## **Risk Register**

R1       Failure of IoT technology integration       H       Mitigate       M         R2       Inaccuracy or malfunction of sensors       M       Prevent       L         R3       Compatibility issues between hardware and software       M       Mitigate       L         R4       Exposure to harsh mining conditions       III       Prevent       M         R5       Regulatory non-compliance       M       Prevent       L         R6       Inadequate testing or validation of safety features       M       Mitigate       L         R7       Dependency on battery power       H       Mitigate       M         R8       Resource constraints       M       Accept       M         R9       Ineffective communication among stakeholders       M       Enhance       L         R10       Supply chain disruptions       M       Transfer       L         R11       Data security vulnerabilities       M       Mitigate       L	Risk ID	Risk Description	Rating Before Risk Respons	Response	Rating after Risk
R3 Compatibility issues between hardware and software M Mitigate L R4 Exposure to harsh mining conditions II Prevent M R5 Regulatory non-compliance M Prevent L R6 Inadequate testing or validation of safety features M Mitigate L R7 Dependency on battery power H Mitigate M R8 Resource constraints M Accept M R9 Ineffective communication among stakeholders M Enhance L R10 Supply chain disruptions M Transfer L	R1	Failure of IoT technology integration	Н	Mitigate	M
R4 Exposure to harsh mining conditions II Prevent M R5 Regulatory non-compliance M Prevent L R6 Inadequate testing or validation of safety features M Mitigate L R7 Dependency on battery power H Mitigate M R8 Resource constraints M Accept M R9 Ineffective communication among stakeholders M Enhance L R10 Supply chain disruptions M Transfer L	R2	Inaccuracy or malfunction of sensors	M	Prevent	L
R5     Regulatory non-compliance     M     Prevent     L       R6     Inadequate testing or validation of safety features     M     Mitigate     L       R7     Dependency on battery power     H     Mitigate     M       R8     Resource constraints     M     Accept     M       R9     Ineffective communication among stakeholders     M     Enhance     L       R10     Supply chain disruptions     M     Transfer     L	R3	Compatibility issues between hardware and software	M	Mitigate	L
R6     Inadequate testing or validation of safety features     M     Mitigate     L       R7     Dependency on battery power     H     Mitigate     M       R8     Resource constraints     M     Accept     M       R9     Ineffective communication among stakeholders     M     Enhance     L       R10     Supply chain disruptions     M     Transfer     L	R4	Exposure to harsh mining conditions	11	Prevent	M
R7     Dependency on battery power     H     Mitigate     M       R8     Resource constraints     M     Accept     M       R9     Ineffective communication among stakeholders     M     Enhance     L       R10     Supply chain disruptions     M     Transfer     L	R5	Regulatory non-compliance	M	Prevent	L
R8       Resource constraints       M       Accept       M         R9       Ineffective communication among stakeholders       M       Enhance       L         R10       Supply chain disruptions       M       Transfer       L	R6	Inadequate testing or validation of safety features	M	Mitigate	L
R9 Ineffective communication among stakeholders M Enhance L R10 Supply chain disruptions M Transfer L	R7	Dependency on battery power	H	Mitigate	M
R10 Supply chain disruptions M Transfer L	R8	Resource constraints	M	Accept	M
	R9	Ineffective communication among stakeholders	M	Enhance	L
R11 Data security vulnerabilities M Mitigate L	R10	Supply chain disruptions	M	Transfer	L
	R11	Data security vulnerabilities	M	Mitigate	L

(Done using Excel Sheet)