

Hydrogeologist/Hydrologist

Reports to: Head of Licensing & Consultancy

Key Purpose of the Role:

As a key member of the Nicholls Licensing & Consultancy Team, your role as a hydrogeologist/hydrologist will be to study the distribution, flow and quality of water underground and on the surface.

You'll interpret technical data and information from maps and historical documents to build a conceptual model of groundwater/surface water flow and quality. Collating the relevant data into Prognosis Reports for use internally by the wider Nicholls team and externally to clients and sub-contractors to assist with decision making. You will also be working with the Nicholls Licensing and Consultancy Team on surface water investigations for client projects.

Responsibilities:

As a hydrogeologist/hydrologist working at Nicholls, you'll need to:

- apply a knowledge of fundamental geology to develop an understanding of how rock types and structure in an area impact on groundwater occurrence and movement
- understand and interpret maps, geographical data, historical evidence and models to build up a picture of the groundwater regime and/or land contamination, often based on incomplete information
- use computers to model groundwater flow, chemistry and temperature according to geological formations, surface water flow and man-made influence
- undertake field work and site visits for investigative and monitoring purposes
- design and commission boreholes, and sample and measure groundwater and surface water
- undertake environment impact assessments of groundwater abstraction and management activities
- analyse collected information, to assess and predict the impact of activities such as landfills, construction developments and mining or agriculture, on groundwater quality and resource availability
- liaise with other hydrogeologists, hydrologists, ecologists, engineers and other professionals in related fields
- ensure compliance with environmental legislation and keep up to date with technological and legislative developments
- write reports for clients, which can be understood by people who don't necessarily have a technical background
- answer technical queries and provide advice to the wider Nicholls team, clients and the public in writing and over the telephone
- work within health and safety guidelines
- work with specifically-designed computer modelling packages to assess the most effective methods of managing available water in a particular area
- study the effects on flows brought about by changes in land use, such as afforestation or crop irrigation
- plan responses to specific weather conditions, such as droughts and floods, and assess the impacts of such events on water catchments and supplies
- estimate water yields, taking into account the utilisation of water in a specific natural drainage area (catchment)
- assess the relationship between rainfall, run off, and soil and rock features for the catchment
- investigate factors affecting acidity, nitrate levels or other diffuse pollution of surface water
- calculate and audit water resource systems and analyse this data
- implement relevant regulations
- deal with enquiries from external bodies and individuals, such as water regulators, consultants and researchers
- liaise with specialists, consultants and clients
- supervise the collection, processing and evaluation of data for water resource planning and flood management
- apply hydrological and statistical techniques to water resource modelling and analysis
- keep up to date with new research and techniques in all areas of hydrology

Hydrogeologists/hydrologists working for Nicholls may be involved in:

- finding new water supplies
- siting new wells
- testing water quality
- protecting water supplies from pollution
- de-contaminating wells
- water resources planning
- reservoir and river flood risk assessment
- water quality
- drainage

Core competencies, knowledge and experience:

- Honesty / Integrity / Reliable / Team Player
- Have excellent interpersonal skills with clients, colleagues, other professionals and continually being a great communicator
- Excellent written and oral communication (written and verbal), Right First Time Approach
- Computer proficient
- Interest in hydrology, geology, sustainability and the environment
- Ability to prioritise and be organised and being able to handle Information accurately
- Tenacity
- Ability to build relationships
- Individual Thinking and have an eye for detail
- Commercially aware
- Scheduling, monitoring and control skills
- Flexibility and have an ability to anticipate issues
- Problem solving skills
- Ability to consider impact of actions
- Ability to communicate status of key tasks clearly
- Evaluate urgency of issues for resolution
- Exceptional service delivered to our clients -Do what we say we will for our customers & colleagues
- Ability to work collaboratively with all members of the Company