Chapter 2 Energy and Resources—Licensing and Inspecting Active Oil and Gas Wells and Facilities

1.0 MAIN POINTS

Saskatchewan's oil and gas industry contributed over \$1.1 billion to provincial revenues in 2022–23 with about 54,000 active oil and gas wells and over 8,000 licensed, active facilities in operation.

The Ministry of Energy and Resources licenses and inspects wells and facilities as part of its regulation of oil and gas activities in Saskatchewan. Assessing whether operators meet all licensing requirements and inspecting wells and facilities helps the Ministry to ensure safe operations. For example, the Ministry found operators not complying with requirements for almost 25% of over 21,000 inspections in 2023.

We audited the Ministry's processes to license and inspect active oil and gas wells and facilities. At December 31, 2023, we found the Ministry had effective processes, except it needs to:

- Implement a risk-informed plan for inspecting oil and gas wells and facilities. During 2023, the Ministry continued to work on a five-year project to inspect higher risk wells identified in 2021. Over 37,000 wells were not part of this project. The Ministry has not developed an ongoing process to determine risk levels of all wells and facilities requiring inspection and set a related inspection frequency beyond 2026.
- Develop central staff guidance to support consistent assessment and documentation of key risk areas inspected and enforcement actions. Having guidance would help staff to assess the most significant risks and take appropriate action when they identify non-compliance. We found Ministry staff gave operators different lengths of time to address similar non-compliance issues (e.g., fix berms around well sites).
- Comply with regulations by sufficiently assessing whether operators owe money to the Government of Saskatchewan and justify approving new well or facility licences when operators do owe money. One operator owed about \$2 million in outstanding royalties but continued to get seven new well licences in 2023.
- Review oil and gas waste disposal facilities' annual reports timely to determine whether environmental risks (e.g., waste spills) exist and require further action.
- Enhance reports to senior management by including analysis of regulatory activities like inspections, complaints received, and non-compliance found.

The Ministry of Environment assesses licence applications when a proposed well or facility has increased risk of environmental impact (e.g., near a water body). Environment needs to document its key judgments about environmental risks when evaluating applications. Insufficient assessments increase the risk of oil and gas activities having significant, adverse effects on the environment.

2.0 INTRODUCTION

We audited the Ministry of Energy and Resources' processes to license and inspect active oil and gas wells and facilities. The Ministry is responsible for licensing and inspecting oil and gas wells and facilities in Saskatchewan per *The Oil and Gas Conservation Act.* A primary purpose of the Act is to protect the environment, property, and public safety with respect to operations of the oil and gas industry.

2.1 Oil and Gas Wells and Facilities in Saskatchewan

Oil and gas operations are a key industry in Saskatchewan contributing over \$1.1 billion to provincial revenues in 2022–23.¹

Operators must obtain a licence from the Ministry of Energy and Resources before drilling, operating, or producing oil or gas. The Ministry also requires operators to obtain a licence to re-enter an abandoned well, deepen an existing vertical well, or change the trajectory of a well.² Further, operators require a licence before installing a facility near a well.³ There is no fee to apply for a licence.

The Oil and Gas Conservation Act and *The Oil and Gas Conservation Regulations* set requirements for operators to comply with as terms and conditions of a licence. This legislation makes the operator, or licensee, of a well or facility responsible for obtaining and complying with the licence. This legislation also enables the Ministry to use and enforce additional Directives that provide further guidance and requirements to operators of oil and gas wells and facilities.⁴

In addition, the Act sets out that the Minister of Energy and Resources may designate any person as an inspector for any or all of the following purposes:

- > Determining whether a licensee complies with this Act
- Conducting a compliance audit of the licensee's practices in relation to the construction, alteration, operation, discontinuation, or abandonment of any well or facility owned by the licensee subject to this Act

Licensing and inspecting wells and facilities is one part of the Ministry's overall regulatory structure for regulating oil and gas activities in Saskatchewan. The Ministry also regulates reportable incidents (e.g., spills), site reclamation (e.g., once oil and gas wells are inactive), and pipelines.

The Ministry has four regional field offices located at Lloydminster, Kindersley, Swift Current, and Estevan, and a head office in Regina. Field offices are responsible for delivering programs and enforcing the requirements specified under the legislation and

¹ *Public Accounts 2022–23 Volume 1*, schedule 14.

 ² www.saskatchewan.ca/business/agriculture-natural-resources-and-industry/oil-and-gas/oil-and-gas-licensing-operations-andrequirements/oil-and-gas-drilling-and-operations/licence-to-drill-a-well (19 March 2024).
³ The Oil and Gas Conservation Regulations, 2012, define a facility as any building, structure, or equipment connected to or

³ The Oil and Gas Conservation Regulations, 2012, define a facility as any building, structure, or equipment connected to or associated with the production, storage, or processing of oil, gas, water, or other substances produced from or used in the production of oil and gas. A facility does not include a pipeline.

⁴ An example of a Directive relevant to this audit is Directive PNG001 Facility Licence Requirements, which outlines the eligibility criteria organizations must meet to licence facilities in Saskatchewan.

Directives. A manager leads each field office. The Ministry employs approximately 30 fieldoffice staff who go on-site to perform inspections. **Figure 1** is a summary of inspections the Ministry completed by region.

Figure 1—Wells and Facility Inspections between December 1, 2022, and November 30, 2023, by Region

Region	Total Inspections	
Estevan	4,860	
Kindersley	4,141	
Lloydminster	9,303	
Swift Current	3,415	
Total Inspections Completed	21,719	

Source: Adapted from Ministry of Energy and Resources' records.

At November 2023, Saskatchewan had about 54,000 active oil and gas wells and over 8,000 licensed, active facilities in operation.

In 2022–23, the Ministry spent \$24.8 million (2021–22: \$24.2 million) for its oil and gas regulatory activities (e.g., regulating pipelines, licensing and inspecting wells). The Ministry levies operators 90% of the total budgeted regulatory activity costs.⁵

2.2 Risk of Ineffective Regulatory Processes

Effectively assessing whether operators applying for a licence satisfactorily meet all requirements set by the Ministry of Energy and Resources helps ensure operators have the capacity to construct and operate wells and facilities in the province appropriately and safely. For example, Ministry staff need to verify operators do not have a significant history of regulatory non-compliance. Also, Ministry staff need to check whether the Ministry of Environment (Environment) has determined if operators meet environmental requirements to lessen environmental effects caused by oil and gas operations, such as adverse impacts to land, water bodies and wetlands, and wildlife habitat.

Appropriate and safe operation of oil and gas wells and facilities helps to mitigate potential incidents that may contaminate air, soil, or water and may pose a risk to human health, public safety, property, or the environment and wildlife. Examples of common oil and gas incidents include fires at an operating well or facility, equipment failures, and the release or spill of hazardous fluids or gases (e.g., highly poisonous hydrogen sulphide).

Operators report incidents related to wells and facilities to the Ministry of Energy and Resources near daily. Between January 1, 2023, and March 12, 2024, operators reported 151 incidents related to wells and 105 related to facilities; 49 of these incidents were still under investigation or required reclamation work as of March 2024. Historically, incidents causing significant damage (e.g., to the environment) occur infrequently. However, such incidents can have devastating consequences to human health and to wildlife, as well as significant costs in repairing the damage.

⁵ In 2022–23, the Ministries of Energy and Resources, Environment, and Agriculture spent \$26.4 million on oil and gas regulatory activities. <u>pubsaskdev.blob.core.windows.net/pubsask-prod/141454/EROilGasCostRecoveryRegulatoryLevyAnnual</u> <u>Report%252B2022-23.pdf</u> (28 March 2024).

Monitoring operators to ensure they meet licensing requirements, and taking appropriate enforcement actions when they are not, helps to reduce the risk of environmental or property damage and threats to human health.

3.0 AUDIT CONCLUSION

We concluded, for the 12-month period ending December 31, 2023, the Ministry of Energy and Resources had effective processes, except in the following areas, to license and inspect active oil and gas wells and facilities.

The Ministry needs to:

- Implement a risk-informed plan to inspect oil and gas wells and facilities (e.g., ongoing process to determine risk level of wells and facilities and related inspection frequency)
- Develop standard expectations to guide staff to support consistent assessment and documentation of key risk areas inspected and enforcement actions
- Comply with regulations by sufficiently assessing whether operators owe money to the Government of Saskatchewan and justify approving new well or facility licences for those operators
- Review waste disposal facilities' key annual reports timely to determine whether environmental risks exist and require further action
- > Enhance analysis reported to senior management about regulatory activities

Additionally, the Ministry of Environment needs to document its key judgments about environmental risks when reviewing and approving oil and gas well and facility applications identified as higher risk to the environment (e.g., near water, near sensitive wildlife habitat).

Figure 2—Audit Objective, Criteria, and Approach

Audit Objective:

Assess the effectiveness of the Ministry of Energy and Resources' processes, for the 12-month period ending December 31, 2023, to licence and inspect active oil and gas wells and facilities.

This audit focused on the Ministry's processes to license oil and gas wells and facilities, and to monitor operators' compliance with key operating requirements (e.g., through inspections). The audit did not assess the following processes that we previously assessed in separate audits at the Ministry of Energy and Resources:

- Regulating pipelines (2012 Report Volume 1, Chapter 5)
- Addressing and resolving incidents (e.g., oil spills) (2018 Report Volume 1, Chapter 4)
- Managing risks related to reclaiming sites once operators are finished producing oil from the site (2012 *Report – Volume 2*, Chapter 31)

Audit Criteria:

Processes to:

- 1. Approve licences for eligible applications for oil and gas wells and facilities
 - Communicate appropriate criteria for eligible operators consistent with legislation and good practice
 - Confirm applicants meet established criteria (e.g., use qualified staff, verify applicant information for new and amended licences)
 - Issue licences timely with appropriate terms and conditions to successful applicants

- 2. Monitor compliance with licence requirements
 - Set guidance for monitoring compliance with licence terms and conditions (e.g., risk-based inspection checklists, inspection procedures, penalties, escalation processes for identified non-compliance, how to enforce corrective action)
 - Set risk-based plans for inspecting licensed operators
 - Regularly assess compliance with licence terms and conditions (e.g., use qualified staff, complete inspections as expected, communicate results to operators, track trends of non-compliance)
 - Investigate complaints about operators in a timely manner
- 3. Address and report non-compliance
 - Require prompt action on non-compliance based on severity of non-compliance
 - Escalate action on continued non-compliance (e.g., cancel or suspend licence, levy fines)
 - Analyze trends to determine whether changes to licences or risk-based plans are needed
 - Report information on non-compliance and related enforcement actions, and regulating results to senior management and the public

Audit Approach:

To conduct this audit, we followed the standards for assurance engagements published in the *CPA Canada Handbook—Assurance* (CSAE 3001). To evaluate the Ministry's processes, we used the above criteria based on our related work, reviews of literature including reports of other auditors, and consultations with management. Ministry management agreed with the above criteria.

We examined the Ministry's criteria, policies, and procedures relating to licensing and inspecting oil and gas wells and facilities. We interviewed key staff responsible for performing activities related to oil and gas licences and inspections (e.g., reviewing applications, performing inspections). We assessed the Ministry's processes for tracking its licensing and inspection activities using its IT system. We tested samples of well and facility licence applications, inspections of wells and facilities, complaints received, and reports provided to regional field offices and senior management. We used an external consultant with expertise in the area to help us identify good practice and to assess the Ministry's processes.

4.0 Key Findings and Recommendations

4.1 Licence Application Guidance and Operating Requirements Available

The Ministry of Energy and Resources provides sufficient guidance to operators about the licence application process and ongoing operating requirements.

The Ministry uses an IT system called Integrated Resource Information System (IRIS), an online business system to support the regulation of Saskatchewan's oil and gas industry. The Ministry uses IRIS to record key information about all oil and gas wells and facilities including tracking licence information, recording inspections completed, receiving information, and communicating with operators.

Operators can directly input relevant licence and business activity information in IRIS. This includes information needed to obtain licences and required approvals, as well as operations' information. Operators can also receive inspection results and regulatory tasks issued by the Ministry (e.g., actions needed to address non-compliance identified during inspections).⁶

The Ministry has a user learning centre on its website providing operators with detailed instructions and information to guide them through the application process in IRIS.⁷ For example, resources include online courses on how to use IRIS, how to apply for a licence, and how to fill out forms in IRIS.

⁶ www.saskatchewan.ca/business/agriculture-natural-resources-and-industry/oil-and-gas/oil-and-gas-licensing-operations-andrequirements/integrated-resource-information-system-inis (28 March 2024).



The online resources also provide guidance to operators on ongoing operating requirements (e.g., Directives) and on how to comply with them (e.g., how to report incidents in IRIS).

We found the resources relevant and covered key topics related to licensing and inspections.

The Ministry regularly sends operators emails and notifications in IRIS informing them of changes to legislation or operating requirements (e.g., updated or new Directives), system changes (e.g., new functions in IRIS), and periodic training sessions for process changes affecting operators. We found Ministry communications with operators clear and timely (i.e., provided operators with sufficient time to prepare for upcoming changes).

Having understandable, publicly available resources for operators helps ensure operators are sufficiently informed to comply with Ministry requirements and keeps these operating requirements transparent.

4.2 Qualified Staff Perform Key Regulatory Activities

The Ministry of Energy and Resources uses qualified staff to assess oil and gas applications and to complete inspections. Staff from the Ministry's Well Licensing and Facilities & Pipelines units along with staff from its four regional offices complete this work.

The Ministry set requirements for relevant education and prior experience when hiring staff responsible for reviewing applications and completing inspections. We found the Ministry's requirements for relevant education (e.g., engineering degree) and relevant industry experience (e.g., oil and gas) reasonable when hiring these staff.

We tested 20 Ministry staff and found all staff had the appropriate qualifications set in the job descriptions. For example, the Ministry requires professional engineering qualifications for those roles that review facility applications due to higher complexity.

Having qualified staff perform key regulatory activities (e.g., reviewing applications, completing inspections) allows the Ministry to appropriately identify key risks related to regulating wells and facilities.

4.3 Inadequate Assessment of Outstanding Payments Prior to Approving New Licences

The Ministry of Energy and Resources sufficiently verified applicants met eligibility requirements prior to issuing licences, except for assessing whether operators have outstanding debts to the Government of Saskatchewan before issuing new licences.

4.3.1 Sufficient Information Required and Obtained for Licence Applications

The Ministry of Energy and Resources established eligibility criteria in legislation and in its application requirements.⁸ These eligibility requirements are built into questions and information fields operators must provide when applying for a licence in IRIS.

⁸ Eligibility requirements for a licence set out in *The Oil and Gas Conservation Regulations*, 2012, section 12(1).

The Ministry requires all operators to respond to questions and provide information about the well or facility as part of the application.⁹ The questions provide the Ministry with information about the proposed well or facility (e.g., type of well, operating plans, design and use of equipment on site). There are 44 questions for well applications and 17 questions for facility applications. We found the information the Ministry requires in well and facility applications consistent with good practice.

The Ministry designed IRIS to use the responses to the questions to assess applications based on risk. IRIS classifies applications as routine or non-routine depending on an applicant's responses. This process allows the Ministry to prioritize applications for higher risk wells or facilities. Ministry staff review high-risk applications (i.e., non-routine) before approval. The IT system automatically approves and issues a licence for low-risk applications (i.e., routine) upon submission. Ministry staff still review low-risk applications after IRIS automatically issues licences to verify application information is appropriate and complies with requirements.

For non-routine applications, Ministry staff must review the applications prior to issuing a licence. IRIS sends the application to the appropriate approval authority. For example, applications that include infrastructure close to water bodies or critical habitats are first sent to the Ministry of Environment for its review and approval of the application, before the Ministry of Energy and Resources approves the licence. See **Section 4.4** for further details on the Ministry of Environment's involvement.

See **Figure 3** for examples of key information the Ministry of Energy and Resources requires and reviews during the application process.

Figure 3—Summary of Information Operators Provide to Apply for Well or Facility Licence

Survey plan: Detailed information of the planned operations of the well or facility site (e.g., specific locations of planned equipment, distances between equipment on the site called setback requirements, and distance from water bodies and utility lines).

Ground elevation: Determines whether inspectors need to perform an on-site inspection of the proposed well site as part of the application review (done when well site is planned on large elevation changes).

Information about the planned well: Vertical or horizontal, depth, underground oil reservoir it will produce from.

Environmental screening checklist: When proposed well is on land with higher environmental sensitivity.

Factors to involve other Government agencies: Ministry of Environment reviews and approves applications where a proposed well site or access road is on Crown land. Ministry of Agriculture reviews and approves applications when a proposed well is on agricultural Crown land (e.g., ensures applicant has signed lease agreement).

Engineering designs: Facilities' applications require additional information such as engineering designs stamped by a professional engineer.

Source: Adapted from Ministry of Energy and Resources' records.

We tested a sample of 51 well and facility applications and found:

IRIS appropriately classified each application with 26 applications classified as non-routine and 25 as routine.

⁹ training.saskatchewan.ca/EnergyAndResources/well-licensing/#/lessons/9BgsAWeV-AMKUXn3mc4tyIHEEWgwvuld (28 March 2024).



- Staff found minor issues with 6 of the 25 routine applications identified after the Ministry automatically issued the licence, which did not ultimately impact the licence's approval.
- Appropriate Ministry staff reviewed and approved applications. For example, a professional engineer reviewed all facility applications consistent with Ministry requirements.
- Staff documented their review of applications on an exception basis (i.e., documented areas where application did not meet eligibility criteria, had concerns with information provided, required more information, or documented rationale for denying application).

For all applications tested, we found all required information (e.g., survey plans) included in IRIS.

> Approved applications were complete and met all Ministry requirements.

Staff identified deficiencies with certain applications in IRIS and documented actions taken to resolve concerns; staff found issues with 13 of 51 applications tested (e.g., requested additional information before approval). For example, one application proposed a well located closer to a power line than regulations allow. Ministry staff required the operator to provide consent from SaskPower, which the operator obtained and then provided to the Ministry for licence approval.

The Ministry denied 1 of the 51 applications tested because the operator proposed a well too close to other infrastructure.

Once approved, an operator can access their licence in IRIS, which outlines the terms and conditions they are required to comply with. For example, the licence will show any outstanding or additional requirements (called obligations) either the Ministry of Energy and Resources or the Ministry of Environment require of operators (e.g., build a fence or a berm around well site). For all applications tested, we found the terms and conditions included in the issued licence appropriate based on the completed application.

We found operating requirements generally align with good practice and other jurisdictions where applicable (i.e., the Ministry has reasonable rationale when Saskatchewan's requirements differ from other jurisdictions). For example, we found venting and flaring and other site spacing (setback) requirements consistent with Alberta, which are important for safely operating wells, and in protecting the environment and the public surrounding wells.

4.3.2 Need to Check for Money Owed Before Licence Approval and Justify Approval Decision Where Money Owed

The Ministry of Energy and Resources has not formally determined how it plans to comply with legislative requirements and identify applicants owing money to the Government of Saskatchewan, and make decisions around approving new licences when applicants do owe money.

Figure 4 outlines eligibility requirements in legislation for new well or facility licences relating to operators who owe money to the Government of Saskatchewan.

Figure 4—Certain Eligibility Requirements in The Oil and Gas Conservation Regulations, 2012

Eligibility requirements to be issued a licence:
12 (2) Unless otherwise approved by the minister, no licence shall be issued to, or transferred to or from, a person if:
(a) that person:
(i) has not paid the required annual orphan fund levy; or
(ii) owes any money to the Crown in right of Saskatchewan
Source: The Oil and Gas Conservation Regulations, 2012.

The Ministry does not have a formal process to consistently apply these eligibility requirements. For new licence applications, Ministry staff do not assess whether an operator owes money to the Ministry.¹⁰ Additionally, staff do not document rationale if they are aware an applicant has outstanding debts and choose to issue the licence anyway.

Some of the most common or significant amounts of money the Ministry receives from operators include resource royalties, annual levies, and security deposits.^{11,12}

The Ministry also does not have a way to check whether operators have significant outstanding debts to other government agencies (e.g., whether an operator owes provincial sales tax to the Ministry of Finance).

We identified one operator where the Ministry continued to issue new well licences (seven licences in total) during 2023 and yet the operator owed significant money to the Ministry (i.e., about \$2 million in outstanding royalty payments accumulated since 2017). While we observed the Ministry working with the operator to collect the outstanding debts during 2023, it did not document rationale for why it continued to approve licences.

We reviewed all operators where the Ministry approved new licences during August 2023 and compared them to a list of operators owing money to the Ministry at that time. We identified 11 operators where the Ministry approved new licences (35 well licences), but the operators owed money to the Ministry (over \$1,000). We did not see any evidence where Ministry staff considered these outstanding debts before approving licences or documented rationale for approving the licences.

Not formally verifying whether operators have unpaid debts owing to the Government of Saskatchewan increases the risk the operator will not pay money owed and the unpaid amounts will continue to increase. Also, approving operator licences without sufficient justification when those operators owe money may not comply with the requirements in legislation. Formally documenting decisions about money owed and applications approved decreases the risk of not treating operators fairly and appropriately.

1. We recommend the Ministry of Energy and Resources justify approving applications for new oil and gas wells or facilities where the operator owes money to the Government of Saskatchewan.

¹⁰ We found the Ministry of Energy and Resources implemented a well-designed process to assess whether applicants have amounts owing to the Ministry while assessing applications to transfer licences from one operator to another; however, the Ministry did not use this process for new licence applications.

¹¹ The Ministry of Energy and Resources collects an annual administrative levy to fund the regulatory activities of the oil and gas industry and an annual levy to support the cleanup of orphaned wells by the Oil and Gas Orphan Fund.

¹² The Ministry of Energy and Resources collects security deposits from operators who it assessed may pose a higher risk of not meeting their well clean up requirements.

4.4 Ministry of Environment Needs to Document Key Judgements When Assessing Potential Environmental Impacts

The Ministry of Environment (Environment) does not sufficiently document its judgments when assessing well and facility applications.

Environment completes assessments of and approves applications for oil and gas wells and facilities (on both private and Crown land) when it needs to consider environmental factors before the Ministry of Energy and Resources can approve an application. Environment delegates its review between two branches. The Environmental Assessment and Stewardship Branch (EASB) conducts a full environmental assessment process when reviewing applications with significant potential environmental impact (e.g., applications for waste processing facilities). Its Lands Branch reviews applications with potential impacts on the environment that are not as significant (e.g., sites proposed on sensitive areas such as grasslands, wetlands, ravines, rivers).¹³

No applications required EASB review during our audit period.

The Lands Branch reviews an environmental screening checklist completed by the operator, which identifies areas where the well site or facility could impact the environment. Some examples of key factors the Lands Branch assesses include:

- Water bodies: If the project is within 45 metres of water bodies or wetlands additional requirements on a well site must occur (e.g., berm construction requirements, restrictions on equipment locations)
- Activity on native prairie: If a project encroaches on native grassland on private land, Environment recommends additional measures to protect the land (e.g., avoid topsoil stripping, re-seed using native plant species)

Environment also reviews an operator's detailed oil and gas project plan (in addition to the environmental screening checklist) on how they plan to mitigate environmental risks posed by a project. It assesses whether an operator's plan appropriately address the risk factors. If a proposed site has certain environmental sensitivities (e.g., sand hills, native grassland), Environment may also complete a physical inspection before approval. If it determines the applicant has not sufficiently reduced the environmental risk, it may require the operator to take additional protection measures (e.g., equipment can only be moved over sensitive wildlife habitat when ground is frozen).

The Lands Branch does not have a checklist or formal guidance for staff to use when reviewing environmental information and to document their assessments. We found it also maintained no documentation of these assessments, only documenting licence approvals in IRIS.

¹³ Environmental Review Guidelines for Oil and Gas Activities (September 2022). <u>pubsaskdev.blob.core.windows.net/pubsask-prod/138811/EnvironmentalReviewGuidelinesForOilAndGasActivities%252BSeptember%252B2022.pdf</u> (28 March 2024).

In our sample of 51 applications tested, 11 applications required Environment's approval. We found:

- Environment received all information required in the application (e.g., site survey, site > layout, setback requirements, environmental screening checklist)
- Appropriate staff approved all applications we expected them to based on the environmental screening checklists submitted by operators¹⁴
- Environment was unable to provide any evidence as to whether the operators' proposed plans were appropriate, whether it determined the operators planned appropriate mitigation steps, or its rationale when it added additional mitigation steps to the licence requirements (if any)

Without documenting key judgements when assessing areas of higher risk or complexity, there is risk that Environment staff do not appropriately consider key risks when approving licence applications that could lead to significant adverse effects on the environment.

2. We recommend the Ministry of Environment document key judgments about environmental risks when reviewing and approving oil and gas well and facility applications.

4.5 Licence Applications Approved Timely

Ministry of Energy and Resources' staff generally review and approve well and facility applications timely to verify whether applicants meet eligibility requirements and comply with legislation.

The Ministry generally meets its target for reviewing and approving applications timely, striving to approve non-routine applications within 14 days of application receipt, and to review routine, automatically-approved applications within 14 days. We considered 14 days for review of routine and approval of non-routine applications appropriate. For example, for routine applications it is unlikely an operator will have started significant work on the site within that period.¹⁵

See Figure 5 for a summary of well and facility licences the Ministry approved.

Figure 5—Well and Facility Licences Reviewed and Approved between December 1, 2022, and November 30, 2023

Licence Type	Licences Reviewed	Target to cences Reviewed Approve/Review Within (days)	
Well Licence – Non-Routine	940	14	10.7
Well Licence – Routine	793	14	Not regularly assessed
Total Well Licences	1,733		

¹⁴ We tested one item of the Ministry of Environment approving a new oil well on agricultural Crown land protected under The Wildlife Habitat Protection Act. In this item, the operator proposed not removing soil to build access roads and constructing the well in fall/winter when agricultural land is frozen and not in use as measures to reduce environmental impact. ¹⁵ If the application requires review from other Ministries (e.g., Ministries of Environment or Agriculture), the target to approve applications is 35 days.

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²⁰²⁴ Report – Volume 1 Provincial Auditor of Saskatchewan

Licence Type	Licences Reviewed	Target to Approve/Review Within (days)	Average Time to Approve/Review (days)
Facility Licence – Non-Routine	56	14	13.7
Facility Licence – Routine	47	14	20 (ranged from 1–54 days late)
Total Facility Licences	103		

Source: Adapted from Ministry of Energy and Resources' records.

We found the Ministry did not regularly assess whether it reviewed routine well applications within its 14-day target (Well Licence – Routine row in **Figure 5**). For 7 of 25 (28%) routine well and facility applications tested, we found the Ministry did not always complete a post-approval review within its 14-day expectation (ranged from 1–23 days late). See **Section 4.11** where we indicate additional internal analysis of measures needed.

We tested a sample of 51 applications and found the Ministry did not meet its target for reviewing and approving 11 applications (ranged between 1–23 days later than the target). While we found it reviewed some applications later than expected, we did not consider these to be significant delays (23 days late).

Additionally, we recognize some delays occur when other agencies involved do not complete their review timely. For example, of the non-routine applications tested, we identified four not approved timely. Of these four applications, three required the Ministry of Environment's review and approval. Overall, our analysis of well and facility application approvals found staff reviewed and approved approximately 85% of non-routine well applications and 64% of facility non-routine applications timely.

Approving applications timely enables the Ministry to ensure applicants meet requirements and that it does not cause operators to experience project delays.

4.6 Risk-Informed Inspection Plan Needed

The Ministry of Energy and Resources continued to work on a project to inspect higher risk wells it identified in 2021 that it had not inspected since 2015. It expected to complete this project by 2026. However, the Ministry has not developed a risk-informed plan to perform ongoing inspections for all wells and facilities beyond 2026.

Ministry staff inspect wells and facilities to monitor operators' compliance with key operating requirements (e.g., Regulations, Directives). From December 1, 2022, to November 30, 2023, the Ministry inspected about 25% of all active and inactive wells (about 21,700 of 84,000).

Each regional manager uses their experience and judgment to prioritize inspections and assign staff to complete inspections. For example, one regional office documented guidance to help staff prioritize inspections depending on informally assessed risk. The guidance prioritizes inspections where a landowner complained, or a reportable incident occurred. The other regional offices did not have documented guidance to prioritize inspections. Although, through our discussion with each regional office, each indicated they

used similar practices such as prioritizing public complaints for selecting which wells to inspect first.

In 2021, the Ministry began a five-year project to focus its regulatory oversight on wells it had not inspected since at least 2015. In 2021, the Ministry assessed the risk of each uninspected well based on various factors such as location, fluid type (e.g., oil, gas, water) and production volume. We found the factors it used to assess risk appropriate. Its goal is to inspect each of the wells assessed as high and medium within five years (complete by 2026).

See **Figure 6** for status of the project as of December 31, 2023. The Ministry inspected 88% of the 18,511 wells identified as higher risk. However, the Ministry did not have a plan for when to inspect low-risk wells (28,169 wells) or when to reinspect wells it inspected between 2015–21 (37,709 wells) after 2026. Also, its project does not include facilities (i.e., no plan for when to inspect facilities) or new wells since 2021.¹⁶

Region	Risk Rating	Wells Identified for Inspection (2021) ^A	Inspected at December 31, 2023	Wells Remaining to be Inspected at December 31, 2023	% Completed
Estovan	High	319	173	146	69%
Estevan	Medium	6,165	5,591	574	91%
Kindorolov	High	1,364	1,364	-	100%
Kindersley	Medium	8,547	6,931	1,616	84%
Lloydminster	High	92	92	-	100%
	Medium	1,679	1,494	185	90%
Curiff Current	High	12	12	-	100%
Swift Current	Medium	333	333	-	100%
Project Total		18,511	15,990	2,521	88%
Wells assessed as low risk ^B	Low	28,169			
Wells not part of project		37,709			
Total wells (active and inactive) ^c		84,389			

Figure 6—Status of Project to Inspect Wells Without Recent Inspections in IRIS

Source: Adapted from Information provided by the Ministry of Energy and Resources.

^A Wells not included in this project already had an inspection prior to 2021 documented in IRIS.

^B Wells assessed as low risk are not targeted for inspection as part of the project, but still may be inspected.

^c Total wells (active and inactive) at March 12, 2024.

Other than its inspection project, the Ministry did not have an ongoing plan for how it determines a risk rating for wells and facilities and for how it will use those ratings to plan inspection frequency of oil and gas wells and facilities going forward.

Having an inspection plan stating the required inspection frequency of wells and facilities will help reduce the risk of unnoticed non-compliance and subsequent consequences. It is good practice to develop inspection plans based on risk. Such plans use risks (e.g., history of non-compliance) to determine the nature and extent (frequency) of inspections.

¹⁶ The Ministry of Energy and Resources completed 275 facility inspections from December 1, 2022, to November 30, 2023, which is about 3.5% of total active facilities.

Having a written risk-informed inspection plan would help the Ministry allocate its resources to inspect the highest priority wells and facilities, especially as Saskatchewan has a significant number of wells and facilities. In addition, inspectors are also responsible for other tasks including handling complaints and reported incidents.

3. We recommend the Ministry of Energy and Resources implement a riskinformed plan for inspecting oil and gas wells and facilities.

4.7 Need to Strengthen Guidance to Staff Around Completing Inspections and Escalating Enforcement Actions

The Ministry of Energy and Resources does not set central expectations to guide staff in completing inspections or escalating enforcement actions when it identifies operators not complying with operating requirements. We found the Ministry does not document whether it routinely inspects the highest risk areas during its inspections of wells and facilities.

The Ministry does not have guidance (e.g., manual or standard checklist) establishing central expectations for staff to follow for inspection or enforcement actions. Instead, it expects staff to use their knowledge and experience to make these decisions. Management indicated it relies on on-the-job training, mentoring newer staff, and senior inspectors reviewing work of newer inspectors. Lack of written central expectations may result in inconsistent decisions or actions taken. We found the Ministry did not have central written guidance on:

> Prioritizing inspections (i.e., which wells or situations to address first).

We found one region documented how staff should prioritize tasks (e.g., complaints addressed first then incidents) and found this reasonable.

- Timelines for completing inspection activities (i.e., how quickly staff need to complete inspections and document in IRIS, inspect actions taken by operators to address issues found in past inspections, and follow up on outstanding issues from past inspections).
- Documenting completed inspections (i.e., expected level of detail documented in IRIS).

We found the Ministry documents inspections on an exception basis meaning it only requires staff to document issues found during inspections in IRIS. We expect the Ministry to require staff to document results of minimum mandatory inspection items to ensure all inspections assess the areas of highest risk (e.g., require minimum documentation in IRIS). This would enable the Ministry to demonstrate it completed sufficient inspections.¹⁷

¹⁷ This may not include inspections for specific purposes such as to assess complaints or reported incidents.

Guide staff on what to inspect during inspections.

As each region has its own inspection checklist, we found key differences in these checklists (used as guides for staff; the Ministry does not require staff to fill out and retain checklists). Some examples of significant items missing:

- One region's well checklist did not include checking whether the operator constructed a proper berm around the well site as required
- Two regions' well checklists did not include checking the distance of flaring equipment to other equipment on the well site
- One region did not have an inspection checklist to assess facilities

We also compared each region's facility checklist to the Alberta Energy Regulator's facility checklist and found each checklist missing some important inspection items such as whether emergency controls and pressure relief systems are present, checking temporary storage tanks are connected properly, and observing equipment inspection records (e.g., pressure vessels) completed by other agencies.

We found each region's well checklists generally consistent to Alberta's well checklist.

Having a standard checklist for all regions to use would help the Ministry communicate key risk areas it expects staff to assess consistently during inspections.

We also found no central guidance for staff to use when escalating enforcement actions such as when to use financial penalties or to suspend/cancel a licence. This increases the risk staff may inconsistently escalate actions on non-compliance and not treat operators fairly.

Not having established guidance for consistent inspections increases the risk staff may not check the most significant risk areas when completing inspections. Additionally, the Ministry may not identify significant deficiencies or risks at well sites or facilities that could impact public health and the environment.

4. We recommend the Ministry of Energy and Resources develop standard expectations to guide staff when completing oil and gas well and facility inspections and escalating enforcement actions.

4.8 Inspections Identifying Regulatory Non-Compliance

The Ministry of Energy and Resources' inspections identified operators not complying with operating requirements. The Ministry worked with these operators to fix issues identified.

Consistent with good practice, inspections consist of visual assessments of a well or facility.

When inspectors find issues, based on the risks of the issues found, they select in IRIS the item of non-compliance, the associated risk of the issue, and the appropriate timeframe for operators to address issues. For example, IRIS standard timeframes indicate zero days for high-risk items, and 30 days to fix low or medium risk issues such as needing to construct or repair a berm around a well site. We found the Ministry's defined items of non-compliance, associated risk, and length of time established in IRIS for operators to fix issues appropriate. Staff can adjust the timeframes for operator response using their judgment.

IRIS automatically sends the operator notification when inspectors require actions to address non-compliance issues. IRIS also notifies operators when required actions are overdue (e.g., a few days before the action is overdue for 30, 60, and 90 days).

We tested a sample of 32 inspections and found:

- Because inspection documentation is on an exception basis, we could not determine what the Ministry inspected (see Section 4.7—develop standard expectations).
- For 6 of 32 inspections, staff did not enter the inspection into IRIS within five days of the completed inspection. These ranged between 6–32 days after inspection. Four of six inspections identified non-compliant issues requiring follow-up actions from the operator. The Ministry's lack of established targets on how timely it expects staff to add inspection information to IRIS means delays in notifying the operator and addressing the issue (see Section 4.7— develop enforcement actions).
- 15 of 32 inspections found non-compliant inspection items (i.e., operator not in compliance with requirements). The Ministry communicated appropriate actions required based on its inspection. All non-compliance items found were assessed as moderate or low risk.
- 7 of these 15 inspections with non-compliance used the 30-day guidance per the standard timeframe in IRIS. For the other 8 inspections with non-compliance, staff provided operators with additional time to resolve issues (ranging from 9–51 extra days). Staff do not document rationale for providing extra time (e.g., in IRIS).

We found five different time lengths staff gave operators to address similar noncompliance issues (fix berms around well site). Providing different timeframes to address issues without documenting rationale increases the risk of not treating all operators fairly (see **Section 4.7**).

For 6 of the 15 inspections with non-compliance, the operator did not resolve the issue by the Ministry's required deadline. Three of these six inspections with noncompliance still had outstanding actions required at the time of our testing. For two of these inspections, we were unable to see evidence the Ministry actively followed up with the operator (e.g., documented date of phone call, sent letter).

The Ministry does not have formal guidance on when or how it expects staff to follow up with operators when there is outstanding action required. This is an example where the Ministry may not be responding timely (see **Section 4.7**).

For 12 non-compliant inspections, the operator indicated they addressed the issues. For four of these inspections, the Ministry did not complete a re-inspection (i.e., revisit site to verify the operator addressed the issue) within 30 days.¹⁸ Our analysis found the Ministry re-inspected industry fixes within 30 days 77% of the time. We consider this reasonable.

¹⁸ One region documented its expectation for staff to re-inspect issues resolved by operators within 30 days; we assessed this expectation to be reasonable.

The Ministry's on-site inspections led to certain significant findings. Some items found in our testing included:

- One well-site inspection found an unlicensed facility operating on the site
- One inspection found a previously unreported incident related to leaking tanks (including risk of leaking hydrogen sulphide)
- Berm improvements around well sites or tanks (helps reduce risk of fluids leaving the well site if a spill occurred) was a common finding

The Ministry found operators not complying with requirements in about 25% of over 21,000 inspections in 2023.

Completing appropriate inspections is important to hold operators accountable for complying with operating requirements, which helps ensure operators conduct operations safely (e.g., reduces risk of negative impact to the environment).

4.9 Complaints Assessed Timely

While the Ministry of Energy and Resources does not have central guidance for staff to respond to complaints, regional offices had reasonable informal processes to appropriately receive and respond to complaints timely.

The Ministry does not have central guidance on how it expects staff to track and respond to complaints. Each regional office developed their own processes to track complaints (e.g., manual forms, spreadsheet). Upon receipt, staff verify complaint legitimacy and document complaint details in a form (e.g., who submitted, date received). Staff record findings from inspections resulting from complaints in IRIS following the same process as all other inspections.

While the Ministry does not have a formal expectation of how quickly staff should respond to complaints (i.e., when to complete on-site inspection), we found one region used two days for odour complaints (high-risk) and 10 days for other lower risk concerns (weeds), which we consider reasonable.

We tested 15 inspections the Ministry completed resulting from complaints and found it completed inspections timely 85% of the time. It sufficiently recorded these inspection results in IRIS.

Adequately resolving complaints enables the Ministry to address situations that may identify operators not complying with operating requirements. Timely inspection of complaints helps protect public safety by identifying possible non-compliance with regulatory requirements.

4.10 Need to Review Waste Disposal Facilities' Reports Timely

The Ministry of Energy and Resources does not review reports it receives for waste disposal facilities timely.

The Ministry requires operators of waste disposal facilities to submit an annual report that summarizes operational details the Ministry uses to assess if additional action is required (e.g., request field staff to complete an on-site inspection). The Ministry of Environment considers these types of facilities to have a higher risk of environmental impact because they collect waste from oil and gas operations (e.g., contaminated soil, oil and other chemicals).¹⁹ These reports, for example, include the results of groundwater testing surrounding these facility sites. If these facilities are not operating appropriately, there is a risk of contaminated fluids escaping the site and polluting groundwater.

We tested three of 29 waste disposal facilities' reports and found:

- The Ministry received the annual reports for these facilities by its deadline (i.e., March 31, 2023).
- The Ministry did not maintain evidence it reviewed these annual reports (as of March 2024). Management indicated it did not review these reports due to other staff priorities.
- None of these annual reports tested identified significant issues (e.g., environmental impact) the Ministry needed to take immediate action on such as inspecting the site. Additionally, site operators did not report an incident during the previous year.

Not reviewing key reports increases the risk the Ministry may not identify concerns at facilities that can significantly impact the environment (e.g., waste spills) and make sure operators take appropriate action timely.

5. We recommend the Ministry of Energy and Resources review oil and gas waste-disposal facility reports timely to monitor whether environmental risks are identified requiring further action.

4.11 Periodic Reporting to Senior Management Lacks Analysis

The Ministry of Energy and Resources periodically provides some information about its key regulatory processes to senior management; however, we found this information often lacked sufficient analysis (e.g., trends).

The Ministry provides quarterly and annual reports to senior management highlighting key regulatory activities or updates to current projects. For example:

- Number of inspections completed quarterly by region
- Annually, number of inspections completed by type (e.g., wells, facility, pipelines) and a five-year comparison on the number of inspections completed including compliance rate (i.e., number of satisfactory inspections compared to total inspections)

¹⁹ Environmental Review Guidelines for Oil and Gas Activities (September 2022).

- Top inspection issues (e.g., during 2023, 2,579 inspections identified issues with appropriate and visible signage at sites)
- Updates on its five-year project for uninspected wells (see description in Section 4.6), including a summary of sites the Ministry still needs to inspect

However, for the items listed, we found the Ministry completes minimal trend analysis or detailed analysis. The Ministry could use this information to inform how it prioritizes future inspection activities. See **Figure 7** for examples of key areas where the Ministry could improve its analysis.

Figure 7—Potential Analysis Areas to Report to Ministry of Energy and Resources' Senior Management

Area of Analysis	Analysis Details
Licence application processing targets	Whether it is improving the timeliness to review and approve licence applications on a year-over-year basis, whether it meets its 14-day target to review routine well applications
Inspection non- compliance rates	Trends on non-compliance for all inspections (e.g., percentage of unsatisfactory inspections), most common issues of non-compliance, compliance rates by region
Non-compliance rates by operator	Trends on operator non-compliance with operating requirements (e.g., year- over-year comparison of operators with high rates of non-compliance)
	For example, we identified 20 operators in 2023 with three or more inspections with 100% inspection non-compliance rates (i.e., all Ministry inspections were unsatisfactory).
Complaints received	Trends from complaints received such as common issues, common locations or specific operators, and how timely the Ministry responds to complaints
Reported incidents	Trends in incidents reported to support risk-informed inspection activities

Source: Developed by the Office of the Provincial Auditor of Saskatchewan based on Ministry of Energy and Resources' data.

During 2023, the Ministry was developing a formal process to identify trends in which questions in the licence application were often filled out incorrectly. This will inform ways to improve responses (e.g., provide targeted training to operators). The Ministry expected to fully implement this new process in 2024.

Having a robust process to analyze trends in its key regulatory activities would provide senior management with more meaningful information to inform key regulatory activities (e.g., inspections). It would also help the Ministry prioritize its work and identify areas for improvement. See **Section 4.6** for recommendation to develop a risk-informed inspection plan.

6. We recommend the Ministry of Energy and Resources enhance written reports given periodically to senior management by including analysis on regulatory activities (e.g., inspections, complaints, non-compliance) related to oil and gas wells and facilities.

4.12 Public Reporting Reasonable

The Ministry of Energy and Resources' public reporting on its licensing and inspection activities for oil and gas wells and facilities is reasonably consistent with good practice and other jurisdictions.



The Ministry reports information publicly about its licensing and inspection activities annually in its *Oil and Gas Regulatory Cost Recovery Levy Annual Report*.²⁰ For example, this report provides information on inspections (e.g., explains what inspectors do, number of inspections) and information on reviewing and approving licence applications (e.g., timeliness of review, percent of applications cancelled by operators).

We evaluated whether the Ministry's publicly reported information is consistent with other jurisdictions (e.g., Alberta Energy Regulator). Overall, the reported information is consistent except for:

- Outcome of inspections (e.g., percentage of compliant/non-compliant inspections).
- Processing licence application target. The Ministry reports on the average time it takes to process non-routine licence applications but neither discloses its licence application processing target (i.e., 14 days) nor how often it meets this target.

Once it develops a risk-informed inspection plan (see **Recommendation 3**), the Ministry can improve its public reporting about inspections completed (e.g., report on risk assessments, inspection results, and whether it is achieving its inspection plan).

We suggest the Ministry consider reporting additional information publicly. Reporting sufficient information publicly increases transparency.

5.0 SELECTED REFERENCES

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²⁰ <u>publications.saskatchewan.ca/#/products/121964</u> (28 March 2024).