

## Annual Report Of Registry Operations For 2021

### Emissions Trading Regulation, Section 15 (Alberta Regulation 33 /2006) Environmental Protection and Enhancement Act (EPEA)

**Table 1: Annual Report of Registry Operations in Calendar Year 2021**

In respect of the preceding year: (a) the number of emission credits issued;	5,606 of NO <sub>x</sub> credits and 4,845 of SO <sub>2</sub> credits.
(b) the number of emission credits that have been used for compliance purposes, retired, cancelled or otherwise extinguished;	168 NO <sub>x</sub> and 142 SO <sub>2</sub> credits were retired.
(c) the number of emission credits discounted and what that discount represents;	<p>The total number of active credits in the Registry that are subject to discount at of the end of 2021 (January 1, 2022) included all credits with a vintage of 2019 or earlier and that number is 81,677 NO<sub>x</sub> credits and 38,617 SO<sub>2</sub> credits. These credits are discounted by 10%.</p> <p>The 10% discount represents 8,167 tonnes of NO<sub>x</sub> and 3,861 tonnes of SO<sub>2</sub>.</p>
(d) the number of transactions recorded by the registry;	There were no inter-firm transactions in 2021.
(e) the aggregate balance of emission credits recorded by the registry;	91,598 NO <sub>x</sub> credits and 45,521 SO <sub>2</sub> credits (balance as of January 1, 2022).
(f) the aggregate mass balance of emission credits after discounting;	On January 1, 2022, 83,430 tonnes of NO <sub>x</sub> and 41,659 tonnes of SO <sub>2</sub> .

Approved on February 14, 2023 by:

Robert Hamaliuk  
Executive Director, Air and Climate Policy  
Emissions Trading Regulation's Section 1(1)(n) Director  
Alberta Environment and Protected Areas

## Appendix A: Credits Issued in 2021 and Their Serial Numbers

**Table A1: Credits Serial Numbers Issued In 2021**

EPEA	Company	Facility	Unit	2018 NOx	2018 SO2	2019 NOx	2019 SO2	Serial Number Start	Serial Number End
773	Capital Power	Genesee	Unit 1 AND 2	1,325	1,538				
773	Capital Power	Allocated to	Unit 1	662				n2018-001671	n2018-002332
773	Capital Power	Allocated to	Unit 1		769			s2018-003546	s2018-004314
773	Capital Power	Allocated to	Unit 2	662				n2018-002333	n2018-002994
773	Capital Power	Allocated to	Unit 2		769			s2018-004315	s2018-005083
773	Capital Power	Genesee	Unit 1 AND 2			1,174	1,059		
773	Capital Power	Allocated to	Unit 1			587		n2019-000079	n2019-000665
773	Capital Power	Allocated to	Unit 1				529	s2019-000001	s2019-000529
773	Capital Power	Allocated to	Unit 2			587		n2019-000666	n2019-001252
773	Capital Power	Allocated to	Unit 2				529	s2019-000530	s2019-001058
773	Capital Power	Genesee	Unit 3	134				n2018-002995	n2018-003128
773	Capital Power	Genesee	Unit 3		254			s2018-005084	s2018-005337
773	Capital Power	Genesee	Unit 3			217		n2019-001253	n2019-001469
773	Capital Power	Genesee	Unit 3				312	s2019-001059	s2019-001370
9830	TransAlta	Sundance	Unit 3		17			s2018-005338	s2018-005354
9830	TransAlta	Sundance	Unit 4		750			s2018-005355	s2018-006104
9830	TransAlta	Sundance	Unit 6		539			s2018-006105	s2018-006643
10324	TransAlta	Keephills	Unit 1	765				n2018-003129	n2018-003893
10324	TransAlta	Keephills	Unit 1		174			s2018-006644	s2018-006817
10324	TransAlta	Keephills	Unit 2	764				n2018-003894	n2018-004657
10324	TransAlta	Keephills	Unit 2		171			s2018-006818	s2018-006988
10324	TransAlta	Keephills	Unit 3	292				n2018-004658	n2018-004949
10324	TransAlta	Keephills	Unit 3		32			s2018-006989	s2018-007020
136681	TransCanada	Carseland	Unit 1	1				n2018-004950w	n2018-004950w
136681	TransCanada	Carseland	Unit 1			8		n2019-001470w	n2019-001477w
136951	TransCanada	Redwater	Unit 1	4				n2018-004951w	n2018-004954w
136951	TransCanada	Redwater	Unit 1			5		n2019-001478w	n2019-001482w
155746	TransCanada	Mackay River	Unit 1	147				n2018-004955w	n2018-005101w
155746	TransCanada	Mackay River	Unit 1			50		n2019-001483w	n2019-001532w
262757	Enmax	Shepard	Unit 1	349				n2018-005102	n2018-005450
262757	Enmax	Shepard	Unit 1			372		n2019-001533	n2019-001904
Sub Total				3,780	3,475	1,826	1,370		
Total				10,451					

**Table A2: Total of All credits Issued In 2021**

Substance	NOX	SO2
Total Issued in 2021	5,606	4,845

## Appendix B: Registry Errata (as of November 2022)

**Table B.1**

Credits Created in Error (2006 to 2022)

Start Serial Number	End Serial Number	Total	EPEA	Erroneously created by Alberta Environment to credit of this unit.	Year the error occurred.	Erroneously created retired to Alberta Environment Account for year:
N2010-006131	N2010-006279	-149	9830	Sundance 3	2013	2013
N2006-000108	N2006-000112	-5	1512	Battle River 3	2010	2010
N2007-000047	N2007-000084	-38	1512	Battle River 3	2010	2010
N2008-000407	N2008-000526	-120	138365	Calgary Energy Centre	2010	2010
S2006-000001	S2006-000002	-2	1512	Battle 3	2010	2010
S2007-000001	S2007-000011	-11	1512	Battle 3	2010	2010
S2015-000001	S2015-000963	-963	773	Genesee 2	2017	2017
NS015-004410	N2015-004506	-97	9830	Sundance 4	2017	2017
S2015-003257	S2015-003407	-151	773	Genesee 3	2017	2017
N2015-007904w	N2015-007941w	-38	73899	Muskeg 2	2018	2018

**Table B.2**

Credits Retired For Correct Unit and Obligation But Wrong Compliance Year (2006 to 2022)

Start of Credit Series	End of Credit Series	Number of Credits	Incorrect Retirement Year In Registry	Correct Retirement Year	In This Unit's Retirement Account
N2012-004109	N2012-004289	181	2013	2014	ATCO - 001512 Battle River - 3
N2013-002919	N2013-002956	38	2013	2014	ATCO - 001512 Battle River - 3
S2006-000003	S2006-000181	179	2007	2014	ATCO - 001512 Battle River - 3
S2006-000363	S2006-000999	637	2007	2014	ATCO - 001512 Battle River - 3
S2006-001000	S2006-001349	350	2007	2014	ATCO - 001512 Battle River - 3
S2007-000303	S2007-000999	697	2013	2014	ATCO - 001512 Battle River - 3
S2007-001000	S2007-001999	1000	2013	2014	ATCO - 001512 Battle River - 3
S2007-002000	S2007-002156	157	2013	2014	ATCO - 001512 Battle River - 3
S2008-002465	S2008-002704	240	2013	2014	ATCO - 001512 Battle River - 3
S2012-001582	S2012-002001	420	2013	2014	ATCO - 001512 Battle River - 3
S2010-000001	S2010-000027	27	2016	2017	ATCO - 001512 Battle River - 4
N2018-000684	N2018-000699	16	2021	2022	TransAlta - 009830 Sundance - 4

Start of Credit Series	End of Credit Series	Number of Credits	Retirement Year	Nominally Retired To Credit of This Unit	Correct Unit
s2006-005119	s2006-5129	11	2018	ATCO - 001512 Battle River - 3	ATCO - 001512 Battle River - 4

## Appendix C: Provisional Compliance Report Issued In 2021



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June 29, 2021

**Re: Provisional Compliance Report For Calendar Year 2020**  
**Emissions Trading Regulation, Section 55 (Alberta Regulation 33 / 2006)**

**Table 1: Section 55 Reporting – Summary Compiled by Registry Operator for 2020**

This provisional report indicates EPEA approval holders retired credits towards the requirements of their approval in regard of annual NO<sub>x</sub> and SO<sub>2</sub> limits.

EPEA Approval	9814		1512	
Facility	HR Milner		Battle River	
EPEA Approval Holder	Milner Power Corp		Heartland	
Unit	1		4	
Generation (MWh)	47,340		186,445	
Substance	SO <sub>2</sub>	NO <sub>x</sub>	SO <sub>2</sub>	NO <sub>x</sub>
Emission Limit (kg/MWh)	0.65	0.47	0.65	0.47
Emissions (kilograms)	0	44,612	234,970	215,520
Actual Intensity (kg/MWh)	0	0.942	1.260	1.156
Credits Needed (tonnes)	0	22	113	127
Credits Retired to the Benefit of 2020 (credits)	0	24	142	126+18 =144
Mass Value of Retired Credits (tonnes)	0	22	127.8	129.6

Approved on June 29, 2021 by:

Brenna McLennan  
Executive Director, Policy Systems Branch  
Emissions Trading Regulation's Section 1(1)(n) Director  
Alberta Environment and Parks

Attachment 1: Serial numbers retired.  
Attachment 2: Extract from regulation.

**Attachment 1: Serial Numbers**

Transaction ID	Sub-stance	Requested By	To Account	To Account Type	First Credit	Last Credit	Total
2021-RN001	NOx	Maxim	009814-1	Retire2020	n2012-004905	n2012-004928	24
2021-RB002	NOx	Heartland	1512-4	Retire2019	n2011-004540	n2011-004541	2*
2021-RB002	SO2	Heartland	1512-4	Retire2020	s2010-001544	s2010-001685	142
2021-RB002	NOx	Heartland	1512-4	Retire2020	n2011-004411	n2011-004536	126
2021-RB002b	NOx	Heartland	1512-4	Retire2020	n2011-004537	n2011-004554	18

\* Operator retired 2 extra credits for 2019 compliance requirement.

## **Attachment 2: Excerpts From Regulation**

### **How emission credits are used for compliance purposes**

45 An emission credit may be used by a unit operator for compliance purposes in respect of a generating unit if the unit operator

- (a) has authority under its approval to use emission credits for compliance purposes, and
- (b) provides to the registry operator by April 30 of the year following the year in which the emission credits are used
  - (i) confirmation of their use, and
  - (ii) the serial number of each emission credit used.

### **Annual Reports**

55(1) On or before March 31 of each year, in respect of the preceding year, a unit operator who has an emissions trading account must submit to the registry operator a report showing

- (a) the annualized air emissions data for NO<sub>x</sub> and, if applicable, for SO<sub>2</sub> for each of the unit operator's generating units, and
- (b) the annual MWh output for each of the unit operator's generating units.

(2) On or before May 31 of each year, a unit operator who has used emission credits for compliance purposes in respect of the generating unit for the previous year must submit to the registry operator a report

- (a) containing a notification from the registry operator that the emission credits have been retired, and
- (b) that includes the following calculation for NO<sub>x</sub> and, if applicable, for SO<sub>2</sub> indicating the number of NO<sub>x</sub> and SO<sub>2</sub> emission credits retired for compliance purposes for the previous year:

$$\frac{A - (B \times C)}{1000}$$

where

A is the actual emissions in kilograms;

B is the annual MWh output for the generating unit for the year;

C is the current emissions standards.

## **Appendix D: Requirements for the Annual Report of Registry Operations**

### **Excerpt from Emissions Trading Regulation (AR 33 / 2006)**

Annual report of registry operations

15 The registry operator must, on or before June 30 of each year, or any other date specified by the Minister, prepare and publish a report containing at least the following information in respect of the preceding year:

- (a) the number of emission credits issued;
- (b) the number of emission credits that have been used for compliance purposes, retired, cancelled or otherwise extinguished;
- (c) the number of emission credits discounted and what that discount represents;
- (d) the number of transactions recorded by the registry;
- (e) the aggregate balance of emission credits recorded in the registry.