

Ministry of Energy and Resources

The Oil and Gas Regulatory Cost Recovery Levy Annual Report for 2021-22

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Introduction

The Oil and Gas Regulatory Cost Recovery Levy (“The Administrative Levy”) ensures that Saskatchewan’s regulatory system meets public expectations for regulatory oversight of the oil and gas industry.

The Administrative Levy recovers 90 per cent of the regulatory costs for the oil and gas regulatory activities of the Ministry of Energy and Resources (ER), Ministry of Environment (ENV), and Ministry of Agriculture (AG). Those regulatory activities include:

- Licensing of wells, facilities and pipelines;
- Review of seismic plans and permitting;
- Inspection of well sites, pipelines and related facilities;
- Reporting of oil and gas production;
- Abandonment of wells and facilities;
- Environmental reviews of proposed wells and facilities; and,
- Review and approval of Crown surface lease applications.

The Administrative Levy also ensures the modernization of systems supporting activities of the regulator and improvements to the services delivered to industry.

The publication of the *Oil and Gas Regulatory Cost Recovery Levy Annual Report* delivers on the Government of Saskatchewan’s commitment to transparency on the Administrative Levy and regulatory performance indicators. This report has two main sections: an overview of Administrative Levy finances; and a review of service levels for the various regulatory services that are delivered.

Information regarding past year Administrative Levy reports can be found at:

<https://www.saskatchewan.ca/business/agriculture-natural-resources-and-industry/oil-and-gas/oil-and-gas-reporting-and-compliance/well-levy>.

Special Notes: Regulatory Cost Review and Underspend Application

In 2020-21, ER reviewed the regulatory cost base for determining oil and gas regulatory expenditures subject to cost recovery through the Administrative Levy. This was the first comprehensive review of the regulatory cost base since the Administrative Levy was introduced in 2014.

The purpose of review was to ensure that financial costs that were included or excluded from the regulatory cost base first established in 2014 remained relevant. The review also examined the treatment of certain types of costs, including the amortization of capital projects related to the Integrated Resource Information System (IRIS) as well as the apportioning of regulatory versus non-regulatory activity costs within the system.

The review identified certain costs that had not been accounted for in the 2014 regulatory cost base. This included some costs associated with accommodation as well as aspects of employee compensation. It also identified changes to reflect the treatment of IRIS amortization and the apportioning of costs of IRIS operations more accurately.

Based on the more accurate accounting methodology established by the review, the 2021-22 Administrative Levy regulatory budget increased by 4.2 per cent to \$26.34 million (M) from \$25.27M in 2020-21. This represented the first increase in the oil and gas regulatory budget since 2017-18. The review established the regulatory cost base moving forward and past year financial results were not restated based on the revised methodology. Any accumulated underspends calculated using the prior methodologies remain as previously stated.

On this basis, the regulatory budget for 2021-22 was established at \$26.34M, with an expected invoice to industry to be \$23.707M. However, in recognition of the accumulation of underspent Administrative Levies from previous years, ER applied \$3.6M of unspent Administrative Levies to the 2021-22 Administrative Levy. This reduced the 2021-22 industry invoice for the Administrative Levy to \$20.1M.

Regulatory Highlights and Accomplishments for 2021-22

Efforts to continuously look for ways to improve regulatory oversight and service to industry remained a focus for 2021-22. The need to ensure a sound regulatory framework and the desire to deliver *best-in-the-west* regulatory services resulted in the following regulatory highlights and accomplishments for 2021-22:

- Continued support for record number of site reclamations and abandonments supported by the Accelerated Site Closure Program (ASCP);
- Obtained approval for *The Financial Security and Site Closure Regulations (FSSCR)* which are expected to come into effect in 2023. The FSSCR will strengthen the oil and gas liability management program operated by ER. <https://publications.saskatchewan.ca/#/products/113561>;
- Launched new features and functions in IRIS with implementation of the Structured Project Application Authorization (SPAA) project. These enhancements were implemented in IRIS on June 23, 2021, and introduced a new structured application for Enhanced Oil Recovery (EOR) and waterflood authorizations;
- Two new online training modules were developed, and 11 updates were made to support the use of IRIS because of regulatory initiatives;
- ER developed a process to enable the approval of well licence applications that cross unit boundaries, which has allowed industry participants to expand their drilling programs;
- Introduced confidentiality rules for production-injection solution well sets related to solution potash mining ([MRO 23-21](#));
- Introduced *Interim Requirements for Potash Wells* ([MRO 291/21](#)), which clarifies the application of existing Directives to potash wells;
- Updated *Directive PNG030: Fees for Oil and Gas Data and Related Services* (Directive PNG030) to include fees for viewing subsurface assets, and clarification pertaining to waiver of fees. <https://publications.saskatchewan.ca/#/products/86558>;
- Completed migration of the scanned historical well log data into IRIS;
- Provided support to the Surface Rights Board of Arbitration for the approval of new Board Rules regarding the conduct of hearings and disclosure of evidence. <https://publications.saskatchewan.ca/#/products/113782>; and,
- Implementation of the Gas Commercialization Mapping (GCM) Service, which generates customized maps of vented and flared methane gas volumes, as well as a table of licensees within a specified geographic area to assist in the potential development of methane capture and commercialization projects.

Administrative Levy Calculation

ER assesses an annual Administrative Levy against all licensees of wells and pipelines in accordance with provisions outlined in *The Oil and Gas Conservation Regulations, 2012*.

The amount of the annual invoice is tied to the number of wells in the various well classes (these are based on the volume of oil and gas produced from the well) and the length in kilometres for various classes of pipelines in operation in the previous calendar year. For example, the Administrative Levy calculated and invoiced for the 2021-22 fiscal period was based on the performance of wells and the length of pipelines operating during the 2020 calendar year.

An annual adjustment factor established by an Order-in-Council adjusts each year's payment to account for changes in the revenue requirements of the Government of Saskatchewan for the provision of regulatory services. Administrative Levy invoices are typically issued in the second fiscal quarter of the year after approval of the provincial budget.

Each well and pipeline is charged a base fee multiplied by an adjustment factor. The adjustment factor is set annually to ensure that 90 per cent of forecast regulatory expenses are recovered. The provincial budget for regulatory services affects the Administrative Levy rates, as do changes in the number of wells, volume of production and pipeline lengths.

The following table summarizes the calculation of the base Administrative Levy revenues for each of the well levy classes and pipeline classes as well as the calculation of the adjustment factor that is applied to the base amounts for invoicing purposes for the 2021-22 fiscal period. As previously noted, these are based on the performance of wells and the length of pipelines operating during the 2020 calendar year.

Annual Adjustment Factor Calculation, 2021-2022 (Base Year 2020)

Class	Production (cubic metres/year)	Base Rate by Class	Number of Well Licences	Base Revenues	
1	Service Wells	\$100	5,739	\$573,900	
2	0.1 to 300.0	\$100	27,679	\$2,767,900	
3	300.1 to 600.0	\$125	7,192	\$899,000	
4	600.1 to 1,200.0	\$312	5,471	\$1,706,952	
5	1,200.1 to 2,000	\$750	2,530	\$1,897,500	
6	2,000.1 to 4,000.0	\$1,250	1,832	\$2,290,000	
7	4,000.1 to 6,000.0	\$1,625	417	\$677,625	
8	6,000.1 and above	\$1,875	499	\$935,625	
9	Wells other than abandoned	\$25	36,450	\$911,250	
		TOTAL	87,809	\$12,659,752	A

Pipe- line Class	Status of Pipeline Segment	Base Rate by Class per km	Length (kms)	Base Revenues	
1	Flowlines	\$0	6911.81	\$0	
2	Operating	\$40	22,563.6	\$902,544	
3	Discontinued	\$20	1691.4	\$33,828	
		TOTAL	31,167	\$936,372	B

TOTAL BASE AMOUNT (C=A+B)	\$13,596,124	C
2021-22 Regulatory Budget:	\$26,340,000	
Industry Share (90%):	\$23,706,000	
Carry Forward Reduction	(\$3,600,000)	
Industry Share	\$20,106,000	D
Annual Adjustment Factor (E=D÷C):	1.478804	E

Financial Reporting

Administrative Levy Revenue and Regulatory Costs

Administrative Levy Revenue and Regulatory Costs (\$000s)		2021-22 Budget	2021-22 Actual
TOTAL ADMINISTRATIVE LEVY INVOICED			20,111
LESS: REGULATORY COSTS INCURRED (90%)			23,233
VARIANCE			(3,122)
2021-22 VARIANCE			(3,122)
2020-21 VARIANCE CARRY FORWARD			5,462
2021-22 VARIANCE CARRY FORWARD			2,340
COST DETAIL			
1	Energy Regulation Division Executive	731	411
2	Field Services	5,549	5,244
3	Liability Management	1,317	1,472
4	Resource Management	2,007	2,253
5	Information Management	2,091	1,781
6	Client Support	1,532	1,364
7	Regulatory Affairs	0	379
8	Surface Rights Board of Arbitration	229	150
9	Central Learning Fund	0	8
10	Information Technology and Database Costs	5,563	5,443
11	Central Overhead and Costs	5,620	5,691
TOTAL MINISTRY OF ENERGY AND RESOURCES		24,639	24,196
OTHER MINISTRIES			
12	Agriculture	550	617
13	Environment	1,200	1,001
TOTAL COSTS: ALL MINISTRIES		26,340	25,814
ADMINISTRATIVE LEVY 90%		23,706	23,233

Ref #	Description
1	<p>Energy Regulation Division (ERD) Executive</p> <ul style="list-style-type: none"> Executive leadership of the Energy Regulation Division; and, Administrative support functions.
2	<p>Field Services</p> <ul style="list-style-type: none"> Policy and program development related to the safe, environmentally sound operation of wells, facilities and pipelines; Monitoring and inspecting of wells, facilities and pipelines, including enforcement actions as required; Responding to and providing oversight for activities related to incidents involving wells, facilities and pipelines and ensuring reclamation activities are undertaken for such incidents; Providing on-the-ground support to landowners and operators related to the development, operation and abandonment of wells, facilities and pipelines; Working with provincial and municipal agencies to address issues related to oil and gas development on private and public lands; Responding to public complaints and inquiries; Conducting corporate audits of companies to ensure compliance with the Safety Loss Management Systems (SLMS), particularly their Integrity and Emergency Management Programs; and, Auditing submissions for facility and pipeline licence applications to ensure the applications were entered correctly and declaration questions answered correctly.
3	<p>Liability Management</p> <ul style="list-style-type: none"> Reclamation standards, procedures and practices; Licensee Liability Rating (LLR) administration; Well and facility reclamation; Issuance of Acknowledgment of Reclamation approvals; Orphan well fund administration and procurement; Liability and reclamation compliance; Care and custody of at-risk sites; Management of severely contaminated sites; and, Well and facility transfer approvals.
4	<p>Resource Management</p> <ul style="list-style-type: none"> Ensuring resource development that utilizes wells (oil, gas, potash, coal, helium, hydrogen, lithium etc.) occurs in a responsible manner to maximize resource potential, prevent waste, ensure equitable production of resources, ensure public safety and protect the environment; Monitoring all wells to ensure responsible reservoir development, set policy and approve development related to well spacing modifications, EOR/waterflood projects, underground (reservoir/cavern) storage/disposal projects, carbon dioxide storage projects, geothermal projects, acid gas disposal project and disposal wells, including establishing any special conditions related to their operation; Establishing production allowables, completion allocations, spacing areas, pools, forced pooling and units for oil and gas production; Establishing and amending logging and testing requirements; Determining oil and natural gas reserve estimates; Managing the reduction of greenhouse gas emissions from venting and flaring; and, Ensuring air quality standards are achieved.

5 Information Management

- Well, facility and seismic information collection, monitoring, validation and publication;
- Drilling core and cuttings collection, storage and administration;
- Measurement standards, audits and compliance;
- Data submission standards, procedures and compliance requirements (geological well data, maintenance of reporting facility infrastructure information, volumetrics and valuation);
- Management of Enhanced Production Audit Program (EPAP) and Enhanced Valuation Audit Program (EVAP);
- Data submission penalty assessment and waivers;
- Seismic planning and program reporting management; and,
- Licensing, sale and distribution of electronic data.

6 Client Support

- Developing standards related to improving regulatory services provided to clients;
- Operating the ER Service Desk for the full suite of activities of ER;
- Issuing licences through IRIS, including coordinating approvals by the various business units;
- Operating the single-window service delivery model with ENV and AG;
- Coordinating service enhancements and bug fixes within IRIS and Petrinex systems;
- Managing the content of the Saskatchewan.ca web site related to ERD programs and services;
- Developing and managing industry training and orientation modules related to the use of ERD's online services; and,
- Providing support in the delivery of large IT projects within the division including the oversight and delivery of organizational change management.

7 Regulatory Affairs

- Leads and/or supports regulatory/legislative/directive development along with consultation and related approval processes;
- Development of processes and tools to assist in risk assessment practice, consistency in business activities and in addressing emerging issues;
- Administrative Levy reporting and accountability;
- Inter-jurisdictional coordination, engagement and monitoring; and,
- Facilitating red tape and program reviews.

8 Surface Rights Board of Arbitration (SRBA)

- Administration costs for the SRBA, governed by *The Surface Rights Acquisition and Compensation Act*. The SRBA is used as a last resort when a landowner or occupant and an oil/gas or potash operator are unable to reach an agreement on the terms of surface access for oil, gas or potash development purposes and/or the compensation payable therefor.

9 Central Learning Fund

- Tuition costs for ERD employees that are reimbursed by ER. Costs typically relate to education opportunities to support technical knowledge or public administration functions.

10 Information Technology and Database Costs

- Operating costs of IRIS, including IT costs for the support and maintenance of IRIS to enable the licensees and regulators to audit and measure their respective performance activities; and,
- Amortization costs of capitalized IRIS IT projects and the operating costs of the legacy systems replaced by IRIS that are in the process of being phased out.

11 Central Overhead and Costs

- Allocation of central accommodation, IT and benefit costs attributable to Administrative Levy activities;
- Accommodation costs for the Subsurface Geological Laboratory where core samples gathered in accordance with regulations are located;
- Amortization costs of capitalized Subsurface Geological Laboratory assets and capitalized Fields Services branch field assets; and,
- Staff development costs not covered under the Central Learning Fund.

12 Ministry of Agriculture

- Salary, expenses and mileage for site inspections, review of new project proposals, abandonment inspections, lease spills, seed mix reviews and approvals; and,
- Salary and operating costs for one director, one agreement coordinator to prepare leases and address industry inquiries and Regina staff involved in policy development, rate review, billing, collections and accounting associated with active leases.

13 Ministry of Environment

- Salaries and operating costs for ecological protection specialists, support staff and manager from the Lands Unit responsible for review and approval of oil/gas industry proposals;
- Time for registry staff from the Corporate Services Branch responsible for producing and completing all land dispositions associated with industry;
- Oil/gas industry related time for staff at the ENV's Conservation Data Centre, which provides rare and endangered species information to industry for use in planning exploration and development; and,
- Time allocated to the regional wildlife and fisheries biologist to associate with industry, and issues/proposals for Environmental Assessment and Stewardship Branch staff.

Staff Development

Staff training and development remain a focus to meet the needs of an ever-changing regulatory environment. Technical training undertaken included GIS Spatial analysis, LiDAR, pipeline safety and operation, emission measurement, data analysis and process analysis. A focus also remained on the health and safety of staff operating in the field and was supported through ongoing First Aid, CPR and H₂S training. In total, \$98,685 was spend on staff training in 2021-22 Regulatory Services and involved 59 employees.

Regulatory Services

The following details regulatory services provided to industry and the service levels achieved.

Applications

The following outlines the various applications completed in 2021-22 and the turnaround times for completion.

Licence Application and Transfers

		2021-22	
		Total Applications	Turnaround Time (Business Days)
Well Licence	Routine*	731	0
	Non-Routine	1,675	5
	Total	2,406	
Facility Licence	Routine*	96	0
	Non-Routine	139	14.2
	Total	235	
Pipeline Licence	Routine*	605	0
	Non-Routine	27	4.5
	Total	632	

* Turnaround time for Routine applications is 0 days as they are approved on same day.

Between April 2021 and March 2022, ER approved 110 Licence Transfer Applications, which resulted in a transfer of 1,314 facility licences, 22,621 well licences, 219 pipeline licences and 607 flowlines.

		2021-22	
		Total Applications	Turnaround Time (Business Days)
Licence Transfer*		256	4.2

*Licence Transfer Application include Pre-Transfer, Transfer and Amalgamations.

Production and Measurement

The following table shows the number of production and measurement related applications reviewed in 2021-22.

	2021-22	
	Total Applications	Turnaround Time (Business Days)
Concurrent Production	18	35.6
Daily Allowable Application	1	127.6
Good Production Practice (GPP)	15	26.1
Maximum Permissible Rate (MPR)	66	8.4
Measurement Exemption	25	91.4
New Unit Application	2	438.7
Measurement, Accounting and Reporting Plan	13	39.6
Gas Well Test Waiver Application	1	16.2

Reservoir

Structured applications were created for EOR and Waterflood applications replacing the legacy generic applications. These new applications allow for meaningful revision of the application after submission between ministry and the applicant to occur. This functionality autogenerates licence submission drafts, which decreases non-routine licences associated to authorizations and provides up-to-date tracking on the associated project of all approved completions (licensed, pending, or active).

	2021-22	
	Total Applications	Turnaround Time (Business Days)
Additional Wellbore	49	4.2
Commingling - Disposal/Other	8	11.3
Commingling - Oil/Gas	49	2.6
Enhanced Recovery (EOR and Waterflood)	89	19.2
EOR (Legacy)	15	62.1
Reclassification	62	7.4
Recompletion	95	2.6
Spacing Modification	76	19.2
Waterflood (Legacy)	16	11.4
Well Test	14	4.4

Repair, Abandonment and Liability

The following table shows the number of repair- abandonment- and liability-related industry applications processed in 2021-22. A significant increase in year-over-year applications in many categories is in large part due to the ASCP.

	2021-22	
	Total Applications	Turnaround Time (Business Days)
Acknowledgment Of Reclamation	620	37.1
Non-Routine Abandonment	5,180	3.7
Well Repair	239	1.8
Full Exemption from Reclamation	111	21.7
ASCP	669	0.0
Partial Exemption from Reclamation	87	16.5
Reclamation Declaration Application	1,722	0.0
Security Deposit Refund Request Application	41	1.0
Multi-Licensed Site Liability Reduction	791	1.4
Facility Decommission Application	44	23.5

Storage

The following table shows the number of storage project-related industry applications processed in 2021-22.

	2021-22	
	Total Applications	Turnaround Time (Business Days)
Storage Project	2	20.7

Units and Forced Pooling

The following table shows the number of unitization- and forced pooling-related industry applications processed in 2021-22. Turnaround time for such applications is highly dependent upon the complexities of the application.

	2021-22	
	Total Applications	Turnaround Time (Business Days)
Forced Pooling	2	42.9
Unit Amendment	2	321.2

Logging Amendment

The following table shows the number of logging amendments processed in 2021-22.

	2021-22	
	Total Applications	Turnaround Time (Business Days)
Logging Amendment	113	2.5

Pipeline

The following table shows the number of pipeline-related applications reviewed in 2021-22.

	2021-22	
	Total Applications	Turnaround Time (Business Days)
Pipeline Leave to Open	534	0.0
Pipeline Licence Data Amendment	45	0.0
Pipeline Liner Install	4	24.0
Pipeline Reactivation	24	9.6
Pipeline Removal	12	0.1
Pipeline Segment Cancellation	483	11.7
Pipeline Segment Data Amendment	792	0.7
Pipeline Segment Replacement or Reroute	9	6.6
Retroactive Pipeline Licence	791	0.0

Obligations and Inspection

Obligations and Inspection application data is a new category ER is reporting on. The following table shows the number of applications reviewed in 2021-22.

	2021-22	
	Total Applications	Turnaround Time (Business Days)
Application For Obligation Deletion	3	0.0
Application For Obligation Extension	123	2.2
Application For Obligation Waiver	246	5.1
Extend Inspection Item Due Date Application	931	1.2

Emissions

Emission application data is a new category in this report. The following table shows the number of applications reviewed in 2021-22.

	2021-22	
	Total Applications	Turnaround Time (Business Days)
Emissions Adjustment Application	11	26.2
Emissions Reduction Plan Application	11	38.2
Qualifying Conservation Project Application	2	56.9
Special Production Flare Test Application	1	73.3
Venting/Flaring Application	35	74.3

Miscellaneous

A total of four applications were processed during 2021-22 with a turnaround time of 52.1 business days. An increase in turnaround time was due to a review of confidentiality rules regarding non-oil and gas related wells.

	2021-22	
	Total Applications	Turnaround Time (Business Days)
Review Confidentiality Period	4	52.1

Field Operations

Through the Field Services Branch, ERD provides services related to the monitoring and inspecting of wells, facilities and pipelines; provision of oversight for activities related to incidents; and ground support to landowners and operators in the areas of development, operation and abandonment of wells, facilities and pipelines.

Key accomplishments include:

- Completion of well, facility and pipeline inspections and incident activities below;
- Completion of four corporate audits on pipeline systems;
- Utilized the Remotely Piloted Aircraft System (RPAS) to complete inspections for 34 pipeline watercourse crossings in 2020-21. RPAS Photogrammetry of Watercourse Crossings is a technology used to further assess and enhance the monitoring of pipeline watercourse crossings; and,
- Use of LiDAR remote sensing techniques for the purpose of terrain analysis to facilitate the measurement of slopes and riverbanks and monitoring of boundary movements.

Well, Facility and Pipeline Inspections

During 2021-22, ER conducted a total of 23,115 inspections related to wells, facilities, incidents, rigs and pipelines.

Inspection Type	2021-22 Total Inspections
Facility	454
Incident	323
Measurement - Gas Facility	0
Measurement - Other	0
Measurement - Oil Facility	84
Measurement – Waste Disposal/Pressure Maintenance Facility	5
Measurement - Well	279
Rig	66
Well	21,733
Pipeline	317
Total	23,261

Inspections are conducted on a routine basis or in response to a complaint. Inspections typically involve the review of the following items:

- Well Identification/Signage
- Measurement Equipment
- Berm Construction and Maintenance
- Surface Casing Vent Installation
- Surface Casing Venting
- Production Casing Venting
- Engine Exhaust Location
- Tank Location and Spacing Requirements
- Chemical Containment
- Spill Clean-up
- Weed Control/Housekeeping
- Lease Under Water
- Equipment Storage
- Filling and Leveling of Excavations
- H₂S Odours – Both on and off Lease
- Sour Gas Management System
- Other Odours
- Residence Setback
- Flare Combustion

ER continues to leverage data within IRIS to support risk-based inspections. These types of inspections require more planning, evaluation and take longer to conduct but are aimed at identifying potential issues that pose the greatest risks. ER staff continue to re-inspect sites for follow-up action and now spend more time on inspections related to incidents, facilities as well as measurement audits.

Non-compliance issues identified result in notifications being sent to the licensee. Note—in many inspections more than one non-compliance issue was identified. Most notifications provide a 30-day time frame for industry to return to compliance for each issue. The exception is when public safety is an issue; then immediate shut down takes place until compliance is achieved.

During the year, ER worked with the Saskatchewan Water Security Agency to create a new layer in the GeoAtlas to support industry's assessment of high-risk pipeline abandonments.

Incidents

In 2021-22, the Saskatchewan upstream oil and gas industry reported a total 440 incidents to ER. Reported incident levels remained similar to 2020-21 numbers (426). ER continues to work with industry to identify potential risks and mitigation strategies prior to incidents occurring. ER officials also continue to participate regularly in spill exercise and spill-response unit meetings.

Incident Type	2021-21 Total Incidents
Natural Gas	44
Oil	61
Other	154
Refined Product or Chemical	8
Water	173
Total	440

Care and Custody

During 2021-22, ER expended \$162,340 for the care and custody of pre-orphaned sites. These are sites that, at the time the work was required, were not officially deemed as orphaned, but the responsible company refused or was unable to meet its obligations toward the sites. The work conducted under the care and custody program is typically emergent in nature.

These expenditures were similar in magnitude compared to expenditures for 2020-21, which were \$178,945. Expenditures under the Care and Custody Program can vary significantly from year to year depending on the number of sites, severity of the issues requiring care and the work that is required at each site.

Examples of the work conducted under this program include abandonment of wells with unsafe pressure conditions or leaks, spill response, removal of contaminated soil adjacent to surface water, removal of fluid from tanks and other receptacles, hauling and disposal of refined chemical barrels and mowing.

Other Regulatory Services

Client Support

ER provided regulatory support to industry in 2021-22 through the ER Service Desk, which handled 11,593 phone calls and emails. A total of 91 IRIS and 91 Petrinex change requests were made to address errors and enhancements, resulting in 887 hours of user acceptance testing being completed.

Key initiatives during 2021-22 included:

- Two new online training modules were developed, and 11 updates were made to support industry on the major regulatory initiatives in the 2021-22 fiscal year.
- ER developed a process to enable the approval of well licence applications that cross unit boundaries, which has allowed industry participants to expand their drilling programs.
- Work continued to develop a risk valuation for licence information and disclosure questions with review of licence audit data that has been collected since IRIS was initiated. This risk assessment will be used to inform amendments to the licence disclosure and requirements to improve the routine/non-routine process. It will also be used to proactively identify issues, educational opportunities, changes and compliance actions.

- The Client Support Branch modified its framework to work in greater cooperation with industry partners and internal business areas to reduce the total number of denied applications. Leading up to November 2021, there was a denial rate of 7.9 per cent and towards the end of fiscal year there was a decrease to 4.4 per cent.
- ER reduced the number of licence cancellations it performed from 5.8 per cent in 2020-21 to 2.6 per cent in 2021-22. Cancellation of a well licence is typically enforced for high-risk failures related to routine applications. ER has been working closely with industry identifying application issues and working towards resolution of those issues rather than cancelling a license and requiring a resubmission of a license application, which was required in prior years.

Information Management

Information Management services include the services required to collect, validate and disseminate data. During the monitoring of the data through external procedures, issues within the Petrinex system were identified and changes were implemented to better assist operators in the reporting of information. The changes that were made to Petrinex include:

- Petrinex Public Data Access;
- Royalty/Taxpayer - Penalty Suspension of RTP101 and RTP104 errors;
- New Miscellaneous ID for Crude-by-Rail Reporting;
- New EPAP Declaration Reports; and,
- New Industry Report – “Unlinked Well Activity”.

Other efforts are undertaken to support the ER’s objective of collecting and disseminating accurate information to support resource management, industry development and other government programs, as well as improving public access to data. Such efforts include:

Facility Data:

- 250 records were identified for review and followed-up on with industry to ensure accuracy of the data and that necessary amendments were submitted.
- 48 custom data requests.
- 184 Reporting Facility Infrastructure changes in Petrinex.
- 17 EVAP Declarations were reviewed.
- 215 EPAP Declaration reviews were completed.

Well Data:

- 581 comprehensive well data audits were performed.
- 5,286 well file clean-up items were completed.
- 54 seismic exploration programs were processed.
- 21,615 records were audited as part of the Non-Log Scanning Project.
- 256,263 well logs were migrated into IRIS as part of the Well Log Scanning Project.

Saskatchewan Subsurface Geological Warehouse:

- Total core pulled for viewing: 1,300 wells for a total of 20,295 boxes of core.
- Total core shipped out: 25 wells for a total of 523 boxes of core.
- Total core received and processed: 90 wells for a total of 2,924 boxes of core.
- Total drill cuttings received and processed: 335 wells for a total of 61,956 vials.
- Total drill cuttings pulled for viewing: 98 wells for a total of 4,950 vials.

Measurement and Compliance:

- Renewed contract with consultant to support Measurement and Compliance program review;

- Prepared *Directive PNG017: Measurement Requirements for Oil and Gas Operations* for public consultation;
- Updated measurement inspection sheets for single well and multi-well batteries, which are easier to utilize in the field; and,
- Processed three Gas-Oil Ratio applications.

Liability Management

The Liability Management Branch administers a number of regulatory programs aimed at ensuring that risks related to industry liabilities are properly managed and that oil and gas sites are decommissioned and reclaimed to regulatory standards.

Key work items for 2021-22 include:

- Completed consultation and drafting of the FSSCR, which were passed in June 2021;
- Amended eligibility criteria to hold or acquire licences to include criteria regarding companies that pose an unreasonable risk due to financial health. Also included provisions for closure companies;
- Established orphan levy amount in consultation with industry associations;
- Developed a new directive, *Directive 045: Acknowledgement of Reclamation for Sodium Chloride-Impacted Sites* (Directive PNG045), anticipated for release in the summer of 2022;
- Began work on a new Corporate Health Test to be used in conjunction with the new Enhanced LLR program;
- Began work on a new financial security requirements directive to compliment the new FSSCR;
- Effectively responded to emerging issues impacting liability management; and,
- Carefully monitored and analyzed all licence transfer applications to ensure risks were properly evaluated and that security was submitted when necessary.

Pipeline Compliance Audits

Four virtual full-scale corporate audits for pipeline systems were completed during the 2021-22 fiscal year. The companies were audited for their pipeline safety and loss management system as per audit protocol that is based on ER's Acts and Directives and CSA Z662 and according to auditee-documented programs and practices. ER auditors have been trained as Lead Auditors in compliance with ISO auditing standards (ISO 14001 and ISO 9001) to support the quality of audits.

The audits resulted in three major and 44 minor findings and 25 observations. Following the completion of an audit, an auditee develops a Corrective Action Plan (CAP) for each of the identified findings and ER conducts follow-up conversations with them to close-off findings within the given timeline. The 19 minor findings from the two virtual audits of the 2020-21 fiscal year were closed after doing follow-up audits with auditees, and subsequently audit closure letters were issued.

Policy Development

The following updates to ER's policies, programs and services were completed:

- *The Seismic Exploration Regulations, 1999* (SER) were amended to eliminate the need for blasters to be permitted by ER. Worker safety requirements were also removed and placed appropriately under mandate of *The Occupational Health and Safety Regulations, 2020*. The SER were also modernized to allow for electronic submission of data.
- Directive PNG030 was amended to include fees for viewing subsurface assets and to provide clarification pertaining to the waiver of fees.
- Phase 3 of the Well Log Scanning Project was completed, which involved the migration of scanned data into IRIS.
- Consulted on the following Directives in anticipation of bringing these into force in 2022-23:
 - *Directive PNG034 Saskatchewan Pipeline Code*;

- *Directive PNG036 Flaring and Venting Requirements;*
- *Directive PNG045; and,*
- *Directive S-20: Saskatchewan Upstream Flaring and Incineration Requirements.*

Resource Management

2021-22 saw a restructure within the Resource Management Branch creating two areas: Reservoir Engineering and Emissions and Subsurface Engineering. This change was made to address the current climate of oil, gas and other emerging resource development occurring while also providing a defined area with focus on emissions regulation.

Reservoir Engineering has two defined groups: Well Development and Recovery Projects. Both areas focus on reservoir management and regulation; one area is focused more on the well level while the other area is focused on larger scale projects.

Emissions and Subsurface Engineering has two defined groups: Environmental Programs and Disposal Well and Storage Projects. Environmental Programs focuses on emission reduction regulation and air quality while disposal well and storage projects focuses on disposal of various well types, storage projects and support of policy development related to non-hydrocarbon resources.

Key accomplishments in 2021-22 included:

- Potash: Interim Ministers Order issued; Potash specific Guideline developed; legacy licenses issued; and developed potash waste disposal report template to streamline reporting requirements;
- Updated licensing requirements for surface brine ponds associated to storage projects to clarify the role between ER and ENV;
- Structured Application for Enhanced Recovery Applications: Updated application process for EOR and Waterfloods, updated forms, updated guidelines on submission, generated links to project and authorizations, created pre-licence wells to be associated to applications and projects;
- Generated policy for non-thermal well completion requirements related to thermal EOR projects, updated application forms and reporting requirements;
- GPP: identified pools that are good candidates for GPP, which will result in a reduction in overproduction and an updated GPP application form and process to support area review and analysis;
- Developed process to allow for area-based concurrent production application and approval; and,
- Assisted in development of contact for webpages providing guidance on non-hydrocarbon bearing well development.

Surface Rights Board of Arbitration

The Surface Rights Board of Arbitration (SRBA) is used as a last resort when a landowner or occupant and an oil/gas or potash operator are unable to reach an agreement for surface access to private land and related compensation. In 2021-22, the SRBA received two Applications for Rental Review. The SRBA held 18 hearings on matters in the SRBA purview, issued nine Right of Entry Orders and two Compensation Orders. Note that this information is only up to the end of 2021.

The SRBA also adopted new Board Rules to meant to address certain common procedural matters that arise in hearings before the SRBA. The new Board Rules promote fairness in the hearing process by establishing formal guidelines on how and when parties to a hearing are to serve and file evidence for a hearing. The Board Rules can be found here: <https://publications.saskatchewan.ca/#/products/113782>

Ministry of Agriculture

In 2021-22, AG issued 27 new surface leases including the review of project proposals, site inspections and field work. AG also completed 522 surface lease renewals and 49 surface lease amendments, numerous seed mix approvals and attended three Saskatchewan Petroleum Industry/Government Environment Committee (SPIGEC) meetings.

Ministry of Environment

In 2021-22, ENV processed 2,404 oil and gas project proposals of which 1,673 were deemed to be non-routine applications. Site inspections were associated with a significant number of those projects, including pre- and post-construction inspections and inspections that were undertaken during construction. The non-routine projects require significant review time due to several factors such as siting on environmentally sensitive lands, proximity to endangered species and crown administered lands. ENV currently administers more than 875 oil and gas dispositions on Crown land, including park lands. Significant effort has been spent working with industry regarding new technology and new companies to Saskatchewan, as well as numerous abandonment programs.

ENV staff also undertook numerous meetings with proponents and attended all SPIGEC meetings.