Comprehensive Water Management Services

Solum Consulting Group

Solum and its allies have the professional team of experts in hydrology, hydraulics, hydrogeology and mining collaborating with our geotechnical and environmental management experts to offer the adequate, innovative and efficient solutions so your projects are in compliance with the financial, environmental and social responsibility objectives, providing superficial and groundwater management, which is essential for all mining projects. We can help with different needs such as water supply for processing, mine dewatering works, pit slope infiltration, water deviation works, and minimization of environmental impacts, among others.



We pay special attention to the water resources, which must be managed in the most efficient and sustainable way to guarantee their optimal use at each stage of the project.

Key Services

SUPERFICIAL AND GROUND WATER

WATER BALANCE

WATER QUALITY STUDIES

REGULATIONS AND PERMITTING superficial and Groundwater Management, modeling (conceptual and numeric), analysis, supply and impacts.

Water balance to consider all the interactions between superficial and groundwater and catchment hydrology analysis to develop water management strategies during operation and closure.

Monitoring of superficial and groundwater, modeling, water resource regulations, sampling programs, water quality analysis, geochemistry and transport and user analysis.

Support for permitting from basic government information provision about the requirements, procedures and document costs.

Hydrogeologic Field Investigations

The field investigations are carried out with the purpose of improving the understanding of soil conditions and during this process, hydrogeology plays an essential role in analyzing how water enters the soil, how water flows underground through aquifers, and how groundwater interacts with nearby soil and rock.

> Well installation at the Sonora Lithium Project Bacanora Minerals



Hydrology and Hydrogeology



Engineering Solum and its technical allies

Hydrology services

Modeling and analysis

Water balance

Deviation structures (channels, berms, dumps)

Geochemical characterization

Water quality assessments

Well design, among others.



Field Work Our sister company: RA Solutions

Field supervision

Hydraulic conductivity analysis

In-Situ tests

Packer/Slug tests

Groundwater sampling and monitoring

Pump tests and air-lift tests

Piezometer and well installations



Regulations

We have the knowledge and the environmental framework and instruments applicable to mining operations, legal requirements, environmental risks and changes in land use.

- Sampling and inventories
- Technical studies
- Application process and guidelines
- Permitting process
- Baseline studies
- Audits

Conagua Permitting Study - Sonora Lithium Project (Bacanora Minerals)

Support for Water Permitting

2012 - 2014

Sonora Lithium Project, Mexico MIA, water rights,

and change of land use.





Fénix Project, Mexico

MIA Modification for In-Pit Tailings Deposit. Preventive report.



2018 - 2019

El Aguila Proyect, Mexico Conagua Permitting Support for the

TSF.

