## Appendix 1 - Water QMS Risk Assessment

There were fourteen new risks and 8 newly high scoring risks identified during the 2024 Water QMS risk assessment. Risks added in 2024 are listed below in Table 1. Risks that have been newly classified as high scoring in 2024 are listed below in Table 2.

Hazardous Event	Plant Location
Public trespassing on Niagara Region property.	Decew Falls Port Colborne
Catastrophic failure of intake structure.	Welland
Failure of aluminum sulfate pump.	All
Catastrophic failure of sedimentation area structure or settling tank.	Welland
PLC (Programmable Logic Controller) breakdown with no parts left to repair.	Welland
Catastrophic failure of Clearwell 3.	Welland
Failure to revise documents following upgrades/changes i.e. drawings, Operations and Maintenance Manuals etc.	All
Inaccurate or outdated general maintenance and asset management information or drawings used for general internal purposes.	All
Inaccurate or outdated general maintenance and asset management information or drawings used for design purposes.	All
Insufficient standardization of preventative asset maintenance, reporting, and communication.	All
Insufficient funding to maintain asset sustainability.	All
Failure of 24" watermain running under lake Moodie.	Decew Falls
Failure of 54" watermain running under lake Moodie.	Decew Falls
Break of two cast irons (42") crossing the Welland Canal.	Welland

## Table 1: Risks added to Water QMS Risk Assessment

Hazardous Event	Plant Location
Accidental chemical spill impacting source water. Region	Decew Falls
notified.	
Accidental chemical spill impacting source water. Region	Port Colborne
notified.	
Public trespassing on Niagara Region property.	Port Colborne
Failure of all low lift pumps due to electrical issue, mechanical	Welland
issue, fire, etc	vvelianu
Inaccurate or outdated general maintenance and asset	All
management information or drawings used for design purposes.	
Insufficient standardization of preventative asset maintenance,	All
reporting, and communication.	
Insufficient funding to maintain asset sustainability.	All
Failure of 24" watermain running under lake Moodie.	Decew Falls

## Table 2: Risks newly classified as high scoring in Water QMS Risk Assessment