

Greenhouse Gas Emissions Release Notes

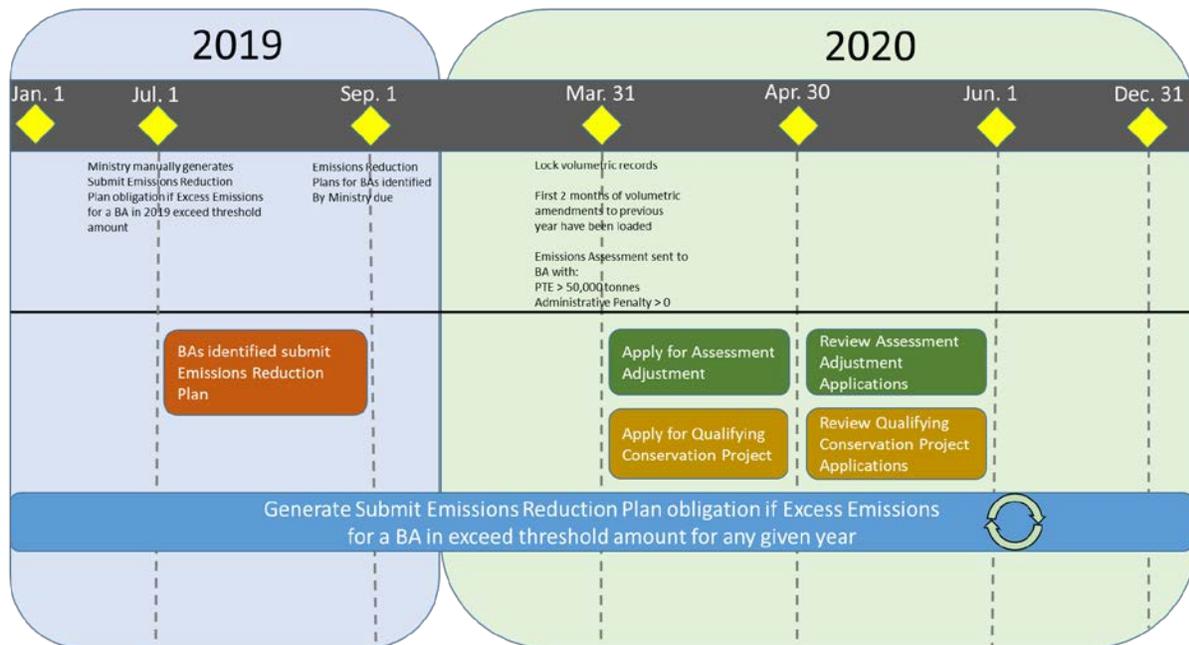
Greenhouse Gas Emissions Reduction Program

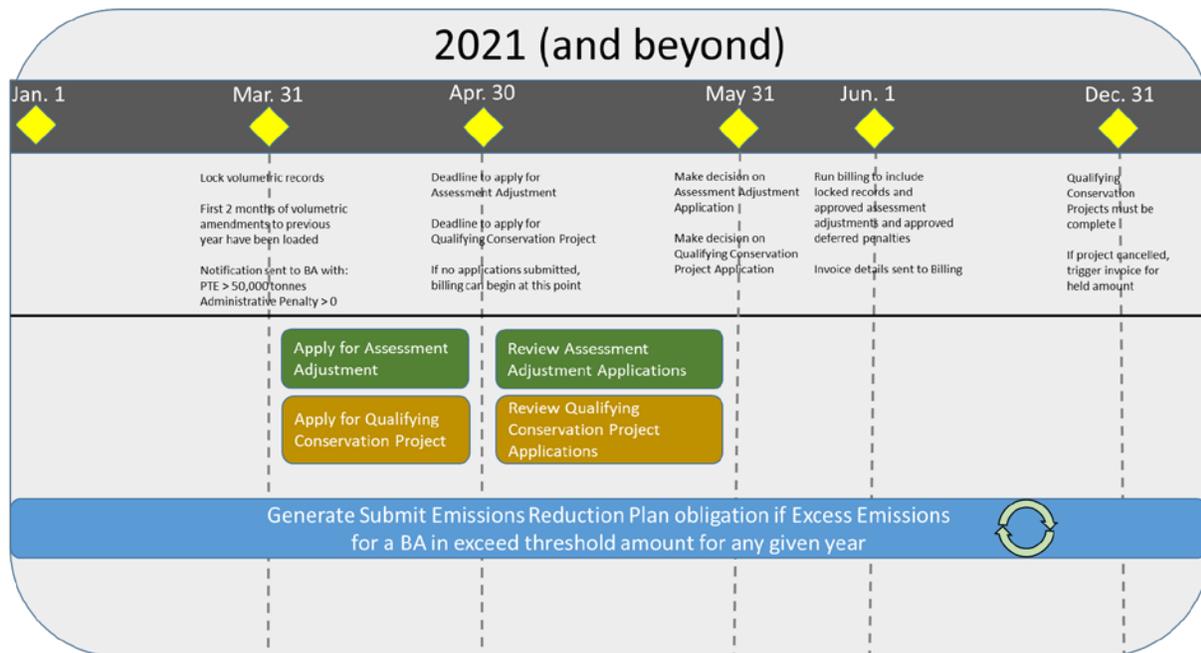
Release Date: February 28, 2019

GHG Project Release Notes Publication Date	Notes and Changes Made
February 14, 2019	Initial Release

About

The Greenhouse Gas (GHG) Emissions project implemented new screens and functionality to support the Government of Saskatchewan and the Oil and Gas Industry in tracking and managing GHG emissions reduction targets in accordance with *The Oil and Gas Emissions Management Regulations (OGEMR)*.





Specific changes included:

- Calculating and displaying GHG emissions at both the Facility and Business Associate (BA) levels
- Providing emissions reports to break down BA level GHG emissions to the facility level for Ministry and Industry
- Functionality for Industry to submit Emissions Reduction Plans
- Issuing a penalty notification for BA's that have exceeded their yearly emissions limit
- Functionality for Industry to submit Emissions Adjustment applications
- Issuing penalty invoices for companies that have exceeded their yearly emissions limit

What's changed?

The highlights of what's changed in IRIS as a result of this release are noted below.

Note: Whether a user has access to the functionality or enhancements outlined in these GHG Project Release Notes depends on the individual's security access and assigned permissions sets.

Greenhouse Gas Emissions Screen

Key Attributes

- Provide a landing page for Ministry and Industry to view emissions information at the BA level.

The screenshot shows the 'Yearly Emission Details' table for the year 2018. The table is organized by production class and includes columns for ATE, PTE, and EL. The 'Yearly Totals' are also provided at the end of the table.

Year	1 - Lloydminster			2a - Kindersley Heavy			2b - Kindersley Non-Heavy			3 - Swift Current			4 - Estevan			Yearly Totals			
	ATE	PTE	EL	ATE	PTE	EL	ATE	PTE	EL	ATE	PTE	EL	ATE	PTE	EL	CE	PTE	EE	
2018	1,335,015	4,961,511	1,781,183	00	00	00	00	00	00	00	00	00	00	00	00	1,335,015	4,961,511	1,781,183	00

- Provides interface for Ministry to issue BA level obligations for Industry to submit Emissions Reduction Plans, and for Ministry and Industry to view BA level emissions obligations.

The screenshot shows the 'Obligations' table for an Emission BA with identifier 00086. The table displays the status of obligations, including a fulfilled obligation with a due date of 2019-04-05 and a fulfilled date of 2019-02-12.

Detail	Component Type	Identifier	Proposed	Unfulfilled	Fulfilled	Waived	N/A	Over Due
▼	Emission BA	00086	-	-	1	-	-	-

To Fulfill							
Obligation #	Status	Due Date	Due Date Type	Fulfilled Date	Obligation Type	Actions	Attachments
321124	Fulfilled	2019-04-05	Day the Obligation is created plus 60 days	2019-02-12	Submit Emission Reduction Plan		See Attachments

[Add Obligation](#)

- **Emissions Reduction Plan Process**
 - Requested automatically by the system or manually by Ministry via setting BA level obligations.
 - Submitted by Industry through a Generic Application that follows the non-routine approval process.
 - Obligations will be fulfilled upon approval of Emissions Reduction Plan applications.

- GHG Emissions screens provide an interface for Ministry and Industry to access approved Emissions Reduction Plans.

COMPANY NAME

Emissions Associated Documents Billing Associated Persons Administration Adjustments Obligations

Filter All

Confidential Help

File *	Document Type *	Is Confidential	Comments	Date *
Test File.pdf	Updated Emissions Reduction Plan(Confidential)	<input checked="" type="checkbox"/>		2019-02-12 08:49:56
Test File.pdf	Emissions Adjustment Application(Confidential)	<input checked="" type="checkbox"/>		2019-02-06 09:27:32

Build: 5.18.1.19043 Environment: QA

- Provides interface to display information related to OGEMR including: Yearly Emissions Intensity Limits, Flaring and Venting Emissions Factors, and Yearly Penalty Rates for Excess Emissions.

Company Name

Emissions Associated Documents Billing Associated Persons Administration Adjustments Obligations

Emissions Factors

Production Class	tonnes CO ₂ e/103m ³	
	EFF	EFv
1	2.53	15.94
2a	2.68	15.65
2b	2.91	14.45
3	2.71	14.21
4	3.23	9.84

Emissions Intensity Limit

Year	Production Class				
	1	2a	2b	3	4
2019	0.359	0.064	0.238	0.086	0.149
2020	0.359	0.064	0.238	0.086	0.149
2021	0.359	0.064	0.238	0.086	0.149
2022	0.359	0.064	0.238	0.086	0.149
2023	0.251	0.046	0.167	0.072	0.127
2024	0.230	0.043	0.154	0.070	0.124
2025	0.209	0.039	0.141	0.068	0.120
2026	0.209	0.039	0.141	0.068	0.120
2027	0.209	0.039	0.141	0.068	0.120
2028	0.209	0.039	0.141	0.068	0.120

Emissions Rate

Year	Rate
2019	0
2020	10.00
2021	20.00
2022	30.00
2023	40.00
2024	50.00
2025	50.00
2026	50.00
2027	50.00
2028	50.00

Build: 5.19.0.1963 Environment: QA

- Provides interface for Ministry to associate BA's with each other where required for the purposes of OGEMR and for Industry to view their Associated BA's.

The screenshot shows the 'COMPANY NAME' page in the Integrated Resource Information System. The page has a navigation bar with tabs: Emissions, Associated Documents, Billing, Associated Persons, Administration, Adjustments, and Obligations. The 'As Reporting BA' section contains a table with the following data:

BA Information	From Year	To Year	Actions
COMPANY NAME	2017	2017	[Edit] [Delete]
COMPANY NAME	2017	2017	[Edit] [Delete]

Below the table are links for '+ Add Associated BA' and '+ Add Reporting BA'. The 'As Associated BA' section shows 'No records found'. The footer indicates 'Build: 5.18.1.19043 Environment: QA'.

- Provides an interface for Ministry to send billing notifications and invoices and gives Industry access to view them

Industry

The screenshot shows the 'COMPANY NAME' page in the Integrated Resource Information System. The page has a navigation bar with tabs: Emissions, Associated Documents, Billing, Associated Persons, Administration, and Adjustments. The 'Emissions Billing' section contains a table with the following data:

Year	Notifications	Invoices
2017	1	0
2018	1	0

The footer indicates 'Build: 5.18.5.19054 Environment: QA'.

Facility Emissions Tab

Key Attributes

- Provides a screen to view emissions at the Facility Level and the emissions factors used to calculate emissions at each facility.

Facility Name _____

Main | Linked | Volumetrics | Emissions | Fluid Analysis | Attachments | Work Items | Associated Entities

Search Criteria

Year 2017 | <= | < | >= | > | Search

Production Class Type: Lloydminster

Emission Factor for Year 2017	
Flaring Factor	Venting Factor
2.53	15.94

Facility Level Emissions for Year 2017				
Month	Flaring	Venting	Total (ATE)	Potential (PTE)
01	0.000	71.730	71.730	213.596
02	0.000	143.460	143.460	277.356
03	0.000	97.234	97.234	245.476
04	0.000	31.880	31.880	175.340
05	0.000	62.166	62.166	210.408
06	0.000	3.188	3.188	138.678
07	0.000	17.534	17.534	165.776
08	0.000	3.188	3.188	119.550
09	0.000	4.782	4.782	148.242
10	0.000	30.286	30.286	178.528
11	0.000	11.158	11.158	122.738
12	0.000	1.594	1.594	90.858
Total	0.000	478.200	478.200	2086.546

IRIS Emissions Billing

Key Attributes



- Final annual emissions calculations are done in March of the following year to allow two months of volumetric amendments to be submitted.
- Automatic notifications are sent to BA's to let them know the results of the final emissions year calculations. BA's that OGEMR did not apply to and BA's that OGEMR did apply to who did not exceed their annual emissions limit will receive these notifications.
- Functionality for Ministry to send manual notifications to BA's who exceeded their annual emissions limit with an attached detailed Notice of Assessment outlining the potential emissions penalty.
- BA's in a penalty situation have 30 days to represent themselves by (including but not limited to) submitting Emissions Adjustment applications and Qualifying Conservation Project applications.
- Functionality for Ministry to generate Emissions Invoices incorporating the results of the final annual emissions calculation and Emissions Adjustment and Qualifying Conservation Project applications. Industry will be able to view their invoices on their GHG Emissions Screens

- Invoice Summary



Ministry of Energy and Resources
1000, 2103-11th Avenue
Regina, Canada S4P 3Z8

Invoice No: E100002
Date: 2019-02-12
GST No: R107864258

COMPANY INFO

Payment of this invoice must be received at the above address on or before MMM DD, CCYY. Payment must be payable to the Minister of Finance. Pre-Authorized Debit (PAD) withdrawal will occur on MMM DD, CCYY.

Transaction Date		Application Number	Description	Emissions Adjustment	Excess Emissions	Price (\$)	Net Payable (\$)
2/12/2019 12:00:00 AM			Emissions Adjustment - 2017	250000.00	362128	10.00	1,121,270.00
2/12/2019 12:00:00 AM			Emissions QCP Adjustment Applied - 2017	250000.00	362128	10.00	1,121,270.00

Excess Emissions Invoice 2017 Total Payable: \$ 1,121,270.00

Production Class	Flared Emissions (tonnes CO2e)	Vented Emissions (tonnes CO2e)	Combined Emissions (tonnes CO2e)	Potential Emissions (tonnes CO2e)	Emissions Intensity Limit	Combined Emissions Limit (tonnes CO2e)	Excess Emissions (tonnes CO2e)
2b - Kindersley Non Heavy	26221.000	53664.90	851760.92	2309825.275	0.238	549,738.29	302022.681
1 - Lloydminster	0.000	87.60	1396.34	1396.344	0.359	501.29	895.056
2a - Kindersley Heavy	4965.600	5726.90	102933.79	683166.320	0.064	43,722.62	59211.172

Sub Total :	\$ 1,121,270.00
Interest Assessed :	\$ 0.00
GST :	\$ 0.00
Total :	\$ 1,121,270.00

Invoice Details



Ministry of Energy and Resources
1000, 2103-11th Avenue
Regina, Canada S4P 3Z8

Emissions Year: 2017
Business Associate ID:
Business Associate Name: COMPANY NAME
Invoice Number: E100002

Report: Emissions Calculation Detail
Date: 2/12/2019 12:00:00 AM
Invoice Inquiries: ER.Services@gov.sk.ca or 1-855-219-9373

Production Class	Facility ID	Produced Volume - Associated Gas (103m3)	Flared Gas Volume (103m3)	Vented Gas Volume (103m3)	Emissions Flared Factor (EFf)	Emissions Vented Factor (EFv)	Actual Flared Emissions (tonnes CO2e)	Actual Vented Emissions (tonnes CO2e)	Actual Total Emissions (tonnes CO2e)	Potential Total Emissions (tonnes CO2e)
1 - Lloydminster	SK BT 0009551	9.600	0.000	9.600	2.53	15.94	0	153	1,396	1,396
1 - Lloydminster	SK BT 0009551	6.600	0.000	6.600	2.53	15.94	0	105	1,396	1,396
1 - Lloydminster	SK BT 0009551	5.500	0.000	5.500	2.53	15.94	0	88	1,396	1,396
1 - Lloydminster	SK BT 0009551	2.700	0.000	2.700	2.53	15.94	0	43	1,396	1,396
1 - Lloydminster	SK BT 0009551	4.600	0.000	4.600	2.53	15.94	0	73	1,396	1,396
1 - Lloydminster	SK BT 0009551	6.800	0.000	6.800	2.53	15.94	0	108	1,396	1,396
1 - Lloydminster	SK BT 0009551	6.800	0.000	6.800	2.53	15.94	0	108	1,396	1,396
1 - Lloydminster	SK BT 0009551	10.000	0.000	10.000	2.53	15.94	0	159	1,396	1,396
1 - Lloydminster	SK BT 0009551	6.600	0.000	6.600	2.53	15.94	0	105	1,396	1,396
1 - Lloydminster	SK BT 0009551	10.600	0.000	10.600	2.53	15.94	0	169	1,396	1,396
1 - Lloydminster	SK BT 0009551	8.300	0.000	8.300	2.53	15.94	0	132	1,396	1,396
1 - Lloydminster	SK BT 0009551	9.500	0.000	9.500	2.53	15.94	0	151	1,396	1,396
1 - Lloydminster	SK BT 0010318	0.000	0.000	0.000	2.53	15.94	0	0	1,396	1,396

(Note that these invoices will have changes after testing is done)

IRIS Emissions Adjustment and Qualifying Conservation Project

Key Attributes

- New generic application that allows Industry to apply for an Emissions Adjustment after a final annual emissions calculation is done.
- Emissions Adjustment applications can be used to make any type of application related to emissions.

Emissions Adjustment Application

The screenshot shows the 'Emissions Adjustment Application' form in the IRIS system. The form is titled 'Create Application' and includes the following fields:

- Industry Application Reference Number (text input)
- Description (text area)
- Emission Adjustment Application Additional Information (text input)
- Application Year (text input)

The form also features a 'Save As Draft' button and a 'Next' button. The background includes a 'QA' watermark.

- New generic application that allows Industry to apply for a Qualifying Conservation project after a final annual emissions calculation is done.

Qualifying Conservation Project Application

The screenshot shows the 'Qualifying Conservation Project Application' form in the IRIS system. The form is titled 'Create Application' and includes the following fields:

- Industry Application Reference Number (text input)
- Description (text area)
- Qualifying Conservation Project Application Additional Information (text input)
- Application Year (text input)

The form also features a 'Save As Draft' button and a 'Next' button. The background includes a 'QA' watermark.

- Approved Adjustments are viewable from a tab on GHG Emissions Screens

COMPANY NAME

Emissions Associated Documents Billing Associated Persons Administration Adjustments Obligations

Deferrals

Year	Submission Number	Application Ref Number	Adjustment Status	Adjusted Amount	Deferral Condition Due Date	Action
2017	117341		Applied	1	12/31/2019	

Adjustments

Year	Submission Number	Application Ref Number	Adjusted Amount
2017	117334		250000

Build: 5.18.1.19043 Environment: QA

Reporting

Key Attributes

- Functionality for Ministry and Industry to run reports on emissions data.
- **Emissions Report** - For Industry and Ministry use. Provides a breakdown of all the data that goes into GHG emissions calculations at the facility level. This report can be run by year or can be broken down by month.

Security and Permission Sets

The following changes were made to the following IRIS’s permission set.

***Note:** If a user is already assigned to the below permission set, they will automatically receive access to the new function.

Industry

New Permissions Sets **		
Permission Sets ADDED **	Permissions	Function
I.PnA.Emission.All.View	<ul style="list-style-type: none"> ▪ <u>ProductionAccounting.Emission.Adjustment.View</u> ▪ <u>ProductionAccounting.Emission.AssociatedDocuments.Maintain</u> ▪ <u>ProductionAccounting.Emission.AssociatedDocuments.View</u> ▪ <u>ProductionAccounting.Emission.Billing.View</u> ▪ <u>ProductionAccounting.Emission.Detail.View</u> ▪ <u>ProductionAccounting.Emission.Facility.View</u> ▪ <u>ProductionAccounting.Emission.Parentage.View</u> 	<ul style="list-style-type: none"> ▪ Can View Emission Adjustments ▪ Can maintain(add/remove) attachments associated with given Emission ▪ Can view attachments associated with given Emission ▪ Can view Emission Billing to see Invoices and Notification ▪ Can view yearly and monthly Emission Details ▪ Can view Emission details and Factors at Facility Level ▪ Can view parentage
I.PnA.Emission.Confidential.View	<ul style="list-style-type: none"> ▪ <u>Shared.AssociatedDocuments.ViewConfidential.EAA_CNF</u> ▪ <u>Shared.AssociatedDocuments.ViewConfidential.ERP_CNF</u> ▪ <u>Shared.AssociatedDocuments.ViewConfidential.OTH_CNF</u> ▪ <u>Shared.AssociatedDocuments.ViewConfidential.OTHER_CNF</u> 	<ul style="list-style-type: none"> ▪ Ability to view confidential documents of type 'Emissions Adjustment Application(Confidential)' ▪ Ability to view confidential documents of type 'Emissions Reduction Plan(Confidential)' ▪ Ability to view confidential documents of type 'Other(Confidential)'

		<ul style="list-style-type: none"> Ability to view confidential documents of type 'Updated Emissions Reduction Plan(Confidential)'
I.PnA.Emission.Notifications.Receive	<ul style="list-style-type: none"> <u>Notification.User.Preferences.Maintain</u> <u>Notification.View</u> <u>ProductionAccounting.Notification.EMI_ASSESS_GEN.Receive</u> 	<ul style="list-style-type: none"> Capability to maintain your notification preferences. Capability to view and search for notifications. Ability to receive notifications of type 'Emission Assessment Generation'
I.PnA.Obligation.Submit	<ul style="list-style-type: none"> <u>Emission.Obligation.Fulfill.NotifyWhenComplete.Submit</u> <u>Infrastructure.Base</u> 	<ul style="list-style-type: none"> Permission to Fulfill Emission Obligation records with a fulfillment type of 'Notify When Complete'. Permission to access the Infrastructure Application - primarily used for menu item.

New Permissions **		
Permission Set Name	Permissions ADDED **	Function
I.INF.ConfidentialPermanent.All.View	<ul style="list-style-type: none"> Shared.AssociatedDocuments.ViewConfidential.EAA_CNF Shared.AssociatedDocuments.ViewConfidential.EMISSION_NOTICE_CNF Shared.AssociatedDocuments.ViewConfidential.ERP_CNF Shared.AssociatedDocuments.ViewConfidential.QSP_CNF Shared.AssociatedDocuments.ViewConfidential.UERP_CNF 	<ul style="list-style-type: none"> Ability to view confidential documents of type 'Emissions Adjustment Application(Confidential)' Ability to view confidential documents of type 'Emission Notice Detail(Confidential)' Ability to view confidential documents of type 'Emissions Reduction Plan(Confidential)' Ability to view confidential documents of type 'Qualifying Conservation Project(Confidential)' Ability to view confidential documents of type 'Updated Emissions Reduction Plan(Confidential)'

I.INF.ProductionAndMeasurementApplications.Administrator	<ul style="list-style-type: none"> ▪ WFI.Application.EMISSIONADJUST.Administrator.Industry ▪ WFI.Application.EMISSIONADJUST.Applicant ▪ WFI.Application.EMISSIONPLAN.Administrator.Industry ▪ WFI.Application.EMISSIONPLAN.Applicant ▪ WFI.Application.QUAL_CONS_PROJ.Administrator.Industry ▪ WFI.Application.QUAL_CONS_PROJ.Applicant 	<ul style="list-style-type: none"> ▪ Industry Administrator for 'Emissions Adjustment Plan'. ▪ Permission to create 'Emissions Adjustment Plan'. ▪ Industry Administrator for 'Emissions Reduction Plan'. ▪ Permission to create 'Emissions Reduction Plan'. ▪ Industry Administrator for 'Qualifying Conservation Project'. ▪ Permission to create 'Qualifying Conservation Project'.
I.INF.Report.All	<ul style="list-style-type: none"> ▪ Infrastructure.Reports.Emissions ▪ Infrastructure.Reports.EmissionsFilteredColumns 	<ul style="list-style-type: none"> ▪ Permission to generate the Emissions report. ▪ Permission to generate the Emissions report.
I.INF.ProductionAndMeasurementApplications.Applicant	<ul style="list-style-type: none"> ▪ WFI.Application.EMISSIONADJUST.Applicant ▪ WFI.Application.EMISSIONPLAN.Applicant ▪ WFI.Application.QUAL_CONS_PROJ.Applicant 	<ul style="list-style-type: none"> ▪ Permission to create 'Emissions Adjustment Plan'. ▪ Permission to create 'Emissions Reduction Plan'. ▪ Permission to create 'Qualifying Conservation Project'.

Greenhouse Gas Emissions Release Notes

Contact Us

The Ministry of the Energy and Resources Service Desk is available Monday-Friday, 8 AM-5 PM CST, excluding holidays.

For any assistance, please contact:

ER Service Desk

1-855-219-9373 (toll free)

ER.ServiceDesk@gov.sk.ca