

# Ministry of Energy and Resources

## Oil and Gas Regulatory Cost Recovery Levy Annual Report for 2019-20

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## 1.0 Introduction

Since its introduction in 2014, the Oil and Gas Regulatory Cost Recovery Levy (“The Administrative Levy”) has helped to ensure that Saskatchewan’s regulatory system meets public expectations for regulatory oversight of the oil and gas industry. The levy has contributed to the modernization of systems supporting activities of the regulator and resulting in improved service to the industry.

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

The publication of the annual report delivers on the Government of Saskatchewan’s commitment to improve transparency on the levy administration 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.

## 2.0 Regulatory Highlights and Accomplishments for 2019-20

- Introduced *The Pipelines Administration and Licensing Regulations (PALR)*, 2020 as part of regulatory changes to replace requirements in *The Pipelines Regulations, 2000*. PALR outlines general administration and licensing requirements for all activities related to pipelines.
- Introduced *Directive PNG034: Saskatchewan Pipelines Code* which provides more concise and clear technical rules for all activities related to pipelines.
- Introduced *Directive PNG036: Venting and Flaring Requirements* in place of *Directive S-10: Saskatchewan Upstream Petroleum Industry Associated Gas Conservation* for alignment with *The Oil and Gas Emissions Management Regulations, 2018*. *Directive PNG036* was also revised to add leak detection and repair requirements for certain gas facility subtypes.
- Implemented *Directive PNG031: Site Specific Liability Assessment* which outlines requirements for a Site Specific Liability Assessment and is intended to improve the consistency and accuracy of reclamation liability cost estimates submitted to ER.
- Implemented *Directive PNG033: Phase II Environmental Site Assessment* which outlines the requirements for a Phase II Environmental Site Assessment.
- *Directive PNG009: Public Notice Requirements* was amended to provide additional clarity and allow additional approval authority.
- *Directive PNG012: Allowable Rate of Production: Oil Wells* was amended to extend Economic Allowance (EA) valuation for wells drilled to a greater measure/vertical total depth.
- *Directive PNG017: Measurement Requirements for Oil and Gas Operations* was amended to revise and relax oil analysis submission requirements.
- Revised *Directive PNG015: Well Abandonment Requirements* to replace *The Oil and Gas Conservation Regulations, 2012* as the primary regulation for abandonment requirements for oil and gas wells. The revised *Directive* also introduced the abandonment process for ‘routine’ and ‘non-routine’ wells.
- Revised *Directive S-20: Saskatchewan Upstream Flaring and Incineration Requirements* to include updated ER contact information.
- Completed Phase 1 of the Well Log Scanning Project.
- Completed consultation and drafting of amendments to the *Seismic Exploration Regulations, 1999*.

### 3.0 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 payment 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 2019-20 fiscal period was based on the performance of wells and the length of pipelines operating during the 2018 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 2019-20 fiscal period. As previously noted, these are based on the performance of wells and the length of pipelines operating during the 2018 calendar year.

### Annual Adjustment Factor Calculation, 2019-2020

Class	Production (cubic metres / year)	Base Rate by Class	Number of Well Licences	Base Revenues	
1	Service Wells	\$100	5,596	\$559,600	
2	0.1 to 300.0	\$100	27,845	\$2,784,500	
3	300.1 to 600.0	\$125	7,798	\$974,750	
4	600.1 to 1,200.0	\$312	6,383	\$1,991,496	
5	1,200.1 to 2,000	\$750	3,246	\$2,434,500	
6	2,000.1 to 4,000.0	\$1,250	2,375	\$2,968,750	
7	4,000.1 to 6,000.0	\$1,625	559	\$908,375	
8	6,000.1 and above	\$1,875	489	\$916,875	
9	Wells other than abandoned	\$25	34,676	\$866,900	
<b>TOTAL</b>			<b>88,967</b>	<b>\$14,405,746</b>	<b>A</b>

Pipeline Class	Status of Pipeline Segment	Base Rate by Class per kilometre:	Length (kms)	Base Revenues	
1	Flowlines	N/A	N/A	N/A	
2	Operating	\$40	21805.91	\$872,236	
3	Discontinued	\$20	1237.35	\$24,747	
<b>TOTAL</b>			<b>23,043</b>	<b>\$896,983</b>	<b>B</b>

**TOTAL BASE AMOUNT (C=A+B) \$15,302,729 C**

**2019-20 Regulatory Budget: \$25,230,000**

**Industry Share (90%): \$22,707,000 D**

**Annual Adjustment Factor (E=D÷C): 1.483853 E**

## 4.0 Financial Reporting

<b>ADMINISTRATIVE LEVY REVENUE AND REGULATORY COSTS</b>		<b>2019-20</b>	<b>2019-20</b>
<b>(\$000s)</b>		<b>Budget</b>	<b>Actual</b>
	ADMINISTRATIVE LEVY INVOICED		22,688
	LESS: REGULATORY COSTS INCURRED (90%)		20,725
	VARIANCE		1,963
	2018-19 VARIANCE CARRY FORWARD		2,816
	2019-20 VARIANCE CARRY FORWARD		4,779
<b>COST DETAIL</b>			
1	Energy Regulation Division (ERD) Executive	916	825
2	Field Services	4,746	4,630
3	Liability Management	1,193	1,184
4	Resource Management	1,904	1,675
5	Information Management	2,101	2,209
6	Client Support	1,459	1,384
7	Pipeline Regulation Enhancement Program	600	482
8	Surface Rights Arbitration Board	229	134
9	Information Technology and Database Costs	7,876	5,393
10	Central Overhead and Costs	2,497	3,511
	<b>TOTAL MINISTRY OF ENERGY AND RESOURCES</b>	<b>23,520</b>	<b>21,427</b>
<b>OTHER MINISTRIES</b>			
11	Agriculture	550	584
12	Environment	1,200	1,017
	<b>TOTAL COSTS: ALL MINISTRIES</b>	<b>25,270</b>	<b>23,028</b>
	<b>ADMINISTRATIVE LEVY 90%</b>	<b>22,743</b>	<b>20,725</b>

Reference	Description
1	<p>ERD Executive (Includes Regulatory Affairs Unit)</p> <ul style="list-style-type: none"> <li>• Regulatory/legislative process modernization and enhancement and directives and guideline content development and management;</li> <li>• Development of processes and tools to assist in risk assessment practice, consistency in business activities and in addressing emerging issues;</li> <li>• Administrative Levy reporting and accountability;</li> <li>• Inter-jurisdictional coordination, engagement and monitoring; and</li> <li>• Facilitating red tape/program reviews</li> </ul>
2	<p>Field Services</p> <ul style="list-style-type: none"> <li>• Policy and program development related to the safe, environmentally sound operation of wells, facilities and pipelines;</li> <li>• Monitoring and inspecting wells, facilities and pipelines, including enforcement actions as required;</li> <li>• Responding to and providing oversight for activities related to incidents involving wells, facilities and pipelines and ensuring reclamation activities are undertaken for such incidents.</li> <li>• Providing on-the-ground support to landowners and operators related to the development, operation and abandonment of wells, facilities and pipelines;</li> <li>• Working with provincial and municipal agencies to address issues related to oil and gas development on private and public lands; and</li> <li>• Responding to public complaints and inquiries.</li> </ul>
3	<p>Liability Management</p> <ul style="list-style-type: none"> <li>• Reclamation standards, procedures and practices;</li> <li>• Licensee Liability Rating (LLR) administration;</li> <li>• Well and facility reclamation (AOR);</li> <li>• Orphan well fund administration and procurement;</li> <li>• Liability and reclamation compliance;</li> <li>• Care and custody of “at risk” sites;</li> <li>• Management of severely contaminated sites; and</li> <li>• Well and facility transfer approvals.</li> </ul>
4	<p>Resource Management</p> <ul style="list-style-type: none"> <li>• Developing policies, programs and standards related to the production of oil and gas resources including the prevention of wasteful operations;</li> <li>• Reservoir management practices and standards;</li> <li>• Oil and natural gas reserve determination;</li> <li>• Regulation of associated mineral rights (potash, coal);</li> <li>• Approving all horizontal and off-target wells, well spacing modifications, enhanced oil recovery/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;</li> </ul>

- 
- Establishing spacing areas, pools, forced pooling and units for oil and gas production;
  - Greenhouse gas emissions management;
  - Setting and monitoring well production allowables;
  - Flaring and venting – air quality;
  - Establish allocation for well completions; and
  - Waiver of logging and testing requirements.

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5 Information Management

- Well, facility and seismic information collection, monitoring and validation, publication;
- Drilling core and cuttings collection, storage and administration;
- Measurement standards, audits and compliance;
- Data submission standards, procedures and compliance requirements (geological well data, volumetrics and valuation);
- Submission penalty assessment and waivers;
- Seismic licensing, permitting and plan recording; and
- Licensing, sale and distribution of electronic data.

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6 Client Support

- IRIS/PETRINEX information system development, enhancement and change management;
- Development of a new tracking tool used for single point of contact for clients;
- Development of on-line training modules for stakeholders using IRIS;
- Operating the ER service desk for the full suite of inquiries and reporting activities of the ministry;
- Managing the content of the Saskatchewan.ca web site related to the ERD's programs and services;
- Operating the single-window service delivery model with the Ministry of the Environment and the Ministry of Agriculture;
- Issuing licence approvals through the IRIS system, including coordinating approvals by the various business units and other agencies; and
- Well licence application audits.

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7 Pipeline Regulation Enhancement Program

- Creating efficiencies for government and industry by integrating all pipeline licensing and reporting requirements into IRIS;
- Developing spatial data tools consistent with Saskatchewan Enterprise Geographic Information System (EGIS) standards that will support industry and assist the regulator in assessing and managing pipeline risk;
- Retroactively licensing approximately 80,000 flowlines (well to battery gathering lines) and any remaining licence-exempt pipelines.

8	<p>Surface Rights Arbitration Board</p> <ul style="list-style-type: none"> <li>The Arbitration Board, governed by The Surface Rights Acquisition and Compensation Act, is used as a last resort when a landowner or occupant and an oil/gas or potash operator are unable to reach an agreement.</li> </ul>
9	<p>Information Technology and Database Costs</p> <ul style="list-style-type: none"> <li>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</li> <li>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.</li> </ul>
10	<p>Central Overhead and Costs</p> <ul style="list-style-type: none"> <li>Allocation of central accommodation, IT and benefit costs attributable to Administrative Levy activities;</li> <li>Accommodation costs for the Subsurface Geological Laboratory where core samples gathered in accordance with regulations are located;</li> <li>Amortization costs of capitalized Subsurface Geological Laboratory assets and capitalized Fields Services branch field assets; and</li> <li>Staff development.</li> </ul>
11	<p>Agriculture</p> <ul style="list-style-type: none"> <li>Salary, expenses, and mileage, for site inspections, review of new project proposals, abandonment inspections, lease spills, seed mix reviews and approvals; and</li> <li>Salary and operating costs for one regional manager, 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.</li> </ul>
12	<p>Ministry of the Environment</p> <ul style="list-style-type: none"> <li>Salaries and operating costs for ecological protection specialists from the Landscape Stewardship Branch responsible for review and approval of oil/gas industry proposals;</li> <li>Time spent by support staff within the branch on the oil/gas program; salaries and operating costs for the manager in the branch who is responsible for the program;</li> <li>Time for registry staff from the Corporate Services Branch responsible for producing and completing all land dispositions associated with industry;</li> <li>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</li> <li>Time allocated to the regional wildlife and fisheries biologist to associate with industry, and issues/proposals for Environmental Assessment Branch staff.</li> </ul>

## 5.0 Staff Development

Continuous training and development of staff remained an important focus of the Ministry of Energy and Resources in 2019-20. Training and development expenditures for the year were just over \$105,000. Training opportunities for staff within the ERD included but was not limited to: Canadian School of Hydrocarbon Measurement Training; SAIT Measurement Inspection; Blow Out Prevention; Pipeline Integrity Management; UAV operation; TOPCORP Training; Skid Smart; H2S; and First Aid/CPR. The Administrative Levy also supported the hosting of ERD’s Spring School which facilitates training and learnings related to regulatory practices and initiatives for all of the division’s staff. As well, staff participated in training related to policy development and governance through the Johnson-Shoyama Graduate School of Public Policy.

## 6.0 Regulatory Services

The following subsections provide details with respect to regulatory services provided to industry and the service levels achieved compared to any established service level targets.

### 6.1 Applications

#### a. Review Confidential Period

A total of four applications were processed during 2019-20 with an average turnaround time of 36.6 business days.

	2019-20	
	Total Applications	Turnaround Time (Business Days)
<i>Review Confidentiality Period</i>	4	36.6

#### b. Licence Application and Transfers

During 2019-20, a total of 2,925 licence applications and 227 facility licence applications were processed. Two hundred and forty-eight well and facility licence transfer applications were processed involving the transfer of 2,711 wells and 248 facilities. Process times for the 1,553 non-routine well licence applications in 2019-20 was 23.2 days, which is over the documented service standard target of 14 days. This metric includes the cumulative time required by AG, ENV and ER to approve non-routine well licence applications through the single window well licence application process in IRIS.

The following table shows the number of licences processed in 2019-20.

**2019-20**

	Total Applications	Turnaround Time (Business Days)
<i>Facility Licence</i>	227	8.8
<i>Licence Transfer</i>	248	6.5

**2019-20**

	Total Applications	Turnaround Time (Business Days)
<i>Well Licence</i> Routine	1372	-
<i>Well Licence</i> Non-Routine	1553	23.2
<i>Well Licence</i> Total	2925	12.3

**c. Production and Measurement**

From April 2019 to March 2020, ER processed 205 production and measurement related applications, an increase of 34 applications from the previous year, with a weighted average turnaround time of 17.4 business days. The following table shows the number of production and measurement related applications reviewed in 2019-20.

**2019-20**

	Total # of Applications	Turnaround Time (Business Days)
<i>Application For S10 Economic Evaluation</i>	50	9.9
<i>Concurrent Production</i>	10	41.5
<i>Good Production Practice (GPP)</i>	20	35.4
<i>Maximum Permissible Rate (MPR)</i>	114	8.9
<i>Measurement Exemption</i>	9	104.7
<i>Special Production Flare Test</i>	2	5.1

**d. Reservoir**

From April 2019 to March 2020, ER processed 919 reservoir related industry applications with a weighted average turnaround time of 13.6 business days. The following table shows the number of reservoir related industry applications processed in 2019-20.

**2019-20**

	Total Applications	Turnaround Time (Business Days)
<i>Acid Gas Disposal</i>	0	0

<i>Additional Wellbore</i>	49	1.7
<i>Commingling</i>	199	32.8
<i>Enhanced Oil Recovery (EOR)</i>	57	27
<i>Project Commencement</i>	14	16.1
<i>Reclassification</i>	83	3.3
<i>Recompletion</i>	217	2.2
<i>Spacing Modification</i>	160	8.5
<i>Waterflood</i>	133	14
<i>Well Test</i>	7	25.5

e. Repair, Abandonment and Liability

From April 2019 to March 2020, ER processed 3,636 repair, abandonment and liability-related industry applications with a weighted average turnaround time of 6.4 business days. This was an increase of 1,008 applications and an average increase in processing time of 3.6 days. The following table shows the number of repair, abandonment and liability related industry applications processed in 2019-20.

<b>2019-20</b>		
	Total Applications	Turnaround Time (Business Days)
<i>Acknowledgment Of Reclamation</i>	400	32.4
<i>Non-Routine Abandonment</i>	2794	2
<i>Well Repair</i>	262	1.2
<i>Full Exemption from Reclamation</i>	93	22.5
<i>Grandfathered Approval (AOR)</i>	26	24.2
<i>Partial Exemption from Reclamation</i>	61	29.4

f. Storage

From April 2019 to March 2020, ER processed 5 storage project related industry applications with a weighted turnaround time of 8.5 business days. The following table shows the number of storage project related industry applications processed in 2019-20

<b>2019-20</b>		
	Total Applications	Turnaround Time (Business Days)
<i>Storage Project</i>	1	1.7
<i>Geothermal Project</i>	3	7.5

<i>CO2 Storage Project</i>	1	18.3
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**g. Units and Forced Pooling**

From April 2019 to March 2020, ER processed 12 units and forced pooling related applications, an increase of seven applications from the previous year, with a weighted average turnaround time of 270.9 business days. The following table shows the number of unit and forced pooling related applications reviewed in 2019-20.

<b>2019-20</b>		
	Total Applications	Turnaround Time (Business Days)
<i>Forced Pooling</i>	3	50.9
<i>New Unit*</i>	4	435.9
<i>Unit Amendment*</i>	5	271

\* Turnaround time for *New Unit* and *Unit Amendments* relates to the utilization process from beginning to end, not the time it takes for ER to review an application, which is considerable less.

**h. Logging Amendment**

A total of 219 applications were processed during 2019-20 with an average turnaround time of 1.7 business days.

<b>2019-20</b>		
	Total Applications	Turnaround Time (Business Days)
<i>Logging Amendment Application</i>	219	1.7

**i. Pipelines**

From April 2019 to March 2020, ER processed 517 pipeline related applications, a decrease of 238 applications from the previous year, with a weighted average turnaround time of 1.8 business days. The following table shows the number of pipeline related applications reviewed in 2019-20.

<b>2019-20</b>		
	Total Applications	Turnaround Time (Business Days)
<i>Transfers</i>	9	4
<i>Leave to Open</i>	139	1
<i>Amendments</i>	282	2

## 6.2 Field Operations

### a. Well, Facility and Pipeline Inspections

During 2019-20, ER conducted a total of 18,096 inspections related to wells, facilities, incidents, rigs and pipelines. The inspections were either regular inspections or in response to a complaint and involved 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
- H<sub>2</sub>S Odours – Both on and off Lease
- Sour Gas Management System
- Other Odours
- Residence Setback
- Flare Combustion

<i>Inspection Type</i>	<b>2019-20 Total Inspections</b>
<i>Facility</i>	189
<i>Incident</i>	614
<i>Measurement - Gas Facility</i>	0
<i>Measurement - Oil Facility</i>	14
<i>Measurement – Waste Disposal/ Pressure Maintenance Facility</i>	0
<i>Measurement - Well</i>	103
<i>Rig</i>	32
<i>Well</i>	17,135
<i>Pipeline</i>	9
<b>Total</b>	<b>18,096</b>

Leveraging data that is now more readily assessable within IRIS, ER continues to undertake more informed and 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.

## b. Incidents

In 2019-20, the Saskatchewan upstream oil and gas industry reported a total 663 spill incidents to the ministry. To help oil and gas companies educate and train their spill-response personnel, ER officials participate regularly in spill exercise and spill-response unit meetings.

<i>Incident Type</i>	<b>2019-20 Total Incidents</b>
<i>H2S</i>	0
<i>Natural Gas</i>	118
<i>Oil</i>	107
<i>Other</i>	184
<i>Refined Product or Chemical</i>	4
<i>Water</i>	187
<b>Total</b>	<b>663</b>

## 6.3 Care and Custody

ER had expenditures of \$14,832 during 2019-20 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. The work conducted under the care and custody program is typically emergent in nature.

These expenditures were similar in magnitude to expenditures for 2018-19 which were \$15,345. Expenditures under the Care and Custody Program can vary significantly from year to year depending on the number of sites requiring care and the work that is required at each site. As an example, expenditures in 2014-15 were \$432,123, which is the maximum annual expenditure for the program thus far.

Examples of the work conducted under this program are abandonment of wells with unsafe pressure conditions or leaks, 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.

## 6.4 Pipeline Regulatory Enhancement Program (PREP)

In the March 2017 Provincial Budget, Saskatchewan announced the creation of the Pipeline Regulatory Enhancement Program (PREP), a multiyear initiative to strengthen pipeline regulation. PREP's purpose was to bring innovation and excellence to the regulation of oil and gas pipelines by identifying and addressing regulatory gaps or deficiencies through new and enhanced programs that meet or exceed leading Canadian and international standards.

In 2019-20, work was completed to automate pipeline licensing and approvals within IRIS in support of licensing and fully regulating over 80,000 flowlines (pipeline operators have four years, if needed, to complete this work). Eight public sector ministries and agencies were engaged throughout this planning, providing a potential foundation for a unified, transparent, on-line single window for industry to obtain government approvals.

Highlights from 2019-20:

- Maintained an intensive industry advisory process utilizing a Business Change Advisory Committee (split between Saskatchewan and Calgary). This forum included approximately 30-35 representatives from pipeline operators and two industry associations who provided comment and input on PREP's vision and implementation plans.
- Successfully launched the new pipeline module within IRIS in January 2020.

With this work completed, the PREP program was formally concluded. On-going improvements to further enhance the management of pipelines will continue.

## 6.5 Other Regulatory Services

### a. 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:

- Adjustment to the Metering Difference Errors in Petrinex to align with the measurement requirements outlined in Directive PNG017;

- Allow the activity of FLARE for product of Acid Gas for Gas Plants;
- Adjusted Gas Oil Ratio (GOR) functionality in Petrinex to allow for backdating of GOR factors and increasing the range of GOR that is permitted for submission;
- Allow producers to access purchaser contact information;
- Allow Saskatchewan operators to view facility level gas plant information for another company's Saskatchewan gas plants;
- Links for facility identifier and well identifier to enhance navigation of Petrinex;
- Allow product type of 'Waste Oil' to be used when the Waste Plant is outside of Saskatchewan;
- Several changes were made to EPAP CAIs in accordance with industry consultation.

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

#### Facility Data:

- 1,983 records were reviewed and followed-up with industry to ensure accuracy of the data and that necessary amendments were submitted.

#### Well Data:

- 668 comprehensive well data audits were performed;
- 12,244 work items completed;
- 4,809 review items completed;
- 2,164 service cases were processed;
- 9,032 fluid analysis types corrected;
- 850 core analysis depths corrected;
- 26,903 well logs audited as part of Phase 1 well log scanning project.

#### Saskatchewan Subsurface Geological Warehouse:

- Total core pulled for viewing: 2,925 wells for a total of 50,723 boxes of core;
- Total core shipped out: 284 wells for a total of 5,412 boxes of core;
- Total core received and processed: 113 wells for a total of 4,965 boxes of core;
- Total drill cuttings received and processed: 508 wells or a total of 76,297 vials;
- Total drill cuttings pulled for viewing: 42 wells for a total of 2,100 vials.

## b. Client Support

ER provided regulatory support to industry in 2019-20 through a now single Service Desk which handled 14,383 phone calls and emails. A total of 122 IRIS and 116 Petrinex change requests were made to address errors and enhancements, resulting in 1,109 hours of user acceptance testing being completed.

Initiatives during 2019-20 included:

- Development of the IRIS online training modules, to provide guidance on regulatory submissions and reporting in IRIS;
- Introduction of functionality to streamline the single window review of well licence applications that are a resubmission of a previously denied or cancelled application or on a PAD well set. These changes resulted in an increase in routine well licence applications from 44 per cent in 2018-19 to 47 per cent in 2019-20.
- Implementation of a well licence audit risk framework which has resulted in ER focusing on higher risk items in a shorter time frame, thus decreasing the potential that a well licence will need to be cancelled if it has progressed past the planned state. This supports reducing potential costs for industry.

### c. Policy Development

Initiatives during 2019-20 included:

- Introduction of the following regulations and directives:
  - *The Pipelines Administration and Licensing Regulations (PALR)*, 2020 to guide general administration and licensing requirements for all activities related to pipelines;
  - *Directive PNG034: Saskatchewan Pipelines Code* which provides technical rules for all activities related to pipelines; and
  - *Directive PNG036: Venting and Flaring Requirements* which sets out the requirements for venting and flaring from oil and gas operations in Saskatchewan.
- Previous work concluded which culminated in the implementation of the following directives:
  - *Directive PNG031: Site Specific Liability Assessment* which outlines requirements for a Site Specific Liability Assessment; and
  - *Directive PNG033: Phase II Environmental Site Assessment* which outlines the requirements for a Phase II Environmental Site Assessment.
- Updates to the following directives completed:
  - Revised *Directive PNG009: Public Notice Requirements* to provide additional clarity and allow additional approval authority;
  - Revised *Directive PNG012: Allowable Rate of Production: Oil Wells* to incorporate Economic Allowance (EA) valuation for wells drilled to a greater measured/vertical total depth;
  - Revised *Directive PNG015: Well Abandonment Requirements* to act as the primary regulation for abandonment requirements for oil and gas wells and introduce the abandonment process for 'routine' and 'non-routine' wells;
  - Revised *Directive PNG017: Measurement Requirements for Oil and Gas Operations* to relax oil analysis submission requirements; and
  - Revised *Directive S-20: Saskatchewan Upstream Flaring and Incineration Requirements* to include updated ER contact information.

- Completed Phase 1 of the Well Log Scanning Project.
- Completed consultation and drafting of amendments to *The Seismic Exploration Regulations, 1999*.

#### d. Pipeline Compliance Audits

Compliance audits of the Safety Loss Management Systems (SLMS) of four companies began in the previous fiscal year and follow up activities continued into 2019-20. Two new SLMS audits were initiated in 2019-20 but, due to the timing of the project, these audits will continue into the next fiscal year.

#### e. Liability

Liability Management Branch carefully monitored all licence transfer applications and scrutinized transfers containing significant uneconomic liabilities in order to protect the industry from exposure to excess orphan fund expenditures. The Branch also effectively responded to emerging issues that impact on industry liability such as potential insolvencies and the fallout from the Supreme Court of Canada Decision in *Redwater*.

Over the 2019-20 fiscal year, the Branch implemented *Directive PNG031: Site Specific Liability Assessment* which outlines requirements for a Site Specific Liability Assessment and is intended to improve the consistency and accuracy of reclamation liability cost estimates submitted to ER. *Directive PNG033: Phase II Environmental Site Assessment* was also implemented which outlines the requirements for a Phase II Environmental Site Assessment. A routine/non-routine application process for the Acknowledgement of Reclamation Program was also implemented during the past fiscal year.

The Branch established an industry working group in order to develop solutions for a regulatory program that will be aimed at the retirement of inactive liabilities. The group met several times over the year and was able to reach consensus on the structure and framework of a regulatory program.

#### f. Improvement Initiatives

In addition to improvements elaborated on previously, the following improvements were completed/initiated this year:

- Added structured well licence obligations to IRIS for the Ministry of Environment resulting in increased efficiency for single window participants and ease of use for industry.
- Launched the online User Learning Centre which provides online training modules for industries in support of regulatory submissions and reporting within IRIS.

- Commenced Phase II of the IRIS Pipeline Infrastructure Project (IPIP) as a result of industry feedback and ER business requirements. This phase consisted of numerous enhancements to the IRIS pipeline module which are expected to be fully implemented in May 2020. These improvements include:
  - Enhancements to better manage pipeline watercourse crossings;
  - Delivery of single levy invoices to pipeline business associates through IRIS;
  - Providing a more robust and interactive map-based experience for pipeline activities in IRIS; and
  - Enabling the use of business intelligence software to generate analytical reports and queries.
- Launched the IRIS Pipeline License Registry, a state-of-the-art licencing and approval system that uses automation and risk analysis to effectively and efficiently oversee the review and approval of pipeline projects in Saskatchewan. Expected improvements include:
  - Automate, streamline and risk inform existing pipeline licensing processes;
  - Support the retroactive licensing of over 80,000 flowlines;
  - Develop new GIS technologies to assist regulatory agencies and industry in identifying high-consequence areas such as water crossings and sensitive habitats; and
  - Uphold the highest standards of safety for the public and the environment, standards that are also continuing priorities for industry.
- Implemented the Greenhouse House Gas (GHG) module within IRIS to support *The Oil and Gas Emissions Management Regulations*.
- Improved reservoir audit processes intended to develop more clear criteria and communications related to disclosure question issues.
- Developed statistical databases associated with production/injection and projects, overproduction and regulatory compliance.
- IRIS Enhancement – a non-routine/routine oil commingling application process.
- Project aimed at integrating the Licensee Liability Rating (LLR) and Facility Licensing System into IRIS.

#### g. Surface Rights Board of Arbitration

The Surface Rights Board of Arbitration (SRBA) is an arbitration board 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 2019-20, the SRBA received 45 Applications for Rental Review. The Board held five hearings on matters in the SRBA purview and issued 14 Right of Entry Orders. No Compensation Orders were issued.

#### h. Resource Management

Resource management services include services required to manage the production of oil and natural gas resources in Saskatchewan. Key accomplishments in 2019-20 included:

- Implemented the Overproduction Mitigation Application process;
- Spacing Modification – developed a process to accept large-scale project approvals;
- Introduced changes to the Forced Pooling Order and Pooling Plan;
- Completed review of current underground formation storage requirements;
- Rescinded the Glen Ewen Oxbow Associated Gas Conservation Area Order; and
- Published *Guideline PNG038: Commingling of Production - Oil or Gas Well* outlining the procedure for obtaining a commingling authorization via IRIS for an oil or gas well.

## 6.6 Ministry of Agriculture

In 2019-20, AG issued and renewed 281 surface leases including the review of project proposals, site inspections and field work. There were 156 surface leases surrendered. Staff attended several Saskatchewan Petroleum Industry/Government Environment Committee (SPIGEC) meetings during the year to provide updates on Lands Branch activities related to oil and gas surface leases on Crown lands. On April 2, 2019, the oil and gas fees increased to reflect market rates. These fees were last updated in 2007. Industry indicated that the new fees were too high. In response, the Lands Branch conducted a review and found that the fees created issues such as unintended impacts on large leases; companies being charged twice for severance; and fees being charged did not account for first-year rent on battery sites. As a result, the fees were reduced effective January 1, 2020.

## 6.7 Ministry of Environment

In 2018-19, ENV processed 3,453 oil and gas project proposals of which 1,955 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. In addition, significant effort regarding Duty to Consult related to Steam Assisted Gravity Drainage projects in the north was required. 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. The ministry currently administers in excess of 890 oil and gas dispositions on both Crown and Park land. Significant effort has been spent working with industry regarding new technology, new companies to Saskatchewan, as well as numerous abandonment programs.

Ministry staff also undertook numerous meetings with proponents and attended all Saskatchewan Petroleum Industry and Government Environment Committee (SPIGEC) meetings. One additional staff member was relocated to the Swift Current office to address concerns regarding industry turnaround times, and improvements to the review process were identified and will be incorporated for the next fiscal year.