

Winnipeg Sewage Treatment Program Integrated Management System



Risk Register

DOCUMENT NUMBER: PG-RM-TO-01

Rev	Prepared by	Reviewed by	Date	Approved by	Date

Appendix G - Project Risk Register - NEWPCC Pipe Improvements

Risk Register Template Version 4.5-nwa2

System			Program Information about the Risk Event										
Risk ID; Sequential ID	Last Reviewed Date	Status Change Date	Identification Date	Project	Phase	Task Group	Contract (Bid Op)	Operational or Capital	Facility	Process Area (optional)	Discipline (Optional)	Risk Type; Program or Project Level Risk	Category of Risk; Design, Construction, HR, Procurement etc
								example					
								example					
								hh					

Project Budget or Target Cost (\$,000) Insert \$ value

Risk Event Identification							Risk Event Assessment					
Threat or Opportunity (T / O)	Due to (Cause Event)	this could occur (Result Event)	Resulting in (this Effect)	Threat / Opp Owner (per Agreement); CofW or Shared	Threat / Opp owner (Individual responsible)	Status (Identified / In Development / Defined / Closed)	Magnitude of Risk Event(1-5)	Likelihood (1-5)	Assessed Score C X L	Estimated Impact (\$,000) what is cost if risk occurred)	Financial Impact (% Target Cost)	Financial risk prior to Mitigation
T	Design assumption for Digestion and de-watering at SEWPCC	Bios lids decision report recommends no digestion or dewatering at SEWPCC	Revise project definition design work based on biosolids decision report	CoW		Identified	2	3	6	80	#VALUE!	36
O	Using a specialist contractor	We may increase productivity for producing O&M manuals	Reduce project delivery cost	Shared		In Development	5	1	5	60	#VALUE!	- 2
									0		#VALUE!	#N/A
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Risk Response Assessment (based on an Implemented Risk Management Plan - future state)									Risk Response Plan - Execution Log				Contingency Plan		
Risk Response Type (Avoidance, Transference, Mitigation, Acceptance)	Risk Response Plan - Actions	Residual Magnitude occur (1-5)	Residual Likelihood (1- 5)	Assessed Residual Score	Cost of Mitigation (\$,000)	Adopted	Financial risk after mitigation	Trigger date (mandatory review date)	Date for each action	Mitigation Evaluation	Action Log Reference	Comments	Contingency plan	Risk Level Before Mitigation	Risk Level After Mitigation
<i>Mitigate - Obtain early direction on biosolids strategy for SEWPCC before biosolids decision report is finalised</i>		3	4	12	20									Med	High
<i>Employ specialist contractor for O&Ms, tie in with specific deliverables from constructor and designers</i>		2	3	6	20									High	Med
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Assessment of the Magnitude of Opportunity

	Insignificant Savings	Minor Savings	Moderate Savings	Major Savings	Significant Savings
	1	2	3	4	5
Cost ¹	< 2% of Project Budget ²	< 5% of Project Budget ²	< 10% of Project Budget ²	< 15% of Project Budget ²	> 20% of Project Budget ²
Time ²	Time savings <½ day	Time savings ½ – 1 day	Time savings >1 day, < 1 week	Time savings >1 week, < 1 month	Time savings >1 month
Other ⁴					
Notes 1 - Project Manager to replace with project specific values 2 - Use Target Cost where the project is subject to a Target Cost 3 - Replace with project specific values 4 - To be defined by the Project Manager if required					

Assessment of the Magnitude of Threat

Descriptor	Negligible	Moderate	Substantial	Severe	Disastrous
	Small effect on costs	Moderately effects costs	Considerably affects cost	Serious threat to the organization, public etc.	The impact is totally unacceptable to the organization
	1	2	3	4	5
Safety	Negligible – No injury, near miss	Minor – minor cuts, bruises, muscle strain	Serious – broken bones, muscle and ligament injuries	Serious / permanent injury / illness	Catastrophic – Single or Multiple fatalities
Financial Impact upto a maximum value (re-work / loss etc..) ¹	< 2% of Project Budget ²	< 5% of Project Budget ²	< 10% of Project Budget ²	< 15% of Project Budget ²	> 20% of Project Budget ²
Schedule, impact on critical path ²	Not likely to impact dates	Likely to absorb float between planned dates and target dates	≤ 1 month	≤ 2 month	> 2 month
Environment	Negligible Environmental effect	Nuisance / minor but reversible Environmental harm	Moderate but short term Environmental harm	Localised, long term Environmental harm	Extensive long term Environmental harm
Regulatory	negligible, near miss	report required to regulatory body	Inspection by Manitoba Env safety officer etc..	CEC review	Clean Environment Commission (CEC) Hearing

Image / Reputation	Single Public Enquiry	Multiple Public Enquiries and / or informal Councillor and / or MP Request	Moderate Media Political – Formal Council and / or MP Request / Moderate Public Impact	Provincial Government, Major Political & Media Scrutiny / Major Public Impact	Federal Investigation
Moral	No Impact	Grumblings at wter cooler	Moderate / Increasing Absenteeism	Major Negative / Loss of Staff / “Go Slow”	Catastrophic Negative / walk out
Legal	No Liability	Written Claim Damages < \$10,000	Damages > \$10,000 < \$250,000	Damages >\$250,000 < \$1,000,000	Damages >\$1,000,000
Other ⁴					

Notes

- 1 - Project Manager to replace with project specific values
- 2 – Use Target Cost where the project is subject to a Target Cost
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III. Assessing Likelihood/probability of Risk Occurrence

Descriptor	Rating	Frequency	Probability
Almost certain	5	Is expected to occur during projects of this type	> 95%
Likely	4	More likely as not, regularly occurs during projects of this type	60% < x < 95%
Moderate	3	As likely as not, might occur at sometime during a project of this type	30% < x < 60%
Unlikely	2	Could occur at some time during the project, rarely occurs on projects of this type	5% < x < 30%
Rare	1	Only occur in exceptional circumstances on projects of this type	< 5%

Note on the use of Specific Probability Data and Distributions:

The first step in assessing the likelihood / probability of a risk should always be to apply the project teams engineering judgement and experience, in most cases this approach is all that is required. Specific probability data is available from a variety of sources, however unless the assumptions underpinning such distributions and data hold, the results can be misleading and introduce greater risk. Such data should be checked carefully before it is used.

<i>Total Severity</i>	<i>Category</i>	<i>Response</i>
20-25	Critical	Expected cost to the project is unacceptably high. This risk must be eliminated or transferred before proceeding with the project. Attempt to avoid or transfer risk
10-20	Serious	Expected cost is high compared to total project cost. It probably is cost effective to eliminate or transfer this risk.
5-10	Important	Consider eliminating or transferring. If accept then manage proactively.
0-5	Acceptable	Accept and manage

PROGRAM - Not Priced in BTC Count of Risks (Before Mitigation)

		Magnitude					
		Insignifican	Minor	Moderate	Major	hatostrophic	
		0	1	2	3	4	5
Likelihood	Rare	1	Low	Low	Med	High	High
	Unlikely	2	Low	Low	Med	High	Extm
	Moderate	3	Low	Med	High	Extm	Extm
	Likely	4	Med	High	High	Extm	Extm
	Almost Ce	5	High	High	Extm	Extm	Extm
Total Number			0				

Date	Change	By
10/19/2012	Added project name	NWA
10/20/2012	Added calculation in column AA and AB	NWA