



Environment & Water Capabilities

Global Overview

Advisian
Worley Group

Who is Advisian?

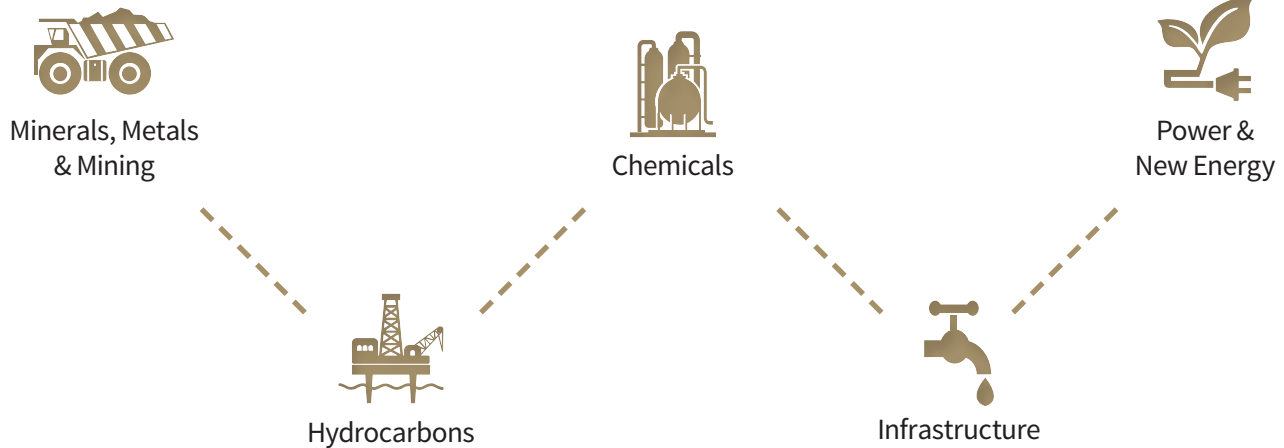
Advisian is Worley's independent consulting business line.

With the combined strategic, operational, and technical skills and expertise of the collective Worley companies, our clients can access unrivalled technical know-how and deep regional knowledge and apply it to the creation of new assets, or to sustaining and improving existing operations.

Advisian works collaboratively with our clients to develop and deliver tailored solutions that help our clients understand and manage their interfaces with natural, physical, social, cultural, regulatory, and built environments.

We make a difference by acting differently.

Sectors





We listen. We advise.
We deliver extraordinary outcomes.

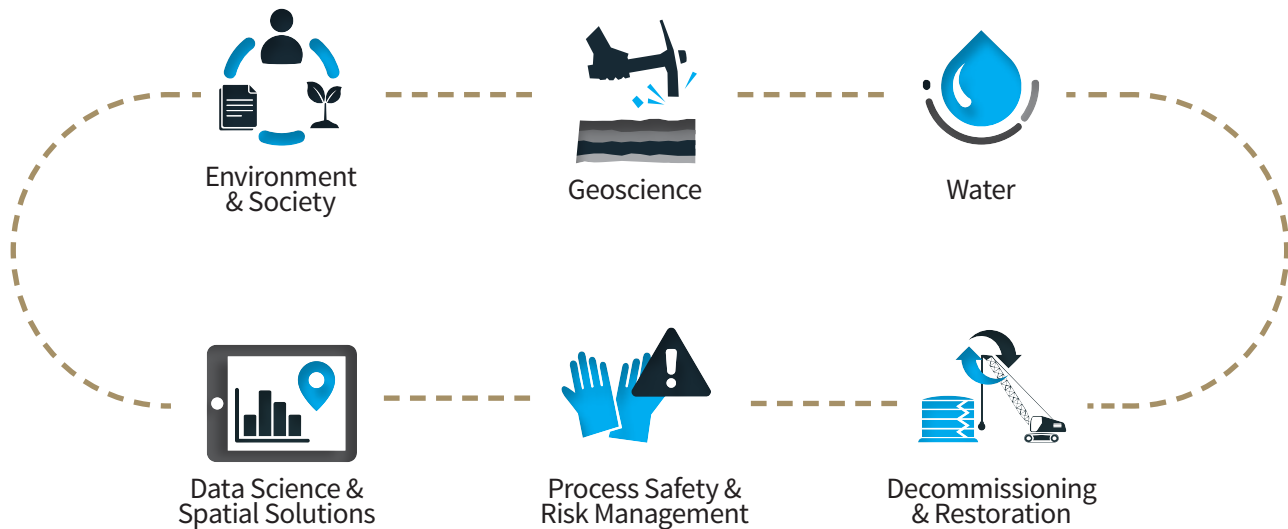
Advisian's expertise

Our broad range of environmental consulting expertise covers every aspect of today's complex project requirements.

For more than 40 years, Advisian and our heritage companies have been creating solutions to complex project challenges. From impact assessments and permitting, to geotechnical investigations and complex water treatment system designs, to end-of-asset life environmental monitoring and clean-up, we solve complex challenges and add value to every project.

As a global environment and water group, we are leaders driving a positive change. We are the engines of the energy transition, advising our clients in a changing world to deliver outcomes that benefit the society and ecosystems in which we work and play.

Service Areas



We offer independent advice to clients all over the world, in addition to adding value to Worley's engineering offering - finding solutions for our clients at every phase of the project lifecycle.



BY THE NUMBERS

50,000+

environment & water projects delivered

1,000+

environment & water specialists worldwide

40+

years providing environment & water services

Proven

track record of profitably embedding environment, social and financial sustainability into project delivery

Solutions

that reduce risk, integrate industry, the environment and community

Advisian provides customized, adaptable solutions tailored to meet our clients' needs.

Environment & Society

Our approach is to broaden the “environment” scale and consider society and health transparently in our evaluations.



Society, Governance & Engagement

- Mapping and strategy
- Communication planning
- Indigenous engagement and participation
- Indigenous knowledge inclusion
- Stakeholder and public consultation
- Social performance monitoring
- Local content planning and implementation
- Resettlement action planning
- Due diligence
- Environmental, Social and Governance (ESG) and sustainability reporting



Planning, Monitoring & Management

- Core science practices – air, noise, terrestrial, aquatics, marine, health
- Land and marine use planning
- Field monitoring and site control
- Numerical modelling
- Environmental management plans
- Environmental Management Systems
- Construction and operations monitoring
- Reclamation planning
- Climate change resilience
- Natural solutions and carbon offsetting



Regulatory Approvals, Permitting & Compliance

- Site selection and alignments
- Regulatory strategy and project roadmap
- Approvals, licenses, permits
- Environmental and Social Impact Assessment
- Risk assessment
- Compliance management and audits
- Regulatory reporting and commitments compliance
- Green House Gas (GHG) reporting
- Net zero emissions planning



Our purpose is to provide shared benefits to society while delivering industrial developments in a way that continues to add value to the world while protecting the planet. We are scientists, engineers, economists, entrepreneurs and intrapreneurs, social practitioners, managers, and technicians embracing our changing world and its new energy and social challenges.

We are a partner of choice, with a goal of delivering successful business outcomes that protect and enhance our environment, our water resources and airshed, and create long-term benefits with Indigenous and local communities.

BY THE NUMBERS

40+

years of delivering environment & society services across the globe

300+

environment & society consultants around the world

Early

identification of environmental and social concerns to de-risk projects and prevent schedule delays

500,000+

commitments met and compliance measured



Geoscience

We offer our clients the full spectrum of geoscience capabilities, both on and offshore, even in the most extreme climate conditions.



Geotechnics

- Geotechnical site investigations
- Instrumentation design and installation
- Engineering geological models
- Site characterization
- Terrain assessments
- Geohazards
- Geo-risk evaluation/mitigation
- Forensic investigations
- Foundation analysis/design
- 2- and 3-D numerical modelling
- Rockfall hazard/slope assessment
- Slope stabilization
- Seismic design
- Liquefaction assessment
- Route assessments
- Siting studies
- Construction materials sourcing and evaluation
- Earthworks design
- Construction supervision
- Dredging design
- Ground improvement
- Piling design and supervision
- Deep excavations design
- Tunnelling and trenchless technology assessment and design



Dams & Tailings

- Tailings and water storage facilities
- Tailings strategy, design, and audits
- Tailings and mine closure
- Valley/in-pit storage
- River diversions, levees
- Landfill design



Geophysics

- Geophysical investigations
- Seismic reflection/refraction
- Electrical resistivity
- Ground penetrating radar
- MASW
- Marine surveys
- Sub-bottom profiling
- Bathymetry

We are a globally integrated geotechnical practice offering our clients pragmatic, economic, and sound geotechnical solutions, using a diverse range of capabilities with demonstrated deep technical and specialist skills.

We partner with our clients offering value through early identification of onshore and offshore geohazards and management of geo-risk, coupled to real-world savings.

Our capability services the full lifecycle of our clients' requirements including strategy setting, geotechnical and geophysical site investigation, concept design, options analysis, detailed engineering analysis and design, construction supervision, operational excellence, and expert witness. Through our broad range of skills and ability to collaborate with associated service lines, we offer extensive value across the global mining, oil and gas, renewables, infrastructure, and chemicals sectors.

BY THE NUMBERS

35+

years delivering innovative Geosciences solutions safely to thousands of clients

40+

countries across the globe with clients benefiting from the value we bring to their market sectors

15,000+

projects where we've significantly enhanced our clients' understanding of geotechnical challenges and reduced geo-risk

500km+

of borehole core drilled to depths as great as 800m to develop detailed project geotechnical models



Water

To solve our clients' water challenges, we offer complete water solutions across the project lifecycle, from concept to end of life.



Advisory & Regulatory

- Corporate water strategy
- Sustainability and water stewardship
- Water accounting and valuation
- Climate change planning and resiliency



Asset Management

- Flood and drought readiness and response
- Data capture and analytics
- Water usage analysis
- Water conservation and efficiency
- Water management contingency planning
- Water monitoring and compliance
- Asset lifecycle management, costing, and optimization



Water Resources

- Groundwater and surface water resource and quality assessment
- Water resource modelling and quantification
- Risk and opportunity evaluation
- Flood management
- Water resource acquisition
- Water resource system design and optimization
- Geothermal energy



Storage, Transmission & Distribution

- Water and wastewater pipelines
- Pumping stations
- Power generation and transmission
- Water storage and dams
- Stormwater drainage
- Intake and diffuser design



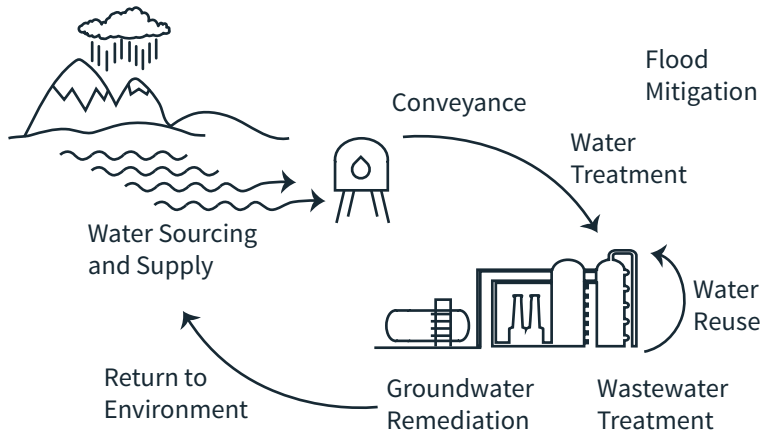
Water & Wastewater Treatment

- Integrated water management
- Desalination
- Process & potable water treatment
- Process and sanitary wastewater treatment
- Produced water treatment and management
- Water efficiency measures



End of Life

- Post-closure planning and management
- Contaminated water treatment
- Water compliance monitoring
- Site rehabilitation



Advisian provides solutions across the entire water lifecycle.

BY THE NUMBERS

40+

years providing water solutions

250+

water consultants across the globe

66+

countries where we've delivered projects

20,000+

water projects delivered

75%

of which were industrial water projects delivered to upstream, midstream, downstream, chemicals/petrochemicals, power, mining, and industrial sectors



Decommissioning & Restoration

We help our clients understand and manage potential, perceived, and legacy liabilities; plan and oversee complex decommissioning and demolition projects, and provide expert waste management advice.



Decommissioning

- Project Management Consultant (PMC) services
- Dismantling and demolition management
- Onshore decommissioning studies and execution planning
- Cost modelling
- Hazardous materials consultancy
- Industrial waste management



Liability Management & Remediation

- Environmental risk and liability management solutions
- Contaminated land assessment and management
- Environmental and human health risk assessments
- Environmental remediation design
- Remediation cost modelling and provisioning
- Restoration
- Reclamation
- Purchaser and vendor environmental due diligence
- Cost benefit analysis/sustainability assessments
- Spill assessment, modelling, and contingency planning



Waste Management

- Operations support
- Construction support
- Facility engineering and design
- Permitting
- Wastestream management
- Waste facility siting
- Technical studies
- Waste systems and facilities planning

Advisian has over 40 years of experience helping its clients reduce, mitigate, and exit their environmental and decommissioning liabilities.

We have helped our clients save over \$500 million through the application of pragmatic assessment of environmental risks, management of liabilities, and the use of sustainable remediation technologies.

We assist our clients with developing their decommissioning and closure strategies and use the knowledge of the Worley Group to deliver decommissioning on schedule and under budget at a wealth of oil and gas, chemicals, industrial, and power facilities.

BY THE NUMBERS

200+

Decommissioning & Restoration experts

20,000+

site assessments undertaken in over 30 countries

7,500+

environmental and human health risk assessments

3,000+

soil and groundwater remediation projects successfully managed across oil and gas, chemicals, minerals and metals, power, and industry market sectors

1,000+

decommissioning management projects safely delivered



Process Safety & Risk Management

We are continually at the forefront of activities to reduce risk using an integrative approach for safe and sustainable operations.



Process Safety Consulting

- Formal safety assessments
- CFD thermal dispersion, radiation, and explosion analysis
- Functional safety lifecycle management
- Toxic gas dispersion analysis
- Quantitative Risk Assessment (QRA)
- Reliability dynamics and noise analysis
- Workshops (HAZID, HAZOP, SIL, LOPA, Bow-Tie)
- Safety Case (operations and design, SIMOPS)
- Safety critical element reviews and assessments
- As Low as Reasonably Practicable (ALARP) assessments



Loss Prevention Engineering

- Steady state and transient hydraulic analysis
- Passive and active fire protection design and specification
- Fire and gas detector layout mapping
- Fire safety reviews
- Hazardous area classification
- Regulatory review and assistance
- Offsite subject matter experts
- Auditing and compliance reviews
- Operational readiness and verification



Process Safety Management

- Implementation of process safety management systems and procedures
- Audits for offshore and onshore industries (OSHAS 18001, SS506, etc.)
- Onsite HSE support and Safety Case bridging documents
- Emergency response plans
- Chemical and occupational health risk assessments
- Incident investigation and causal analysis
- Human factors engineering

Advisian utilizes a range of specialist tools such as ANSYS FEA, ANSYS CFX, KFX, FLACS, Flaresim, PHAST, FRED, SHEPHARD, HYSIS, PipeSim, SILver, MAROS, TARO, PIPENET, and Detect 3D.

As an industry leader in process safety and risk management, we are uniquely positioned to provide integrated consulting and process safety advisory services across a range of sectors.

We have highly qualified and experienced functional and process safety, risk, and reliability consultant engineers that can assist in all aspects of process safety management, with significant experience in the development of full offshore safety cases. We are recognized experts in onshore Major Hazard Facility (MHF) regularity compliance and can assist in developing Safety Cases, safety management systems and other activities associated with major hazard facilities management.

BY THE NUMBERS

50+

years of actively reducing risk within the energy, chemicals, and refining sectors

150+

process safety and risk experts across the globe

5,000+

safety reviews completed (HAZIDs, HAZAN, HAZOP, CHAZOP, LOPA, SIL, CHRA, FMECA, CBow-Tie)

1,000+

technical risk assessments, advanced consequence modelling, and Quantitative Risk Assessments (QRA)

100+

site verification, operational readiness, and due diligence activities completed



Data Science & Spatial Solutions

Advisian helps clients realize the benefits of well-managed data through independent (technology agnostic) data consultancy services, including strategic advice on all aspects of data management – people, processes, data, and technology.



Advisory & Planning

- Strategy/transformational roadmap development and implementation
- Data governance and compliance (assessments, standards, and process development)
- Data architecture advice and design



Cartographic & Data Visualization

- Spatial data management
- Technology, software, and integration services
- Practical application of data and technology standards (e.g., Seabed Survey Data Model [SSDM], ISO 15489, 15926, 19115, 19139, 20000, 27000, etc.)



Data & Applications

- General data management and governance
- Data integration, processing, modelling, cleansing, and remediation
- Process and workflow automation/scientific programming
- Technology and software integration services
- Data analytics

Advisian understands the importance of quality data to assist delivering projects in the most cost-effective, well-designed, and safest way. We support decision makers in maximizing the value of their data to make the best qualitative and quantitative choices by utilizing solution-focused applications and processes. Advisian uses both industry standard and bespoke software solutions to help clients capture, manage, analyze, and visualize their environmental and spatial data. Our data management processes have been developed over thousands of projects to securely and efficiently manage and quality control data, alleviating the need for our clients to acquire or maintain costly data management applications.

BY THE NUMBERS

30M+

analytical results and over 1 million water level measurements stored in our secure database

15,000+

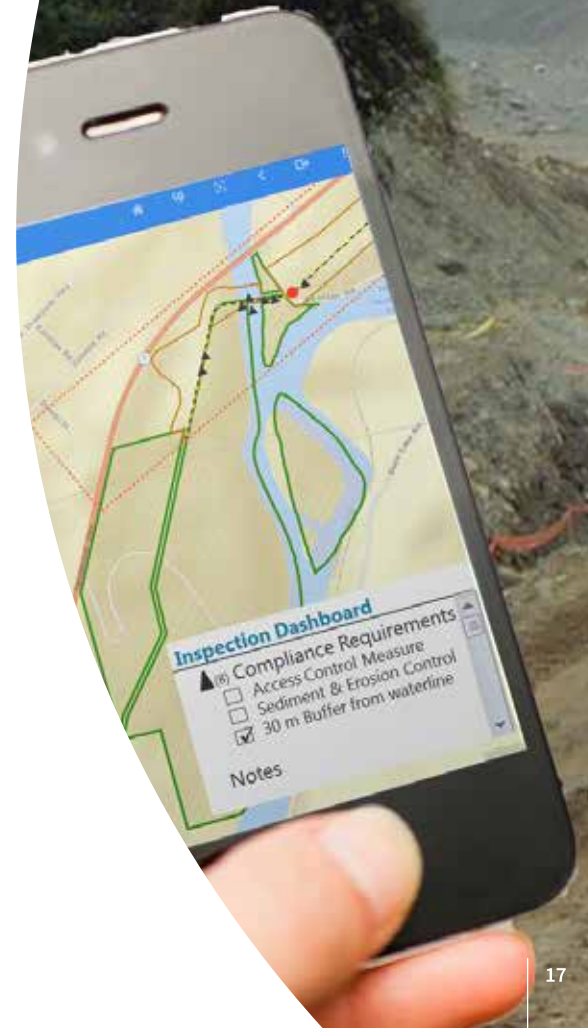
projects where we've embedded environmental and spatial data management solutions

7M+

person-hours operating central data management systems for major world-class engineering projects

Bespoke

GIS applications that follow the entire project lifecycle



Select global project experience



Environmental Services for an LNG Project

Queensland Gas Company / Australia

The QCLNG project includes the construction and operation of the Curtis Island LNG facility and associated infrastructure.

How we added value:

- Master approvals and compliance plan developed for the construction phase
- Developed QGC's upstream permits and approvals matrix
- Ensured that engineering design complies with commitments
- Provided/procured specialist studies relating to soil management, ecological constraints, noise monitoring, air quality, and emissions management
- Developed Environmental Management Plans for construction activities
- Coordinated site survey crews and collated surveyed environmental data



Rapid Remediation of Former Petrol Filling Station

Confidential Client / United Kingdom

Petroleum components were detected in water samples from a local public supply well resulting in our client's site being deemed contaminated land. Advisian was commissioned to undertake more detailed investigation and assess the site.

Site investigation identified historical off-site migration of petroleum product. Potential risks to human health through inhalation of vapors was identified and investigated.

A remediation strategy was developed following completion of detailed groundwater risk assessment, cost benefit analysis, and discussion with key stakeholders.

Advisian designed, installed, and commissioned three successful remediation systems, recovering hydrocarbon mass from the soil and groundwater in the source area, and successfully preventing further impact to the water supply well. MTBE impacts were no longer detected in the well within six months of commissioning.



Geotechnical Investigation for an Oil and Gas Tank Farm

Confidential Client / Canada

Our client recently expanded its existing tank farm by constructing three new storage tanks. The existing pipeline was to be extended to the south and connect with the new tanks. A ravine borders the site to the west.

Services provided include:

- Conducted field investigations that comprised drilling and sampling, soil logging, piezometer installations, and geotechnical laboratory testing
- Reviewed site topography and aerial photographs
- Interpreted field data into geotechnical design parameters
- Provided recommendations on shallow foundations, pile foundations, structural containment walls, and construction
- Performed a standard slope analysis and provided recommendations on control slope remediation
- Provided QA/QC support during site preparation and construction to ensure compliance with design drawings



Natural Gas Pipeline Environmental Services

TANAP / Azerbaijan to Europe

An 1,850 km natural gas pipeline from Azerbaijan through Turkey and up to Europe. Over 150 archaeological sites and more than 1,000 archaeology findings were revealed during rescue excavations. The pipeline required a complex land acquisition process and over 1,000 roads, rivers, rail, and third-party pipeline crossings.

Worley Group was commissioned by TANAP to provide EPCM services and our Environment team was extensively involved. Where we added value:

- Identified and managed potential impacts of the project on the environment and society during construction
- Verified the implementation of the environmental and social monitoring/management plan
- Enabled a complete local content inclusion plan
- Spatial database development to support automated alignment sheet production, route design and visualization (base, engineering, environmental data)
- Implementation of ProjectSight web application as a visual integration platform for project team and client



Environmental Compliance

Imperial Oil Resources Ltd. / Canada

The Kearl 345,000 bbl/d oil sands mine encompasses large areas of land and is surrounded by vegetated areas and natural watercourses. During operations of the mine, Imperial is required to monitor and control all emissions that may be a detriment to the environment.

Advisian was retained to provide both home office and on-site services to manage and monitor releases from the site related to surface water and groundwater. Advisian worked collaboratively with Imperial to develop monitoring plans and laboratory analytical schedules to maintain the project within compliance of regulatory approvals. In addition, Advisian also provided detailed design services for a pilot treatment wetland to provide natural treatment of contaminated runoff from an area in contact with lean oil sands.

In the eighth year of the assignment, Advisian has maintained compliance, while also creating efficiencies that have decreased field times overall, thereby saving costs for the client and maintaining HSE incidents at zero lost days.

To help Imperial meet local commitments, 100% of the work has been transferred to Advisian's Indigenous owned partnership, Mikisew Advisian Environmental.



Permian Frac Water Sourcing

Pioneer Natural Resources / USA

Planning and execution of multi-source water supply, storage, and distribution system for hydraulic fracturing:

- Acquisition from multiple sources provides increased reliability
- Optimized system reduced lifecycle cost by \$200 million



Ultrafiltration System for Cracker

The Dow Chemical Company / USA

EPCM delivery of 16,000 gpm (3,600 m³/hr) process water treatment to feed cracker and other process units.

- Cracker heat exchanger fouling significantly reduced
- Capital costs reduced by \$40 million from initial EPC estimate



Land Regeneration Framework Agreement in the UK

National Grid Property Holdings Ltd. (NGPH) / United Kingdom

For over 25 years, Advisian has been one of the UK environmental framework consultants retained by NGPH. We provide award-winning consulting and strategic advisory services, assisting NGPH to manage environmental liabilities, reduce provisions, maximize land values, and protect and enhance its corporate reputation.

Advisian has safely delivered complex projects in high-risk operational environments and assisted NGPH in achieving recognition for exceptional HSE performance. Works have been completed at over 500 sites.

Our unique EcoNomics™ cost-benefit methodology has been used to develop economically sustainable remedial strategies and achieve regulatory closure at complex and problematic sites.

Working alongside NGPH's commercial partners and real estate service providers, Advisian has assisted with the safe demolition of over 50 redundant buildings and over 60 decommissioned gasholders, supporting the release of valuable real estate for residential and commercial developments.



Environmental Support for the Cairo Refinery

Egyptian Refining Company (ERC) / Egypt

To meet the lenders' due diligence requirements for the Cairo Refinery expansion project, Advisian was engaged as an environmental consultancy to support demolition and remediation services, and prepare an Environmental, Social and Health Impact Assessment (ESHIA) report complying with international lender expectations.

We conducted a number of baseline studies including air, noise, water, soils, and ecology. All the data were managed on a GIS. Stakeholder engagement and consultation were an integral part of the ESHIA process. We also supported the management of the demolition and dismantling of former plant and structures, along with soil and groundwater remediation works.

Consultation and engagement continued throughout all phases of the project. Our work has mitigated risks to the environment, managed liabilities, unlocked constraints, and enabled the safe redevelopment of the refinery for ERC.



Alkimos Seawater Desalination Plant – Marine Works and Tunnelling

Water Corporation / Australia

Advisian provided geotechnical studies as part of a large multi-disciplinary project team responsible for completing feasibility and concept design of the proposed Alkimos Seawater Desalination Plant.

The geotechnical aspects of the project were addressed utilizing a phased approach, beginning with a comprehensive review of available data and scoping of investigative work. Site investigations included a marine geophysical model developed utilizing a comprehensive suite of methods. The tailored drilling program investigated sub-seabed variability identified in the geophysical model. Using this data, a site-wide engineering geological model was developed.

Advisian's ability to successfully deliver large, complex, logistically and technically challenging marine geotechnical studies, and provide valuable insights into the implications of the geotechnical conditions for design and construction of critical project infrastructure, was widely recognized as providing outstanding contributions to the overall success of the project.



Geotechnical Support for the Balama Graphite Project TSF

Twigg Exploration and Mining Limitada / Mozambique

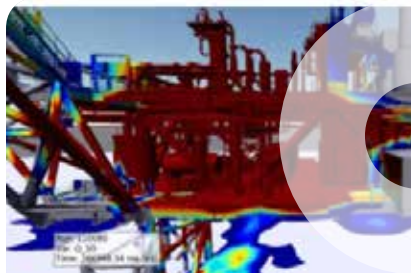
Twigg engaged Advisian to provide the concept design of the Balama Graphite Project TSF. The TSF was designed to accommodate over 40 years of production with a target 1.5 Mtpa of tailings.

With the concept of five interconnected cells, the Detailed Designs of Cells 1 and 2 were delivered with all documentation necessary for construction and operation. Cell 2 design was developed to be built in two phases with consideration to the dry period in Balama.

The design comprises aboveground cells fully lined with bituminous geomembrane, underdrainage, deposition and water recovery systems along with a comprehensive water balance for the whole mine site.

Advisian conducted construction supervision with a QA/QC role managing material suitability and geotechnical testing for Cell 1.

After the commissioning of Cell 1, Advisian supported Twigg in a pre-feasibility study for a dry stacking strategy that can eliminate two out of the five cells in Balama TSF.



Process Safety in Support of Neptun Deep FEED Project

ExxonMobil / Romania

The Neptun Deep development comprises a not normally manned shallow water platform with risers and flowlines from subsea wells, exporting dehydrated gas via a production pipeline to an onshore metering station.

FEED studies were undertaken to confirm the strategy and planning for the development by Worley with specialist study support from the global Safety and Risk HUB team.

Technical safety engineering deliverables included:

- CFD exhaust dispersion, vent dispersion and turbulent airflow analysis
- CFD fire and explosion analysis
- Riser release analysis
- Fire analysis for lift option model
- Reliability, Availability and Maintainability (RAM) analysis for the full field development including all SURF
- architecture
- Noise, acoustic and flow vibration assessments

Key findings support the wider demonstration that the risks associated with the facilities were being reduced to As Low As Reasonably Practicable (ALARP).



Environmental Data Management

Confidential / Canada

Multi-year, multi-project data management services for major oil and gas producer.

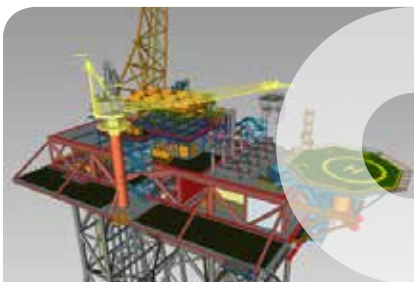
- Environmental data management services using EQuIS application for a large portfolio with hundreds of sites in various stages of assessment, remediation, or monitoring.



Seawater Reverse Osmosis Plant

Mitsui / Chile

PMC consulting services for the design review and construction supervision of an 100,000 m³/day seawater reverse osmosis plant and associated facilities. Desalinated water will be pumped towards the BHP Spence mine, by means of a 154 km long conveyance system.



Shell CRUX Pre-FEED - HSE and Process Safety Delivery

Shell Australia / Australia

Shell Australia plans to develop gas and condensate from the Crux field. The remotely operated Not Normally Manned (NNM) platform concept for Crux dehydrates the gas and condensate streams and exports a multiphase stream to the Prelude FLNG.

Advisian provided technical safety and risk expertise during Basis for Design (BfD) phase of the project as part of a fully integrated team (with Shell). The aim of the phase was to deliver a clearly defined BfD document with freeze on major decisions allowing entry into FEED and ensuring that the future operating facility:

- will comply with local legislation, internationally accepted norms, as well as Shell standards and guidelines
- risks to people, assets, reputation, and the environment are tolerable and ALARP

Advisian's services included:

- HSSE & HFE philosophy development
- Preliminary safety assessment
- Risk workshop facilitation
- HSE BfD datasheets
- Key decisions input



LNG Facility Decommissioning and Restoration Studies

Confidential Client / Middle East

Advisian was commissioned to deliver consultancy support to develop decommissioning and remediation plans and cost estimates to support the future decommissioning, dismantling, and restoration of two LNG mega-trains.

The project team included subject matter experts drawn from Advisian's staff in Qatar, UAE, and the UK, including decommissioning engineers, environmental scientists, construction managers, and cost engineers. The study developed the decommissioning methodology, cost model, and high-level schedule to provide our client with a robust level of detail to forecast the decommissioning, dismantling, and remediation costs. Cost models were developed in accordance with Class 4 AACE International Recommended Practice No. 18R-97.

Advisian's services provided our client with a robust plan, cost model, and schedule to present at board level and ensure accurate provisioning on the balance sheet of the anticipated decommissioning and remediation works at each mega-train.



San Fernando Groundwater Remediation

Los Angeles Dept. of Water & Power (LADWP) / USA

Local groundwater is a key resource that the city of Los Angeles relies upon as a major component of its water supply portfolio, with the primary source of local groundwater being the San Fernando Basin (SFB). The SFB underlies most of the San Fernando Valley and is home to one of the largest Superfund contamination sites in the US. As a result of groundwater contamination issues, over half of LADWP's production wells in the SFB have been removed from service. LADWP wants to restore groundwater by developing groundwater remediation facilities to remove contamination from the groundwater basin.

As part of the Owner's Agent Team Advisian is providing expertise in support of Remedial investigation / Feasibility Study, groundwater modelling, and risk assessment to evaluate and support design of Groundwater Remediation Facilities.

Cleaning up the SFB is a massive undertaking that will transform one of the city's key water sources to ensure that this Basin remains a consistent, stable, and reliable resource for years to come.



Gas Plant and Well Field Assessment and Remediation

Nexen ULC / Canada

Advisian provided environmental services to Nexen Energy ULC for the Balzac sour gas plant and associated facilities in the Balzac field. Services provided for the plant have included:

- Soil and groundwater assessment and regulatory monitoring
- Geophysical investigation
- Liability assessment, Phase 1 Environmental Site Assessment (ESA), and risk-screening evaluation
- Remediation design, implementation, and monitoring

After plant shutdown in 2011, we continued to provide support related to demolition, assessment, plant approval and renewal applications, and shoreline erosion control and mitigation.



Environmental Monitoring and Management Program

Maritime and Ports Authority of Singapore / Singapore

We provided environmental monitoring and management of dredging and reclamation activities for the future Singapore Tuas Mega Port.

Our solution delivers an active approach. Advisian uses advanced 3D hydrodynamic and sediment plume modelling to underpin the scientific assessment of potential impact from dredging and sediment disposal activities. Construction activities are planned ahead and optimized without compromising the receptors.

Advisian developed an integrated front- and back-end system to integrate the processes of the construction contractor, field survey, laboratory, and stakeholders. This web-based solution is a decision support platform used to predict, measure, and present in real-time how construction related activities will impact nearby environmental receptors.



Marine Survey and Remediation

Great Barrier Reef Marine Park Authority / Australia

In 2010 a bulk carrier ran aground on Douglas Shoal of the Great Barrier Reef. Over 40 ha of total area was directly impacted with contamination through antifouling paint and physical damage.

Our team was engaged, firstly, to assess the site condition and analyze options and plan remediation, and secondly, to provide advisory and project management services to support procurement and execution of remediation works.

In parallel, we are planning and facilitating Indigenous participation and supporting effective stakeholder engagement.

See more positive outcomes we've helped create at advisian.com

