

New

Ministry

Energy and Minerals

Describe: Basic Job Details

Position

Position ID

Position Name (200 character maximum)

Manager, Engineering

Requested Class

Manager (Zone 2)

Job Focus

Supervisory Level

Cost Centre

Program Code: (enter if required)

Employee Name (or Vacant)

Organizational Structure

Division, Branch/Unit

Ministry Services/Professional and Program Services

☒ Current organizational chart attached?

Supervisor's Position ID

Supervisor's Position Name (30 characters)

Supervisor's Current Class

Senior Manager (Zone 2)

Design: Identify Job Duties and Value

Job Purpose and Organizational Context

Why the job exists:

Organizational Context: The PPS Branch provides scientific and technical services to Alberta Energy (and other Departments at times) to facilitate the development of policy and delivery of programs in a strategic and integrated manner across the Government of Alberta. It is the Department of Energy's nucleus of professional engineers and geologists, mapping expertise and program specialists, which are grouped into four areas: (i) Resource Mapping and Analysis, (ii) Engineering, (iii) Geology, and (iv) Program (design, implementation and monitoring) Services. The task of responding to and delivering upon the Branch's client needs is managed by an active and comprehensive management structure with the objective of providing technical integrity and expertise, in accordance with APEGA standards of professional practice for professional members in the branch including engineering.

Job Purpose: Reporting to the Director of Engineering, this position is responsible for providing strategic leadership and is accountable for the delivery of critical technical inputs to support Government of Alberta policy and operations. The role involves delivering expert assessments, advice, and opinions to guide policy and operational decisions, including technical advice on resource assessments, reservoir modeling, facility constraints for resource development, enhanced oil recovery schemes, energy metrics (including environmental emissions related to energy), upgrading and

refining technology assessments and modeling, energy infrastructure assessments, oil sands, petroleum and natural gas reserves, coal and mineral projects, CCUS, and land-use framework related projects. Additionally, the position entails developing and implementing plans for key projects, responsibility for project execution, and coordinating with cross-functional teams to ensure successful delivery. Strategic planning is a crucial aspect, involving the formulation of strategies to optimize resource utilization and enhance operational efficiency, conducting comprehensive evaluations to inform decision-making and policy development, and reporting findings and recommendations to senior management and stakeholders. The role is responsible for leading and managing a group of engineering professionals, fostering a collaborative and productive work environment, conducting performance evaluations, and promoting a culture of continuous improvement and innovation. Furthermore, engaging with internal and external stakeholders to build strong relationships and facilitate effective communication is essential, representing the organization in meetings and discussions, and advocating for technical and strategic initiatives.

The Manager is relied on to apply highly developed business, leadership, program management, energy sector, engineering, and operational expertise to deliver planning and assessments with technical integrity in accordance with APEGA Professional Guidelines.

The Manager is a P.Eng. member of APEGA in good standing and is expected to support APEGA's mandate, activities, and Boards. The position will also be responsible for the development of any engineer's in training who are their direct reports, requiring oversight and sign-off on any engineering work delivered.

Reporting to the Director, Engineering, this position performs all work in accordance with relevant government and Ministry legislation, regulations, policies, and guidelines, as well as APEGA standards of professional practice.

Responsibilities

Job outcomes (4-6 core results), and for each outcome, 4-6 corresponding activities:

Project Management and Mentoring

1. **Leads, coaches and mentors engineers** through complex technical challenges and ensure that the standards of professional practice are met by both P.Eng and EITs. Responsible for sign-off and development of professional work products that are completed by EITs under their guidance.
2. **Plan and Deliver projects** from ideation through to execution. Leads and manages a group of professional staff and coordinates issues management activities by delegating responsibilities.
3. **Provide day-to-day supervision** including identification of work priorities and ensuring appropriate performance management is completed. Ensuring staff meet performance expectations and providing support to team members.
4. **Knowledge transfer** in areas of expertise to ensure business continuity and increased capacity for knowledge building in the team and across the Department.
5. **Implementing project management tools** and methodologies to ensure tested, timely and effective delivery for stakeholders.

Standard Operating Procedures and KPI Development

1. **Identify Engineering processes requiring standardization** including project management support, technical analysis, data collection, and technical reporting.
2. **Draft, Review, Validate and Maintain SOPs** to include scope, validation with stakeholders, required forms or templates, and ensure they are effective and useful internally and with stakeholders.
3. **Define the Purpose and Goals of KPIs**, connecting them to organizational objectives, and how the engineering team's performance contributes to operational and strategic plans.
4. **Create Realistic Targets for improvement** by establishing baseline performance levels and setting SMART goals for each KPI.
5. **Implement Data Collection and Reporting Processes** to identify which databases, regulatory reports, internal reports, etc. will be used in the generation of KPIs and SOPs. In doing so, establish dashboards or other visual tools to easily track and communicate delivery of KPIs and SOPs.

Techno-economic assessments related to energy and minerals program development/management

1. **Lead and plan** assessments of industry proposals brought forward to the Department and coordinating with

various technical, policy and program staff.

2. **Responsible for oversight** of evaluations of Petroleum and natural gas, Oil Sands, coal and mineral, CCUS, disposal, renewable and/or alternative energy related projects.
3. **Provide expertise** and advice on project feasibility, performance and production.
4. **Manage complex interdisciplinary problem solving** to ensure integration of methodologies as part of departmental and government processes and projects.
5. **Coordinate and deliver** technical input to briefings, working groups and other business areas to support the decision making process for operations, program decisions and policy development.

Tracking technology, regulatory and policy developments and their scientific basis

1. **Monitor** announcements and publications from regulatory bodies policies for energy development (including renewables), and resource development frameworks (e.g., geothermal, lithium).
2. **Coordinate analyses** of the scientific studies and data that underpin proposed or enacted regulations to understand the technical challenges and requirements for compliance.
3. **Consult** with industry and internal working groups related to policy and program development to provide engineering perspectives and identify areas where clarity or further research is needed to inform effective regulation.
4. **Develop assessments** of the scientific implications of legislation, mechanisms and other market-based instruments designed to incentivize behavioural changes adoption technologies in industries related to Energy and Minerals.

Coordination and Communication

1. **Build and maintain relationships** with internal networks and experts within government agencies, academic institutions, research organizations, industry associations and energy industry.
2. **Guide and influence** the direction of regulations, policy and research related to Energy and Minerals' mandate through the participation in multi-stakeholder teams and consortiums.
3. **Conduct internal stakeholder analysis** to determine ministries and work teams that are connected or impacted by the issues.
4. **Liaise with Energy program areas** and other ministries, as necessary, to share information about initiatives and to create opportunities for feedback and input.
5. **Coordinate input** from other teams and ministries, including synthesis of information, summarizing, re-writing, and/or editing material as necessary.
6. **Develop tools to report on progress** of activities, projects and initiatives with Energy and Minerals stakeholders and executive leadership.

Problem Solving

Typical problems solved:

The Manager will operate in a dynamic and complex environment involving multiple ministries, governments, and industry stakeholders. This position demands a high attention to detail, strong organizational and planning skills, and an ability to prioritize and deliver on multiple ongoing projects.

The Manager must:

- Operate in an environment of ambiguity. Roles, responsibilities, process, and deliverables are often fluid and left to project teams to determine for themselves.
- Coordinate initiatives and projects with limited knowledge or necessarily previous exposure to the policy/program area or focus.
- Perform a highly collaborative role, interacting with staff at all levels, and ensuring that input from all

necessary stakeholders is delivered in documents in a coordinated and comprehensive manner that aligns with the professional practice standards of APEGA.

- Ensure that technical information is reported, analyzed, and reviewed to ensure that division/ministry business outcomes are delivered and align with professional practice guidelines.
- Understand that issues are diverse, complex, and politically sensitive, with this position expected to demonstrate discretion and political acumen.
- Initiate the delivery of high quality work in very short to intermediate timeframes. Quality and accuracy is critical, given that documents and ministerial orders are presented to executive leadership as well as external stakeholders.
- Have the ability to lead and support large, high profile projects, as many activities are required by regulation. Many additional initiatives are at the forefront of executive leadership's priorities.
- Demonstrate exceptional agility, as the Manager is required to shift focus due to the complexity and issues management nature of the work.
- Initiate, plan, organize and implement projects based on high-level direction and the intended outcome.
- Lead or conduct research on various topics while incorporating a clear understanding of issues sensitivities and the overall impact of recommendations, ensuring that senior management, and executive leadership as necessary, are appropriately advised.
- Creativity and judgment are required to develop and present complex technical information in a manner appropriate for a variety of audiences.

Types of guidance available for problem solving:

This position is expected to maintain a broad view of the interests and priorities of both the Government of Alberta and the Ministry, while considering the implications of policies and regulatory initiatives in the context of the energy and mineral resource systems. This view should be maintained through the lens of technical and engineering competencies and professional practice while understanding and adhering to the scope of professionals within the team.

The Director provides general guidance and performance oversight, reviewing work for alignment with business plan goals and Department priorities, while the Manager is accountable for their own quality of analysis, recommendations and solutions provided and professional judgment. The director is responsible for linking regulatory, technical and policy complexities across files that are beyond the scope of the Manager's role.

Direct or indirect impacts of decisions:

The impact of decisions and recommendations made by the Manager are considerable. Decisions made and decisions recommended by the Manager have the potential for significant implications for the energy and minerals stakeholders, including regional economic and environmental outcomes. Decisions and recommendations affecting the ability of industry to develop resources can also have implications for the Ministry of Energy and Crown revenue. Issues are complex and often politically sensitive. This position is expected to maintain a broad view of the interests and business priorities of the Government of Alberta and the Ministry, and consider the implications of policies and planning initiatives in the context of the energy and mineral resource systems.

The Manager interacts extensively with internal and external stakeholders with varied backgrounds, interests and perspectives. The Manager must be able to influence others and lead and participate in discussions on challenging issues and policy questions towards achieving Department objectives. This position is expected to anticipate the potential effects of proposals and policy, ask the appropriate questions, and bring issues and options forward for consideration by senior and Executive leadership as appropriate.

The Manager works within the parameters of established legislation and regulations with significant discretion in determining how responsibilities are performed. The Director provides general guidance and performance oversight, reviewing work for alignment with government goals and strategic outcomes, while the Manager is accountable for their own quality of analysis, recommendations and solutions provided and professional judgment. The Director is responsible for linking policy complexities across files that are beyond the scope of the Manager's role. The comprehensiveness of engagement, consultation and advice provided to clients and stakeholders is critical, with the work of the Manager also evaluated based on the effectiveness of partnerships and working relationships established with the wide variety of stakeholders and clients. The position is tasked with ensuring appropriate technical staff are contacted on various files, requiring significant organizational awareness and strong relationships. The work of several units is regularly impacted by the decisions and analysis of the Manager.

This position is delegated considerable independence to exercise judgment when presenting results of research and analysis and associated recommendations to senior representatives and cross-ministry colleagues, developing policy options and recommendations, and prioritizing responsibilities. As a member of cross-ministry teams the role of which is

to undertake complex and real-time analysis of planning files, the Manager is empowered to speak on behalf of the department and make in-meeting decisions to advance solutions. Matters with the potential to significantly impact Ministry operations, resource allocation, or client and stakeholder relations are referred to and discussed with the Director and Branch management team. Matters with significant precedent-setting possibility are referred to the Director.

Key Relationships

Major stakeholders and purpose of interactions:

The Manager has regular and ongoing contact with:

- Branch and Ministry representatives to exchange information, resolve issues, ensure Ministry priorities are appropriately considered, and provide consultation, advice, technical assessments and recommendations. In addition, significant work and consultation is done in coordination with other Ministries to support cross ministry initiatives and operations;
- Representatives of other municipal, provincial and federal departments and agencies to exchange information; resolve issues; and represent Ministry interests in relation to operations, policy development and implementation and other related initiatives and issues; and
- Stakeholders, including industry associations and energy and mineral companies, and other diverse stakeholders to exchange information, provide consultation and advocacy, represent Ministry interests, and coordinate activities in relation to policy-related initiatives.

Required Education, Experience and Technical Competencies

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

If other, specify:

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

The Manager must have the following attributes:

A degree in an Engineering field along with P.Eng. registration in good standing to ensure compliance with APEGA professional practice guidelines are upheld.

University graduation in the field of engineering plus four (4) years progressively responsible related experience or equivalent as described below

- Equivalency: Directly related education or experience considered on the basis of:

--> 1 year of education for 1 year of experience; or

--> 1 year of experience for 1 year of education.

The Manager should have the following knowledge:

- Understand the process of analysis and assessment of Department and/or external policies and regulations related to science, technology and innovation, including identifying gaps and issues, researching options and recommendations.
- This position will provide expert advice, options, technical opinions, and recommendations on how to develop and implement operational, policy and program changes related to Energy and Minerals' priority initiatives.
- Knowledge of policy, planning and decision-making processes in large and complex organizations, as a key function of the position and branch is navigating organizational systems and structures to get timely decisions to move projects forward efficiently.
- Provincial business priorities and emerging issues. Engineering issues will typically either focus or be related to these priorities/issues.
- Familiarity with best practices and guidelines under APEGA, research theories and methods, including organizational evaluation, project management approaches, and information/data management and security.
- Preparation of policy decision-making documents such as Ministerial Orders, Cabinet Reports, 4- column documents, Recommendations for Order in Council, etc.
- Comprehensive knowledge of the acts, regulations, and major policies administered by Energy and Minerals

and its ABCs as well as other provincial and federal legislation that is applicable to, and may impact, Energy and Minerals' priority initiatives.

- Other statutes to which the Ministry is subject, such as the Government Organization Act, Freedom of Information and Protection of Privacy Act (FOIPPA), the Alberta Public Agencies Governance Act (APAGA), etc.

The Manager should have the following skills and abilities:

- Excellent interpersonal skills, relationship management and communication skills, including the ability to consult, negotiate with, and communicate direction to, Ministry staff (program areas and senior management).
- Well-developed analytical and research skills. Ability to assess complex problems and issues and prepare strategies and solutions in response.
- Ability to probe for, and subsequently present, information and options that facilitate good Ministry and government decision-making. Ability to develop an idea from the conceptual stage through to implementation, to translate concepts and objectives into a clear and meaningful policy and legislative options.
- Providing a leadership role in amending legislation, taking into account and balancing a wide range of conflicting influences to ensure that policies are integrated to facilitate the effective delivery of programs and services.
- Relationship, consensus building, and facilitation skills to manage and coordinate small groups in meeting project deliverables; ability to work collaboratively in multi-disciplinary, multi-level team settings.
- Excellent written communication skills with an aptitude for detail and accuracy and the ability to modify writing style for different target audiences.
- Independent and self-directed working style with excellent project planning, strong time management, and well-developed organizational skills for managing individual projects and project teams; managing under pressure of short timelines; and ability to assess and balance competing demands on confidential and sensitive matters.
- Ability to exercise a high degree of independent decision-making by exercising sound judgement and objectivity in dealing with program areas.
- Good personal decision-making, sound judgment, and objectivity when working with program areas.
- Strong political acumen and ability to assess sensitivity and risk to specific legislative issues and take actions to manage or mitigate those risks.
- Well-developed oral and presentation skills for conveying information to peers and senior management.
- Competency in Microsoft Office software, (e.g. Word, PowerPoint, Excel, Microsoft Project) to organize and present information that promotes good decision-making.
- The Manager position requires the ability to function with maturity in most components of the GOA Competency Model, but the following are deemed to be of somewhat higher profile to success in the position - Systems Thinking, Creative Problem Solving, and Drive for Results.

Experience:

- Policy development and planning.
- Project management experience, including setting and meeting timelines, and delivering results.
- Proven ability to establish positive working relationships with a broad variety of clients and demonstrated success in managing complex issues within short timelines.
- Managing information flows to ensure decision-makers have timely access to information.
- Ability to perform effectively on and with a variety of project teams, and with many stakeholders, dealing with highly complex issues and interrelationships.
- Leading planning sessions, writing project charters, and establishing outcomes and measurements.

- Experience with databases search techniques and with computer applications including Microsoft Word, Excel, SharePoint, Visio, and PowerPoint and ability to prepare documents with charts and graphs.
- Conducting research, analysis, and environmental scanning, and developing strategy documents in response to issues.

The manager must be able to:

- Consistently demonstrate initiative and professional judgment;
- Provide high quality deliverables and operate effectively within a complex organization and continually changing business environment;
- Quickly become familiar with new or newly relevant technologies, regulations, or pieces of legislation, including those outside the mandate of the Department of Energy;
- Quickly review, understand, and administer formal agreements, contracts, regulations and Ministerial Orders;
- Understand the social, economic, political and environmental implications associated with energy, environmental, and resource development policies and projects;
- Proactively anticipate and plan for requirements of Ministry, Government of Alberta departments, diverse clients and stakeholders;
- Prioritize actions effectively in order to respond to numerous, diverse challenges and demands in a timely manner, including being adaptable and flexible when faced with changing situations and priorities;
- Identify and monitor sensitive issues and develop appropriate scientific responses and recommendations;
- Identify emerging trends, issues and opportunities relating to project management and technical analysis functions;
- Develop and maintain collaborative working relationships with colleagues, clients, stakeholders and other affected parties;
- Maintain a strategic focus while delivering results at both the strategic and operational level; and
- Function successfully independently as well as lead and contribute effectively within team environments.

Behavioral Competencies

Pick 4-5 representative behavioral competencies and their level.

Competency	Level					Level Definition	Examples of how this level best represents the job
	A	B	C	D	E		
Drive for Results	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<p>Takes and delegates responsibility for outcomes:</p> <ul style="list-style-type: none"> • Uses variety of resources to monitor own performance standards • Acknowledges even indirect responsibility • Commits to what is good for Albertans even if not immediately accepted • Reaches goals consistent with APS direction 	<p>Regularly reviews project progress using available tools, conducts performance evaluations, and seeks feedback from team members to ensure high standards are maintained.</p> <p>Recognizes the impact of decisions on other departments and stakeholders, and takes ownership of outcomes, even when not directly involved in the execution.</p>

			<p>Prioritizes Energy and Minerals' business goals that benefit the province and advocates for solutions that achieve them.</p> <p>Aligns team objectives with the Alberta Public Service (APS) strategic goals, ensuring that all projects contribute to the broader mission and vision of the organization.</p>
Agility	○ ○ ● ○ ○	<p>Identifies and manages required change and the associated risks:</p> <ul style="list-style-type: none"> • Identifies alternative approaches and supports others to do the same • Proactively explains impact of changes • Anticipates and mitigates emotions of others • Anticipates obstacles and stays focused on goals • Makes decisions and takes action in uncertain situations and creates a backup plan 	<p>Clearly communicates the reasons behind project adjustments and their potential effects on team members and stakeholders, ensuring everyone is informed and aligned.</p> <p>Recognizes the emotional responses of team members to changes and provides support and reassurance to help them adapt smoothly.</p> <p>Identifies potential challenges early in the project or policy lifecycle and develops strategies to overcome them, maintaining focus on achieving project objectives.</p> <p>Demonstrates decisiveness in ambiguous situations, making informed choices and preparing contingency plans to address unforeseen issues.</p>
Systems Thinking	○ ○ ● ○ ○	<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, 	<p>Evaluates the long-term effects of engineering decisions and advice and actively seeks input from stakeholders to ensure comprehensive understanding and alignment.</p>

		seeks stakeholder perspectives <ul style="list-style-type: none"> • Works towards actions and plans aligned with APS values • Works with others to identify areas for collaboration 	Develops and implements strategies that reflect the Alberta Public Service (APS) values, ensuring that all initiatives support the organization's mission and ethical standards. Identifies opportunities for teamwork and partnership both within the team and with external entities, enhancing project success and innovation.
Develop Self and Others	<input type="radio"/> <input type="radio"/> <input checked="" type="radio"/> <input type="radio"/> <input type="radio"/>	Plans according to career goals and regular development: <ul style="list-style-type: none"> • Aligns personal goals with career goals • Leverages strengths; attempts stretch goals • Provides feedback and openly discusses team performance • Values team diversity, and supports personal development 	Utilizes personal and team strengths to achieve ambitious targets, encouraging continuous growth and development. Regularly offers constructive feedback and fosters open discussions about team performance to drive improvement and innovation. Embraces the diverse backgrounds and perspectives within the team, promoting an inclusive environment and supporting individual career growth and development.
