

Risks and Opportunities – Quality Principles

By understanding and identifying potential risks and opportunities, you can effectively manage them, minimising the impacts of risk whilst maximizing opportunities.

What is Risk?

Risk is the **effect** of **uncertainty**

An **effect** is a deviation from the expected whether positive (opportunity) or negative (risk).

Uncertainty is a deficiency of knowledge or understanding of any information or event, its consequence, or likelihood.

Identifying Risks and Opportunities:

The following outlines an example of the risks and opportunities present when working on a highly visible site with neighbours.

1. We must gain the relevant information so that we can analyse the potential risks and opportunities.

For example:

- Have they had past experiences with our company or the Client?
- If so were they good or bad?
- Have there been previous complaints by the neighbours / public?
- Are they often around during working hours i.e. retired / student population?



2. Consider what the hazards and risks could be

Hazard = High volume of construction traffic **Risk** = Disruption caused to neighbours, who complain

Hazard = Public park in close vicinity to site **Risk** = Member of Public has an accident, negative company publicity

3. Consider the impact of the risks / analyse the likelihood and severity (consequence) of occurrence

Example of a risk matrix that could be utilised to rate project commercial risk based on likelihood and severity
Note: A Risk matrix will also need to incorporate environmental, H&S, legislative risk etc.

Likelihood	Consequences				
	Insignificant Risk is easily mitigated by normal day to day process	Minor Delays up to 10% of Schedule Additional cost up to 10% of Budget	Moderate Delays up to 30% of Schedule Additional cost up to 30% of Budget	Major Delays up to 50% of Schedule Additional cost up to 50% of Budget	Catastrophic Project abandoned
Certain >90% chance	High	High	Extreme	Extreme	Extreme
Likely 50% - 90% chance	Moderate	High	High	Extreme	Extreme
Moderate 10% - 50% chance	Low	Moderate	High	Extreme	Extreme
Unlikely 3% - 10% chance	Low	Low	Moderate	High	Extreme
Rare <3% chance	Low	Low	Moderate	High	High

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<u>4. Consider how these risks can be controlled and mitigated</u>		<u>5. Evaluate if through effective planning these risks can be turned into opportunities which in return can provide benefits</u>	
Hazard	Risk	Control Measures / Mitigation	Opportunity
High amounts of construction traffic	Disruption caused, Neighbours complain to Ofwat and negatively affect SIM score (reducing client funding)	Construction traffic restricted at peak times	Neighbours give 5 out of 5 on SIM score due to proactive traffic management
Excessive Noise created during construction	Neighbours use social media to complain	Communicate with residents to hear their suggestions / complaints and enrol the site on the Considerate Constructors Scheme	Neighbours compliment effectiveness of communication by MWH Treatment / Client on social media
A public park is in close vicinity to the site	Public have an accident	Educate the public on dangers / ensure adequate fencing / signage etc.	Opportunity to refurbish the park / improve local assets and advertise successes

Types of Risks and Opportunities

- Regulatory / Legal Compliance e.g. Health and Safety, Environmental Legislation
- Reputational
- Commercial / Financial
- Other

Project Risks and Opportunities:

- During tender phase use the risk register (PSFR009) to record any identified risks.
- Post Project award, CDFR01-01 Project Risk and Opportunities Register should be used alongside any risk mitigation plans.
- As risks continually change and evolve it is essential that these changes are considered and that documentation is updated to reflect this.

Why Monitor Risks & Opportunities?

A number of External and Internal standards and good business practice requires that the company monitors and controls risks and opportunities. The external Quality standard to which MWH Treatment is certified, ISO 9001:2015, requires that our company and its individuals:

- Determine the risks and opportunities that need to be addressed.
- Plan actions to address these risks and opportunities.
- Evaluate the effectiveness of these actions.

Risk Mitigation – Options to address Risk

- **Avoidance** – If the risks identified are too high, avoid it
- **Taking** Risk to pursue an opportunity
- **Minimise** risk through informed decisions
- **Eliminating** the risk source – find an alternative method or impose control measures to eliminate the risk
- **Changing** the likelihood or consequences



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Questions:

Q1: Can you think of any potential risks within your area of work that may be turned into an opportunity if managed correctly?

Q2: During a project, where should you record Risks and Opportunities?

Q3: Name 3 ways to address potential risks?

REGISTER OF ATTENDEES

Delivered By: (name / job title)	
Project No.:	
Project Name:	