

Incident Investigation Services

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GL aims to become the leading supplier of water focussed asset management services to industrialists and water utility companies through the provision of quality products and first class professional services.

GL is a leading global technical assurance and consulting company providing asset management support to industrialists and water utility companies. GL solutions assist in managing the selection, maintenance, operation, inspection and renewal of physical assets across the industrial water cycle, including water and waste water transport and treatment. GL's knowledge of water asset management has been successfully applied for over 30 years, improving operational performance, regulatory compliance, safety and profitability for our worldwide clients.



Incident investigation services

The investigation of incidents arising from asset failure within a utility management environment is considered good business practice and may be required to comply with statutory requirements. It may also help to reduce business risk, improve operational performance and maintain safety standards by identifying underlying causes, enabling designs or operational procedures to be changed, and thereby preventing similar incidents occurring again in the future.

GL has extensive experience of investigating incidents that result from systemic, procedural or process control-related factors. The aim of any investigation and audit is to determine, via root cause analysis and audits, how these factors contributed to a failure and the subsequent consequences. GL can provide extensive knowledge and understanding of the technical, investigative, operational and management aspects of the utility industry, so enabling a unique standard of service to be offered in two broad areas, namely Pipeline Failure Investigations and Health and Safety Systems Assessment.

The service can include a rapid response to investigate incidents, production of reports to meet statutory requirements and provision of expert witness support if criminal or litigation proceedings result.

Pipeline failure investigation

The pipeline failure investigation services offered by GL include the following:

- Rapid mobilisation service available
- Detailed on-site investigation to collect all available evidence
- Interviews of key personnel (operatives, managers, occupants etc)
- Pipeline material factors, covering pit-cast iron, spun-cast iron, ductile iron, steel and polyethylene
- Pipeline construction/ installation related factors
- Determination of failure causes: fracturing, fissuring, corrosion, erosion, and assessment of asset condition
- Ground-related factors: external loading, ground movement, pipe support conditions/ stressors, contamination
- Environmental factors; meteorological conditions, groundwater movement, previous land usage
- Modelling of loading/ stressing scenarios using bespoke software solutions
- Preparation of factual and interpretative reports covering failure causes, escape/ ingress routes, damage sequences, and human-related factors
- Consideration of available evidence and its interpretation to postulate the most likely sequence of events (and their possible causes) that resulted in the failure/ incident
- Forensic analysis and assessment, technical reporting under legal privilege and expert witness



Health and safety system assessment

The health and safety system assessment services offered by GL include the following:

- Interviews of key personnel (operational, managerial, contractors, third parties etc)
- Review of company procedures, management systems, staff technical competence, safety, and control of operations requirements (e.g. SCO/ HAZOP)
- Investigation of permit system, risk assessments, hazard analysis, method statements, work procedures
- Investigation of breaches of procedures during site activities that contributed to the incident
- Audits of site activities, management processes and work procedures
- Root cause analysis of the systems and procedure-related factors that resulted in the incident
- Preparation of incident investigation report detailing the failure events and probable causes
- Recommendations for improvements to systems, processes and operational control procedures, additional training requirements, gap analyses

