

Ministry

Environment and Protected Areas

Describe: Basic Job Details

Position

Position ID

Position Name

Senior Water Adm Eng(Hydrogeo)

Requested Class

Engineering & Related Level 2

Job Focus

Operations/Program

Supervisory Level

00 - No Supervision

Agency (ministry) code

Cost Centre

Program Code: (enter if required)

Employee

Employee Name (or Vacant)

Organizational Structure

Division, Branch/Unit

RAD, Regulatory Assurance/Approvals



Supervisor's Position ID

Supervisor's Position Name

Supervisor's Current Class

Senior Manager (Zone 1)

Design: Identify Job Duties and Value

Job Purpose and Organizational Context

Why the job exists:

Reporting to the Water Approvals Team Lead, the Water Administration Engineer (hydrogeologist) is a front-line position that directs and undertakes work that administers the *Water Act* with a focus on Groundwater. Through technical review and engineering expertise, the Engineer develops authorizations for the Director's decision, for proponents to undertake activities under the *Water Act* within the framework of provincial legislation, policies and the current business plan. The regulatory system is applied to ensure activities proceed in an environmentally responsible and sustainable manner.

The Water Administration Engineer provides community level service and represents the department by meeting with local authorities, industry and the general public, to explain department programs, services and policies and assisting them to access to the same. The position also represents the region/department at public hearings and appeals, and on internal/external committees. It provides consultation/information and advice to assist and expedite approval processes and abatement activities. It involves extensive interaction with clients and stakeholders and requires knowledge of diverse disciplines and good engineering practices.

The position also provides technical expertise and advice to Compliance and Policy Branch regarding water management issues and The Water Administration Engineer will help develop a new regulatory frameworks that involves outcome based environmental management systems.

The Water Approvals Engineer works alongside technical staff of the Water Team and may supervise junior technical staff. The position provides initiative, engineering judgement and coordinates various engineering specialties and other department agencies and public inputs required to resolve water management problems.

Responsibilities

1. Process applications submitted under Water Act legislation such that authorizations are issued efficiently and effect cumulative effects management of the water resource pursuant to the Water Act and it's associated Regulations, Codes of Practice, policies and guidelines.

Activities:

- Process primarily Groundwater applications submitted under *the Water Act* such that authorizations are issued in a timely and efficient manner through fair and transparent application process, meeting the needs of the applicant and other stakeholders, are consistent, and result in desired environmental outcomes.
- Facilitate pre-application meeting for projects involving multiple regulatory approvals for a single activity with a high risk of environmental, social, or regulatory conflict.
- As part of application review process send referrals, deal with environmental issues, resolve public concerns raised through public consultation process.
- Coordinate process among different groups for project requiring authorizations under various Acts mandated to Environment and Parks.
- Provide information to proponents regarding *the Water Act* and applicable policies and standards.
- Liaise with applicants, statement of concern filers and public interest groups to facilitate issue discussion and resolution.
- Write effective and enforceable clauses to ensure effective management, monitoring and control of environmental issues through the review of applications and preparation of authorizations for the projects within the region.
- Participate as needed, in Environmental Appeal Board hearings.
- Senior Water Administration Engineer are delegated with Designated Director authority under the Water Act for issuing Temporary Diversion Licence.

2. Review Environmental Impact Assessments (EIA) submissions within the bounds of the Water Act and associated Regulation, Policies and Guidelines.

Activities:

- Participate in the early aspects of the EIA review process, i.e., development of the terms of reference and participate in workshops.
- Act as a technical reviewer of an EIA with respect to Environmental issues mandated under *the Water Act*.
- Review environmental impact assessment (EIA) submissions within the bounds of *the Water Act* to achieve EIA completion in a timely manner.
- Participate as needed in Natural Resource Conservation Board (NRCB) proceedings.

3. Participate in the Transformation required by Alberta Environment and Park's Regulatory Assurance Framework to provide an effective and efficient regulatory assurance system that fosters environmental sustainability.

Activities:

- Actively participate in the development of the Digital Regulatory Assurance System and associated policies and procedures.
- Review collected Structured Data and Annual Reports from approval/licence holders.
- Provide technical support in active compliance files including review of technical reports.
- Work collaboratively with compliance group for inspections and to deal with contraventions of *the Water Act* and contraventions of Authorization conditions.
- Participate in Joint approval/compliance inspections.
- Perform proactive inspections of approved projects and facilities.

4. Represents Department interests and issues through participation on internal and external review teams/committees and provides technical expertise and input to public hearing and appeal processes.

Activities:

- Communicate with members of the public regarding the impact of existing or proposed projects, including attending public meetings to discuss issues, preparing letters representing the Department's position and holding conversations and in person and virtual meetings to resolve environmental issues.
- Participate on internal standards/policy development committees and provides technical input and regional perspective to ensure the proposed policy/program development guidelines meet regional needs and interests.
- Participate on external standards/policy development committees and provides technical input and the Department perspective to ensure the proposed policy/guideline document meets the need and interest of the Department.
- Work effectively with other regional colleagues to assist each other and to deliver an effective and consistent regional program.
- Provide advice to the Minister of Environment and Parks and executives, within the mandate of *the Water Act* and applicable policies, in a timely manner, and demonstrates proactive environmental protection and that rules and regulations are in place and enforced.
- Represents regional interests and issues through participation on internal and external review teams/committees.
- Liaises with industry, stakeholders, environmental groups and the general public to provide information and to develop and maintain

awareness of regional issues related to assigned activities.

- Provide feedback with respect to *the Water Act* on referrals sent by other departments or government agencies
- Identify concerns and issues relevant to the Department's mandate, and issues raised by the stakeholders. Analyze the issues based on scientific principles and prepare proposals to address the issues using professional skills and professional judgment. The Approvals Engineer's professional opinion, relevant Department policy, and business plan components, forms the basis for the Department's position on the stakeholder concerns and issues.
- Monitor performance, progress and quality service and recommend where improvements can be made.

5. Supports continuous improvement initiatives for abatement issues (i.e. activities/actions in situations where problems have occurred or are occurring and where enforcement action is not considered appropriate).

Activities:

- Meet with industry officials or industry association representatives to discuss strategies for industries to improve their environmental performance.
- Work with industry to develop initiative, environmentally acceptable and cost effective options for resolution of identified problems.
- Provide assistance to industry to expedite approval/regulatory process.

6. Coordinate with other Agencies and regulators for developing operational policies and working collaboratively for project requiring approval from more than one regulator:

Activities:

- Coordinate with Alberta Energy Regulator on emerging issues.
- Work collaboratively with Alberta Energy Regulator for developing operational policies.
- Manages or participates in joint process for energy related development as part of the Alberta Utility Commission approval process.
- Represents the region/department at Alberta Utility Commission, Natural Resources Conservation Board to provide technical expertise and regional perspective.

7. Common Employee Commitments to ensure APS Values are demonstrated in interaction with others (internally and externally) to contribute to organization's success and fulfil job expectations as identified in the goals and action in annual; performance agreement:

Activities:

- Demonstrate the Alberta Public Service Values of Respect, Accountability, Integrity and Excellence in interaction with others
- Contribute to positive and safe work environment.
- Contribute to organization's success and fulfil job expectations as identified in the goals and action in annual; performance agreement.
- Support team work and collaborate with other to achieve branch, divisional, department wide goals.
- Acquire necessary trainings and apply the learnings in day-to-day work.
- Attend conferences, courses and seminars for updating knowledge and professional excellence.
- Perform work in a safe manner consistent with the Department's Occupational Health and Safety requirements and the OH&S plans.
- Acquire mandatory trainings in a timely manner.

8. Contribute to Departmental and Regional Strategic Initiatives to ensure branch goals are aligned with regional/ divisional and department strategic initiatives.

Activities:

- Participate in the development and implementation of Departmental operation plans.
- Participate in the development and implementation of Regional operation plans.



Problem Solving

Typical problems solved:

The Senior Water Administration Engineer requires the ability to apply scientific principles/theories to varied situations with consideration for policy, as well as the economic, legal and social impact of actions taken (i.e. the "big picture" perspective).

Types of guidance available for problem solving:

Legislation, regulations, guidance documents, departmental policy, and information from other jurisdictions is used as part of problem solving

Direct or indirect impacts of decisions:

The position ultimately provides information related to statutory decisions for the issuance of approvals and licences.

Key Relationships

Major stakeholders and purpose of interactions:

Approvals/licences drafted by the Water Approvals Engineer and the individuals supervised by the position, directly impact municipalities and water users in all sectors of the economy by establishing terms and conditions that impact the environment and the public.

The Senior Water Administration Engineer represents the department with the media and internal and external stakeholders and clients in providing technical and professional advice, recommendation and information.

The stakeholders that the Senior Water Administration Engineer typically deals with other industry representatives, professional peers in industry and consulting roles, government technical specialists and other government departments (federal, provincial and municipal), but can also include environmental groups, Indigenous groups, other special interest groups, individual landowners or citizens, department executive management, political representatives of local government, MLA's or representatives or representatives of MLA's offices.

The Senior Water Administration Engineer must be able to understand technical concepts/issues and provide descriptions or responses to stakeholders that are at an appropriate technical level.

Senior Water Administration Engineer are delegated with Designated Director authority under the Water Act for issuing Temporary Diversion Licence.

Required Education, Experience and Technical Competencies

Education Level	Focus/Major	2nd Major/Minor if applicable	Designation
Bachelor's Degree (4 year)	Engineering	Other	PEng

If other, specify:

Hydrogeology, resource engineering/environmental engineering equivalents, Masters preferred

Job-specific experience, technical competencies, certification and/or training:

The minimum requirements for this job are: a Bachelor of Science degree in Engineering, in hydrogeology or resource engineering/earth science/environmental engineering equivalents, Master's preferred; a minimum of 5 year of related work experience; and are eligible for membership in the Association of Professional Engineers, and Geoscientists of Alberta (APEGA).

The incumbent should also have the following:

Knowledge of:

- The *Water Act* legislation, Regulations, Codes of Practice, policies and guidelines.
- Water Act Application process for acquiring approval/licence
- The Environmental Appeals Board process.
- Broad knowledge of geology and hydrogeological principles, aquifer evaluation techniques, impact assessment techniques and groundwater modelling.
- Hydrology, hydraulics and other environmental topics.
- Monitoring practices.
- Cumulative effects management.

Awareness of:

- Familiarity with compliance and enforcement procedures under the Water Act, Environmental Protection and Enhancement Act, Public Lands Act and the accompanying regulations and policy, within their scope.
- The EIA review process.
- The Alberta Energy Regulator and their mandate.
- Natural Resources Conservation Board and their mandate.
- Selected federal agencies (DFO, Transport Canada, and Environment Canada) and their mandate.
- Monitoring practices.

Ability to:

- Interpret technical reports and drawings specifically in relation to aquifer characteristics reports and geological assessments.
- Communicate effectively, in both written and verbal forms, with technical and non-technical groups and/or individuals.
- Work independently (minimal or no supervision).
- Ability to apply technical knowledge and professional judgement to providing creative approaches for resolution of environmental issues, recommending appropriate authorization conditions, and for providing input into environmental issues management documents, abatement strategies and regulatory reform.
- Responsibly represent the Department's position in public forums and in Appeals process.
- Translate highly technical information into a form of understandable by the public.

- Learn and adapt to change.
- Ability to resolve conflicts.

Skills:

- Negotiation, facilitation and mediation skills.
- Interpersonal skills.
- Analytical thinking and problem solving.

Familiarity with computer applications such as spreadsheets, databases, word processing and internet access.

Behavioral Competencies

Competency	Level A B C D E	Level Definition	Examples of how this level best represents the job
Creative Problem Solving	<input type="radio"/> <input checked="" type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	<p>Focuses on continuous improvement and increasing breadth of insight:</p> <ul style="list-style-type: none"> • Asks questions to understand a problem • Looks for new ways to improve results and activities • Explores different work methods and what made projects successful; shares learning • Collects breadth of data and perspectives to make choices 	Working independently, the position exercises professional judgment when assessing the applications for water act licences and approvals. While there are documented guidance in many situations, actual situations often require a professional assessment.
Systems Thinking	<input type="radio"/> <input type="radio"/> <input checked="" type="radio"/> <input type="radio"/> <input type="radio"/>	<p>Takes a long-term view towards organization's objectives and how to achieve them:</p> <ul style="list-style-type: none"> • Takes holistic long-term view of challenges and opportunities • Anticipates outcomes and potential impacts, seeks stakeholder perspectives • Works towards actions and plans aligned with APS values • Works with others to identify areas for collaboration 	Decisions recommended must account for departmental objectives related to environmental, social, and economic outcomes
Agility	<input type="radio"/> <input checked="" type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	<p>Works in a changing environment and takes initiative to change:</p> <ul style="list-style-type: none"> • Takes opportunities to improve work processes • Anticipates and adjusts behaviour to change • Remains optimistic, calm and composed in 	Decision-making must be agile enough to account for different levels of risk Engagement with stakeholders often raises issues requiring agile thinking, and conflict management.

		<p>stressful situations</p> <ul style="list-style-type: none"> • Seeks advice and support to change appropriately • Works creatively within guidelines 	
Drive for Results	<input type="radio"/> <input checked="" type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	<p>Works to exceed goals and partner with others to achieve objectives:</p> <ul style="list-style-type: none"> • Plans based on past experience • Holds self and others responsible for results • Partners with groups to achieve outcomes • Aims to exceed expectations 	<p>Focuses on material aspects of decisions to be made to ensure decisions are made in a timely fashion</p>