses a widespread threat to the environment or irrevsible damage to ecosystem	>=\$10 Million	International / National Media Coverage	A1	A2	A3	A4	A5
B	Permanent Disabling Injury-OR multiple people injured	Any Regulatory Non Compliance with a localized (not widespread) environmental impact that can be remediated over months or years	\$1 Million up to \$10 Million	Local / State / Provincial Media Coverage or multiple community complaints	B1	B2	B3	B4	B5
C	Injury/Illness with work restrictions	Any Regulatory Non Compliance, including those with quickly reversible^ environmental impact	\$100,000 up to \$1 Million	Mosaic Internal Impact or community complaint	C1	C2	C3	C4	C5
D	Injury/Illness with minor severity	Release with minimal impact	<\$100,000	Site internal impact	D1	D2	D3	D4	D5
(Use these probabilities for Mechanical Integrity or LOPA only)				<1/10,000	1/1,000 to 1/10,000	1/100 to 1/1,000	1/10 to 1/100	>1/10	
*Includes employees, contractors or members of the public	**Any Regulatory Non Compliance includes reportable releases ^Quickly reversible is up to a few weeks	*** Lost Production (Margin) & Property Damage. Total financial impact is based on one time incident occurrence and limited to no longer than one year.		<b>Step 3: Determine the risk rating of each category and select the one with the highest risk.</b>					
<b>Step 4: Take Action based on specific program (i.e. MOC, EHS MS, Mechanical Integrity... )</b>									
<b>Low Risk</b>			<b>Medium Risk</b>			<b>High Risk</b>			
Identified controls are sufficient and assessed through management system activities.			Controls shall meet regulatory and company compliance requirements, followed by a documented suitability assessment of the control based on historic knowledge and industry			Business functions will demonstrate that the risk is controlled to a level that is as low as reasonably practicable (ALARP).			

