

Superseded

Alberta  Government

**Standard for Greenhouse Gas Emission Offset
Project Developers
Technology, Innovation, and Emissions Reductions Regulation**

Version 3.0
November 2019



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Summary of Revisions

Version	Date	Summary of Revisions
3.0	November 2019	<ul style="list-style-type: none"> • The revisions since version 2.0 of this Standard include: • Updates to align with Technology Incentive and Emission Reduction (TIER) Regulation • Clarified the follow up process for re-verification and second re-verification. • Corrected Part 1 section (9) to clarify that an aggregated project planning sheet or master planning sheet (if applicable) must accompany the project plan for the project plan to be considered complete. • Added clause to clarify that registering a project on the Registry does not constitute approval of that project, the verification, or the third party assurance provider. • Changed the consecutive verification requirements to be consistent with Standard for Validation, Verification, and Audit. • Added a section on priced emissions to outline the process for quantifying projects that have levied fuels or fuels subject to the federal fuel charge. • Clarified the impact to offset projects at facilities that opt in to TIER or become part of an aggregate facility. • Adjusted section describing what constitutes invalid emission offsets.
2.0	July 2018	<ul style="list-style-type: none"> • Changed definition of offset start date to ‘date project plan submitted’ rather than ‘date project plan is posted by the Registry’. • Corrected numbering in Part 1 section 4. • Changed project extensions to align with additionality process. • Changed section 8 so that subprojects are eligible to generate offsets on the activity start date as long as the planning sheet is submitted within 30 days. • Changed timeline on applying for an extension to 8 months prior to allow projects time to decide on opt-in. • Clarify May 1 deadline for agriculture projects. • Adjusted language in error correction process for clarity. • Removed references to Schedule D and C.

		<ul style="list-style-type: none"> Removed reference to Net Emissions Intensity Limit. Added rules regarding moving a subproject from one project to another project.
1.0	December 2017	<ul style="list-style-type: none"> The Carbon Competitiveness Incentive Regulation will be effective January 1, 2018. This Standard is a document referenced in the Regulation. The information in this standard is largely adopted from the Technical Guidance for Offset Project Developers (February 2013).
Draft	February 2017	<ul style="list-style-type: none"> The draft version of this standard was posted for 30 day public comment and was adopted from the Technical Guidance for Offset Project Developers (February (2013)).

Superseded

Table of Contents

Introduction	7
Part 1 – Regulatory Details.....	8
Division 1.....	8
Definitions	8
Aggregated emission offset projects.....	9
In the event of a conflict	9
Division 2.....	9
Quantification protocol.....	9
Using more than one quantification protocol	9
Quantification Protocols withdrawn	10
Aggregated emission offset projects.....	10
Subprojects	11
Division 3.....	11
Project plan.....	11
Offset start date.....	12
Offset crediting period.....	12
Extension period.....	13
Division 4.....	13
Registration.....	13
Project report	14
Division 5.....	14
Re-verification	14
Re-verification terminated.....	15
Errors identified by the third party assurance provider during re-verification	15
Errors identified by emission offset project developer.....	15
Invalid emission offsets	16
Division 6.....	16
Contact Information.....	17
Reporting	17
Standard amendment	17
Effective date.....	17
Part 2 - Requirements for Greenhouse Gas Emission Offset Project Developers.....	18
1.0 Overview of the Alberta Emission Offset System	18
1.1 Aggregated Emission Offset Projects	18
1.2 Baseline Condition and Project Condition.....	21
1.3 Conservativeness.....	21
1.4 Expansion.....	21
1.5 Right to Transact Emission Offsets	22
1.5.1 Land Based Projects.....	22
1.6 Project Extension	22
1.7 Deviation Requests	22
1.8 Quantification Protocol Flagged	23
1.9 Quantification Protocol Withdrawn	23
1.10 Requests to use more than one quantification protocol	24
1.11 Carbon Offset Emission Factors Handbook.....	24
1.12 Sources and Sinks	25
1.13 Validation.....	25
1.14 Priced Emission Reductions	25
1.15 Conventional Oil and Gas Facilities	25
2.0 Emission Offset Project Lifecycle	26
2.1 Initiation.....	28

2.2	Implementation and Generation.....	28
2.3	Verification	29
2.4	Registration	29
2.5	Serialization	29
2.6	Transfer.....	29
2.7	Government Re-verification	30
2.8	Error Correction	31
	2.8.1 Error Identified During Verification	31
	2.8.2 Error Identified by Emission Offset Project Developer	31
	2.8.3 Error Identified During Government Re-verification	32
	2.8.4 Removal	32
3.0	Registry Process.....	32
4.0	Records	34
4.1	Data Management	34

List of Tables and Figures

Table 1: Examples of Offset Crediting Periods for Aggregated Emission Offset Project and Subproject Eligibility to Generate Offsets	20
Table 2: Registry Project Status Terminology	32
Table 3: Actions and Documents Required for the Registry for Transactions.....	33

List of Figures

Figure 1: Description of Process of Emission Offset Project Lifecycle.....	27
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List of Appendices

APPENDIX A: Project Plan Form	36
APPENDIX B: Project Report Form.....	37

Introduction

Part 1 of the Standard for Greenhouse Gas Emission Offset Project Developers is adopted by the Technology Innovation and Emissions Reduction Regulation (the “Regulation”), under the authority of section 61 of the *Emissions Management and Climate Resilience Act* (the “Act”). Part 1 of the Standard is enforceable as law.

In addition to the legal requirements in Part 1 of this standard, emission offset project developers must comply with the Act, the Regulation, and all other applicable laws.

Part 2 of the Standard for Greenhouse Gas Emission Offset Project Developers sets out additional requirements for emission offset project developers.

Revisions made to this standard in version 3.0 are effective January 1, 2020.

Superseded

Part 1 – Regulatory Details

Division 1

Interpretation and Application

Definitions

- 1(1) Terms that are defined in the Act and Regulation are incorporated into and become part of this standard.
- (2) In this standard,
- (a) “Act” means the *Emissions Management and Climate Resilience Act*;
 - (b) “activity start date” means the first day on which the action that is the subject of an emission offset project, or of an emission offset subproject, starts;
 - (c) “aggregated emission offset project” means an aggregated emission offset project described in section 7;
 - (d) “emission offset subproject” means an emission offset project that an emission offset project developer groups with one or more emission offset projects and submits to the Registry as a single aggregated emission offset project;
 - (e) “extension period” means an extension period described in section 12;
 - (f) “flagged protocol” means a quantification protocol identified by the department for potential withdrawal or replacement;
 - (g) “flexibility mechanism” means an alternate or additional quantification methodology, part of a quantification methodology, or alternative requirement within a quantification protocol;
 - (h) “Introduction” means the portion of this standard identified by the subtitle “Introduction”;
 - (i) “offset crediting period” means an offset crediting period described in section 11;
 - (j) “offset start date” means the first day on which an emission offset project is eligible to generate emission offsets, as determined in accordance with section 10;
 - (k) “Part 1” means the portion of this standard identified by the subtitle “Part 1 – Regulatory Details”;
 - (l) “Part 2” means the portion of this standard identified by the subtitle “Part 2 – Requirements for Greenhouse Gas Emission Offset Project Developers”;
 - (m) “project plan” means a project plan described in section 9;
 - (n) “project report” means a project report described in section 14;
 - (o) “quantification protocol” means an emission offset quantification protocol approved and published by the department, as amended or replaced from time to time;
 - (p) “Quantification Protocol for Agricultural Nitrous Oxide Emissions Reductions” means Quantification Protocol for Agricultural Nitrous Oxide Emissions Reductions published by the department, as amended or replaced from time to time;
 - (q) “Quantification Protocol for Conservation Cropping” means the Quantification Protocol for Conservation Cropping, as published by the department, as amended or replaced from time to time;
 - (r) “Registry” means the Alberta Emission Offset Registry;
 - (s) “Regulation” means the Technology Innovation and Emissions Reduction Regulation, as amended;
 - (t) “reporting period” means the period of time covered by a project report;
 - (u) “this standard” means the Standard for Greenhouse Gas Emission Offset Project Developers and includes the Introduction, Part 1, Part 2, and Appendices A and B.

Aggregated emission offset projects

- 2 All references to an emission offset project in Part 1 include an aggregated emission offset project unless otherwise provided.

In the event of a conflict

- 3(1) If there is any conflict between this standard and the Act or the Regulation, the Act or the Regulation prevails over this standard.
- (2) If there is any conflict between Part 1 and Part 2 of this standard, Part 1 prevails.

Division 2

Quantification Protocols and Aggregated Emission Offset Projects

Quantification protocol

- 4(1) Subject to subsection (2), for each emission offset project an emission offset project developer must:
- (a) comply with the requirements of the applicable quantification protocol, and
 - (b) initiate and implement the emission offset project in accordance with the most current version of the applicable quantification protocol in place on the date that the emission offset project developer submits the project plan to the Registry in accordance with section 9, unless otherwise authorized in writing by the director.
- (2) The emission offset project developer may, prior to submitting a project plan under section 9 or project report to the Registry under section 13, apply in writing to the director for a deviation from one or more of the requirements of a quantification protocol.
- (3) The director may grant or refuse to grant a deviation in subsection (2).
- (4) Where the director grants a deviation in subsection (3), the director may impose on the emission offset project developer any terms and conditions that the director considers appropriate with respect to the deviation.
- (5) The emission offset project developer must comply with each term and condition imposed by the director under subsection (4).
- (6) The emission offset project developer must not initiate or implement an emission offset project using a flagged protocol without prior written authorization from the director.
- (7) The director may grant or refuse to grant written authorization to initiate or implement an emission offset project using a flagged protocol.
- (8) Where the director grants an emission offset project developer written authorization to use a flagged protocol, the director may impose on the emission offset project developer any terms and conditions that the director considers appropriate with respect to the authorization.
- (9) The emission offset project developer must comply with each term and condition imposed by the director under subsection (8).

Using more than one quantification protocol

- 5(1) Subject to subsection (2), an emission offset project developer must not use more than one quantification protocol in initiating and implementing an emission offset project, unless otherwise authorized in writing by the director.
- (2) The emission offset project developer may apply in writing to the director for written authorization to initiate and implement an emission offset project using two or more applicable approved quantification protocols.

- (3) The director may grant or refuse to grant written authorization in subsection (2).
- (4) Where the director grants written authorization in subsection (3), the director may impose on the emission offset project developer any terms and conditions that the director considers appropriate with respect to the authorization.
- (5) The emission offset project developer must comply with each term and condition imposed by the director under subsection (4).

Quantification Protocols withdrawn

- 6(1) The director may, at any time,
 - (a) withdraw a quantification protocol, and
 - (b) determine that no further emission offset projects may be initiated under that withdrawn quantification protocol.
- (2) Where the director withdraws a quantification protocol, the director shall prescribe the duration of
 - (a) the offset crediting period,
 - (b) the extension periodof any emission offset project that was initiated under that quantification protocol prior to its withdrawal.
- (3) Subject to subsection (4), where the director replaces a withdrawn quantification protocol with a new quantification protocol, the emission offset project developer of an emission offset project initiated under the withdrawn quantification protocol may continue generating emission offsets using
 - (a) the withdrawn quantification protocol until
 - (i) the last day of the crediting period, or
 - (ii) the last day of the extension period,whichever is applicable, or
 - (b) the new quantification protocol.
- (4) The director may require the emission offset project developer of an emission offset project initiated under a withdrawn quantification protocol to apply a new quantification protocol to the emission offset project as of the date specified by the director.
- (5) When applying a new quantification protocol to an emission offset project initiated under a withdrawn quantification protocol, the emission offset project developer shall
 - (a) update the project plan,
 - (b) update the description of the baseline condition,
 - (c) update the description of the emission offset project condition, and
 - (d) use all applicable emission factorsin accordance with the new quantification protocol.
- (6) Notwithstanding subsections (1) to (5), if the specified gas emission reduction or sequestration from an emission offset project or a portion of an emission offset project becomes required by law, that emission offset project or that portion of an emission offset project will not be eligible to generate emission offsets on or after the date the specified gas emission reduction or sequestration becomes required by law.

Aggregated emission offset projects

- 7(1) An emission offset project developer may submit two or more emission offset subprojects to the Registry as an aggregated emission offset project.

- (2) Subject to section 5, each emission offset subproject that an emission offset project developer submits to the Registry as part of an aggregated emission offset project must be initiated and implemented according to the same quantification protocol.

Subprojects

- 8(1) An emission offset project developer may not add any emission offset subprojects to an aggregated emission offset project after the date on which the project plan was submitted to the Registry unless the emission offset project developer first submits an updated aggregated project planning sheet that includes the new emission offset subprojects or an updated master planning sheet that includes the new emission offset subprojects, whichever is applicable, to the Registry.
- (2) Where an emission offset project developer adds an emission offset subproject to an aggregated emission offset project after the date on which the emission offset project developer submits the project plan to the Registry, the emission offset subproject is not eligible to generate emission offsets more than 30 days prior to the date the emission offset project developer submits an updated aggregated project planning sheet or updated master planning sheet, whichever is applicable, to the Registry.
- (3) An emission offset subproject initiated under the Quantification Protocol for Conservation Cropping or the Quantification Protocol for Agricultural Nitrous Oxide Emissions Reductions that is added to an aggregated emission offset project by submitting an updated aggregated project planning sheet or an updated master planning sheet, whichever is applicable, to the Registry after May 1 in a year is not eligible to generate emission offsets in that year.
- (4) No emission offset subproject is eligible to generate emission offsets prior to
- (a) the activity start date of that emission offset subproject, or
 - (b) the offset start date of the aggregated emission offset project that includes the emission offset subproject.

Division 3

Project Plan and Offset Crediting Period

Project plan

- 9(1) The emission offset project developer shall submit to the Registry
- (a) a completed project plan for an emission offset project in the form and including all of the information prescribed in the Project Plan Form, as amended or replaced from time to time;
- and
- (b) in the case of
 - (i) an aggregated emission offset project, other than an aggregated emission offset project initiated under the approved Quantification Protocol for Conservation Cropping, the completed aggregated project planning sheet including the information and data required by the director for each emission offset subproject within the aggregated emission offset project;
 - (ii) an aggregated emission offset project initiated under the approved Quantification Protocol for Conservation Cropping, the completed master planning sheet including the information and data required by the director for each emission offset subproject that the emission offset project developer has initiated under that quantification protocol.
- (2) The emission offset project developer must sign the completed project plan prior to submitting it to the Registry.

- (3) The emission offset project will only be posted on the Registry after the emission offset project developer submits
 - (a) a completed project plan, and
 - (b) the aggregated project planning sheet or master planning sheet, if applicable.

Offset start date

10(1) The offset start date for an emission offset project is

- (a) in the case of an aggregated emission offset project initiated or implemented using the Quantification Protocol for Conservation Cropping,
 - (i) January 1 of the year the project plan is submitted to the Registry, if the project plan is submitted on or before May 1 of a year, or
 - (ii) January 1 of the year following the year the project plan is submitted to the Registry, if the project plan is submitted after May 1 of a year,
- (b) in the case of an aggregated emissions offset project initiated or implemented using the Quantification Protocol for Agricultural Nitrous Oxide Emissions Reductions,
 - (i) the first day on which the project plan for the emission offset project is submitted to the Registry, if the project plan is submitted on or before May 1 of a year, or
 - (ii) January 1 of the year following the year the project plan is submitted to the Registry, if the project plan is submitted after May 1 of a year,

and

- (c) in any other case, the first day on which the completed project plan and, if applicable, the aggregated project planning sheet or master planning sheet for the emission offset project is submitted to the Registry.
- (2) An emission offset project is not eligible to generate emission offsets prior to the offset start date of that emission offset project.
 - (3) The offset start date for an emission offset project that is not an aggregated emission offset project must be on or after the activity start date of that emission offset project.

Offset crediting period

- 11(1)** The offset crediting period for an emission offset project begins on the offset start date of that emission offset project.
- (2) Subject to subsection (3) and section 6, the offset crediting period for an emission offset project is eight consecutive years, unless otherwise specified in the applicable quantification protocol, in which case the offset crediting period is that period set out in the applicable quantification protocol.
 - (3) The emission offset project developer may apply to the director for written authorization for an emission offset project to have an offset crediting period of ten consecutive years.
 - (4) The director may grant or refuse to grant written authorization for an offset crediting period of ten consecutive years in subsection (3).
 - (5) An emission offset project is not eligible to generate emission offsets after the last day of the offset crediting period for that emission offset project, unless the director grants an extension period for the emission offset project under section 12.

Extension period

- 12(1)** If an emission offset project developer applies to the director for an extension period, the emission offset project developer must apply no more than eight months and no less than thirty days before the last day of the offset crediting period or an existing extension period, whichever is applicable, of an emission offset project.
- (2) Notwithstanding (1), in the case of an emission offset project with an offset crediting period that expired after December 31, 2018 and before January 1, 2020, the emission offset project developer may apply to the director for an extension for that emission offset project on or before March 31, 2020.
 - (3) The director may grant or refuse to grant an extension period.
 - (4) Where the director grants an extension period in subsection (3), the director may impose on the emission offset project developer any terms and conditions that the director considers appropriate with respect to the extension period.
 - (5) The emission offset project developer must comply with each term and condition imposed by the director under subsection (4).
 - (6) The director will not grant an extension period for an emission offset project
 - (a) initiated under a quantification protocol that has been subsequently withdrawn by the director under section 6 unless the withdrawn quantification protocol has been replaced by a new quantification protocol, or
 - (b) which was granted an offset crediting period of ten consecutive years under section 11(4).
 - (7) An extension period granted for an emission offset project under this section must
 - (c) begin on the day immediately following the last day of the offset crediting period or the extension period, whichever is applicable, of the emission offset project, and
 - (d) be no more than five consecutive years, unless otherwise specified in the applicable quantification protocol, in which case the extension period is that which is specified in the applicable quantification protocol.
 - (8) An emission offset project is not eligible to generate emission offsets after the last day of the final extension period for that emission offset project.
 - (9) Where the director grants an extension period to an emission offset project, the emission offset project developer shall apply the most current version of the applicable quantification protocol to the emission offset project by updating
 - (a) the project plan, and
 - (b) the baseline conditionon or before the date specified by the director when granting the extension.

Division 4

Registration, Project Report and Verification

Registration

- 13(1)** The emission offset project developer shall register an emission offset project by submitting the following documents to the Registry:
- (a) the project report;
 - (b) in the case of an aggregated emission offset project, the aggregated project reporting sheet containing the information and data required by the director;

- (c) the verification report prepared in accordance with the Standard for Validation, Verification, and Audit;
- (d) a statutory declaration confirming that
 - (i) the emission offset project developer has the exclusive authority to transact in the reduction of specified gas emissions, or net sequestration, net geological sequestration or capture of carbon dioxide identified in the greenhouse gas assertion included in the project report, and
 - (ii) the reduction of specified gas emissions, or net sequestration, net geological sequestration or capture of carbon dioxide resulting from the emission offset project has not been registered, or serialized
 - (A) in relation to a regulatory requirement under another enactment, or
 - (B) under any other offset or other recognition scheme;

and

- (e) any other information required by the director.
- (2) Where the emission offset project developer submits more than one project report for an emission offset project, the emission offset project developer must not report on the same, or any portion of the same, reporting period as any other project report submitted for that emission offset project.

Project report

- 14(1) Subject to subsection (2), the emission offset project developer must submit the written project report for an emission offset project in the form and include all information prescribed in the Project Report Form, as amended or replaced from time to time.
- (2) The emission offset project developer must identify in the project report all sections of the Project Report Form that do not apply to the emission offset project, and provide an explanation as to why the sections do not apply.
- (3) The emission offset project developer must
- (a) sign the emission offset project report, and
 - (b) complete the emission offset project report before a third party assurance provider verifies it.
- (4) If the emission offset project developer makes any changes to the emission offset project as compared to the project plan, including changes made pursuant to a deviation granted under section 4(2), the emission offset project developer shall record all of these changes in the project report.
- (5) If the emission offset project developer modifies or changes the project report after it has been verified, the emission offset project developer must submit the modified or changed project report to a third party assurance provider for a new verification.

Division 5

Re-verification

Re-verification

- 15(1) After an emission offset project has been registered under section 13, the director may select a project report of that emission offset project to be re-verified by a third party assurance provider who is selected and hired by the director.
- (2) Where the director selects a project report to be re-verified in subsection (1), the director may provide any direction to the emission offset project developer of the emission offset project that the director considers necessary to facilitate the re-verification.
- (3) The emission offset project developer shall comply with any direction provided to the emission offset project developer by the director in subsection (2).

- (4) The emission offset project developer of an emission offset project selected for re-verification must not make any changes to the project report from the date the emission offset project is selected for re-verification until the date the re-verification is completed.

Re-verification terminated

- 16(1)** Where the third party assurance provider terminates the re-verification of a project report in accordance with the Standard for Validation, Verification, and Audit, the emission offset project developer shall
- (a) resolve any issues that led to the termination of the re-verification in accordance with directions provided by the director,
 - (b) revise the project report, if necessary,
 - (c) hire a third party assurance provider, selected by the director, to re-verify the revised project report, and
 - (d) submit to the director a revised verification report for the revised project report within six months of the date on which the third party assurance provider terminated the re-verification.
- (2) If
- (a) the third party assurance provider terminates the re-verification of a project report for an emission offset project in accordance with the Standard for Validation, Verification, and Audit, and
 - (b) the emission offset project developer fails to comply with any part of subsection (1),
- the emission offsets for the reporting period of that project report are invalid.

Errors identified by the third party assurance provider during re-verification

- 17(1)** Where a third party assurance provider, during the course of a re-verification, identifies an error in the project report that results in an understatement of the emission offsets, the emission offset project developer must not register emission offsets in respect of the reduction of specified gas emissions or sequestration of carbon dioxide that was not included in the verified project report.
- (2) Where a third party assurance provider, during the course of a re-verification, identifies a material error in the project report that results in an overstatement of the emission offsets, the emission offset project developer shall
- (a) correct the error in the emission offset project,
 - (b) update the project report and submit it to the director, and
 - (c) hire a third party assurance provider, selected by the director, to re-verify the updated project report and submit to the director a new verification report in accordance with a written schedule set by the director.
- (3) If the emission offset project developer fails to comply with any part of subsection (2), the emission offsets for the reporting period of that project report are invalid.

Errors identified by emission offset project developer

- 18(1)** An emission offset project developer must report in writing a material error in a verified project report to the director as soon as possible and in any event not later than 30 days after the emission offset project developer became aware, or should reasonably have become aware, of the material error.
- (2) Where an emission offset project developer becomes aware of an error in a verified project report that results in an understatement of the emission offsets, the emission offset project developer must not register emission offsets in respect of a reduction of specified gas emissions or sequestration of carbon dioxide that was not included in the verified project report.

- (3) Where an emission offset project developer becomes aware of a material error in a verified project report that results in an overstatement of emission offsets, the emission offset project developer must
- (a) correct the error in the emission offset project,
 - (b) update the project report,
 - (c) hire a third party assurance provider to re-verify the updated project report, and
 - (d) submit to the Registry
 - (i) the updated project report,
 - (ii) a new verification report of the updated project report, and
 - (iii) a new statement of verification of the updated project report
- in accordance with a written schedule set by the director.
- (4) If the emission offset project developer fails to comply with any part of subsection (3), the emission offsets for the reporting period of that project report are invalid.
- (5) Subsections (3) and (4) do not apply to a project report that the director has selected to be re-verified by a third party assurance provider under section 15.

Invalid emission offsets

19(1) Where an emission offset is

- (a) used in determining the net emissions for a regulated facility under section 13 of the Regulation and the associated reduction of specified gas emissions, net sequestration, net geological sequestration or capture of carbon dioxide is applied in relation to a regulatory requirement under another enactment, or
- (b) used in determining the net emissions for a regulated facility under section 13 of the Regulation and the associated reduction of specified gas emissions, or net sequestration, net geological sequestration or capture of carbon dioxide is submitted for recognition under any other offset or other recognition scheme,

that emission offset is invalid.

- (2) Where an emission offset is serialized on the Registry in recognition of a reduction of specified gas emissions, or net sequestration, net geological sequestration or capture of carbon dioxide, and the reduction of specified gas emissions, or net sequestration, net geological sequestration or capture of carbon dioxide is also
- (a) registered or serialized on a registry other than the Registry, or
 - (b) registered or serialized under any other offset or other recognition scheme,
- that emission offset is invalid.
- (3) Where two emission offsets are serialized on the Registry in respect of the same CO₂e tonne reduction of specified gas emissions, or the same net sequestration, net geological sequestration or capture of one tonne of carbon dioxide, one of the emission offsets is invalid.
- (4) Where an emission offset was serialized on the Registry in recognition of a sequestration or geological sequestration of, or a capture of, carbon dioxide, and the carbon dioxide was subsequently released into the environment, that emission offset is invalid.

Division 6

Miscellaneous Provisions

Contact Information

- 20** An emission offset project developer must immediately notify the Registry in writing of any changes to the contact information provided by the emission offset project developer in a project plan or project report.

Reporting

- 21** The emission offset project developer must immediately report any contravention of this standard to the director.

Standard amendment

- 22** Part 1 of this standard will be reviewed as changes in technology and other standards warrant.

Effective date

- 23** This standard is effective January 1, 2020.

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Part 2 - Requirements for Greenhouse Gas Emission Offset Project Developers

1.0 Overview of the Alberta Emission Offset System

The Alberta emission offset system is a regulatory program managed by the Alberta Environment and Parks that enables facilities regulated under the Technology Innovation and Emissions Reduction Regulation to use emission offsets to meet compliance obligations. System requirements are set out in the *Emissions Management and Climate Resilience Act*, the Technology Innovation and Emissions Reduction Regulation, Standards, Guidelines, and quantification protocols. The Alberta emission offset system is based on the ISO 14064-2, with guidance at the project level for quantification, monitoring and reporting of greenhouse gas emission reductions or removals.

The scope of Part 2 of this standard is to provide information to emission offset project developers, to assist them with the initiation and implementation of an emission offset project. This standard may also be informative to other stakeholders in the Alberta emission offset system. The objective of Part 2 of this standard is to:

- provide additional guidance on the requirements of the Alberta emission offset system as they apply to an emission offset project developer,
- describe the process an offset project developer can follow to initiate and implement an emission offset project in Alberta, and
- explain the documents, records and data management systems needed to support emission offset project implementation in the Alberta emission offset system.

Project developers can contact the department via email:

- AEP.GHG@gov.ab.ca

1.1 Aggregated Emission Offset Projects

An aggregated emission offset project is two or more emission offset subprojects that an emission offset project developer submits to the Registry as a single aggregated emission offset project. An offset project developer that submits an aggregated emission offset project is referred to as an aggregator. The benefit of an aggregated emission offset project is that the aggregator can minimize administration and verification costs associated with each emission offset subproject by combining multiple similar subprojects into a single aggregated emission offset project.

Aggregators must submit an aggregated project planning sheet with the project plan and an aggregated project reporting sheet with each project report. The planning sheet will be for internal use only and will not be publically available on the Registry. The planning sheet will include information for each subproject such as project name, location, activity start date, and unique site identifier. The reporting sheet will similarly include information on each subproject including its name, location, and calculated emission reductions or carbon dioxide sequestrations. The aggregated project planning sheet and reporting sheet forms are available from the Registry.

An aggregated emission offset project may have subprojects that begin operating at different times, meaning they have different activity start dates. If the activity start date for a subproject is before the offset start date, the subprojects listed in the project planning sheet are eligible to start generating emission offsets on the offset start date. If the activity start date for a subproject is after the offset start date and the aggregator adds the subproject by updating the planning sheet, the subproject may generate emission offsets beginning on the activity start date as long as the updated project planning sheet is submitted to the Registry within 30 days of the activity start date until the end of the offset crediting period for the overall project. Aggregators must provide evidence to a third party assurance provider to demonstrate activity start date. This will mean a credit duration of less than 8 years for the subprojects added after the offset start date.

If an aggregator chooses to transfer a subproject from one aggregated emission offset project to a different aggregated emission offset project, the aggregator must clearly document the transfer on the aggregated project planning sheet, and the offset project plan, if applicable. The aggregator must demonstrate that the

overall offset crediting period of the subproject will not exceed the offset crediting period of the original project or the project the subproject is transferred to.

The intent of this is to ensure go forward crediting from the time of project initiation and go forward crediting from the time subprojects are added to an aggregated emission offset project. Land based agricultural projects must also meet the intent of go forward crediting for projects and subprojects. The additional requirements for projects using the Agricultural Nitrous Oxide Emission Reductions and Conservation Cropping quantification protocols are articulated below.

Agricultural Nitrous Oxide Emission Reductions Projects

This section sets out additional requirements that apply to projects using the Agricultural Nitrous Oxide Emission Reduction quantification protocol. The offset start date is defined in Part 1 as the date the offset project plan is submitted to the Registry. Aggregators must submit a completed aggregated project planning sheet at the same time the project plan is submitted to the Registry. Offset project plans submitted to the Registry after May 1 of a year will not be eligible to generate emission offsets in the same calendar year. Aggregators may add subprojects after the offset project plan is submitted to the Registry by submitting an updated aggregated project planning sheet to the Registry on or before May 1. Subprojects listed in aggregated project planning sheets submitted to the Registry after May 1 of a year will not be eligible to generate emission offsets in the same calendar year.

Projects and subprojects cannot be compiled annually in the way that Conservation Cropping projects can be. The subproject cannot generate emission offsets outside of the aggregated emission offset project's offset crediting period.

Conservation Cropping Projects

Aggregators who initiate aggregated emission offset projects using the Conservation Cropping quantification protocol must submit a project plan for each aggregated emission offset project on or before May 1 of the year the project is generating emission offsets. The aggregator must also submit a master planning sheet that includes all subprojects using the Conservation Cropping quantification protocol on or before May 1 of the year the subproject is generating emission offsets. The master planning sheet is similar to an aggregated project planning sheet but includes all subprojects of the aggregators Conservation Cropping quantification protocol aggregated emission offset projects in a single master planning sheet.

Aggregators may add subprojects after the offset project plan is submitted to the Registry by submitting an updated master planning sheet to the Registry on or before May 1. Subprojects listed in master project planning sheets submitted to the Registry after May 1 of a year will not be eligible to generate emission offsets in that same calendar year.

Subprojects identified in the master planning sheet and updated master planning sheet are eligible to generate emission offsets from January to December of a year, provided they are included in the master planning sheet or the updated master planning sheet on or before May 1 of that year. For aggregated emission offset projects that do not compile annually (i.e. the credit duration is longer than one year) an updated master planning sheet must be provided to the Registry on or before May 1 in order to add subprojects in that calendar year.

The aggregator must submit an aggregated project reporting sheet with the project report that is a list of all farmers and land locations that met the requirements of the Conservation Cropping quantification protocol for the year emission reductions occurred. The land locations listed on the aggregated reporting sheet must be listed in the master planning sheet on or before May 1 of the year the emission reductions occurred.

Table 1 provides specific examples for activity start dates, offset start dates and offset crediting periods for some types of quantification protocols.

Table 1: Examples of Offset Crediting Periods for Aggregated Emission Offset Project and Subproject Eligibility to Generate Offsets

Quantification Protocol	Offset Start Date	Aggregated emission offset project Offset Crediting Period	Activity Start Dates and Updated Project Planning Sheet submission	Subproject Eligibility to Generate Offsets
General	February 1, 2018 (date plan submitted to Registry)	February 1, 2018 to January 31, 2026 (8 years)	Subproject 1 – installed January 1, 2017 Subproject 2 – installed June 1, 2019, updated aggregated project planning sheet submitted June 30, 2019	Feb. 1, 2018 to January 31, 2026 for subproject 1. June 1, 2019 to January 31, 2026 for subproject 2.
Greenhouse Gas Emission Reductions from Pneumatic Devices	March 30, 2018 (date plan submitted to Registry)	March 30, 2018 to December 31, 2022 (protocol expires December 31, 2022)	Subproject 1-50 installed leading up to March 30, 2018 Subproject 51 installed April 15, 2018, updated aggregated project planning sheet submitted May 14, 2018.	March 30, 2018 to December 31, 2022 for subprojects 1-50. April 15, 2018 to December 31, 2022 for subproject 51.
Conservation Cropping (if compiled annually)	January 1, 2018 Project plan submitted on or before May 1, 2018.	January 1, 2018 to December 31, 2018. (protocol expires December 31, 2021)	Subprojects 1-50 listed in master planning sheet submitted to the Registry May 1, 2018. Subprojects 51-75 listed in the updated master planning sheet submitted to the Registry May 1, 2018. Subprojects 76-100 listed in updated master planning sheet submitted to the Registry June 15, 2018.	January 1, 2018 to December 31, 2018 for subprojects 1-50 January 1, 2018 to December 31, 2018 for subprojects 51-75. Subprojects 76-100 not eligible to generate emission offsets in 2018.
Conservation Cropping (if not compiled annually)	January 1, 2018 Project plan submitted on or before May 1, 2018	January 1, 2018 to December 31, 2021 (protocol expires December 31, 2021)	Subprojects 1-50 listed in master planning sheet submitted to Registry May 1, 2018. Subprojects 51-75 listed in updated master planning sheet submitted to Registry May 2, 2018. Subprojects 76-100 listed in the updated master planning sheet submitted to Registry May 1, 2019	January 1, 2018 to December 31, 2021 for subprojects 1-50 Subprojects 51-75 not eligible to generate emission offsets in 2018, but may start on January 1, 2019. January 1, 2019 to December 31, 2021 for subprojects 76-100

Quantification Protocol	Offset Start Date	Aggregated emission offset project Offset Crediting Period	Activity Start Dates and Updated Project Planning Sheet submission	Subproject Eligibility to Generate Offsets
Agricultural Nitrous Oxide Emission Reduction	May 1, 2018 (date plan submitted to Registry)	May 1, 2018 to April 30, 2026 (8 years)	Subprojects 1-50 listed in an aggregated project planning sheet submitted to Registry May 1, 2018. Subprojects 51-75 listed in updated project planning sheet submitted to Registry May 1, 2019.	May 1, 2018 to April 30, 2026 for subproject 1-50 May 1, 2019 to April 30, 2026 for subprojects 51-75.

1.2 Baseline Condition and Project Condition

The baseline condition represents the specified gas emissions that would have occurred had the offset project not been implemented. It is quantified using the applicable quantification protocol. The project condition describes the specified gas emissions that occur once the project is implemented. Where the emissions from the project condition are less than the emissions from the baseline condition, the difference represents the specified gas emission reduction, or sequestration for the emission offset project.

1.3 Conservativeness

Conservativeness is a principle that is defined as the use of conservative assumptions, values and procedures to ensure that a specified gas emissions reduction or sequestration is not over-stated. Offset project developers must apply the principle of conservativeness when developing emission offset projects. If there is a decision point during project development where an offset project developer needs to decide on an approach to quantification, measurement, a flexibility mechanism etc. the project developer must choose a conservative approach. The choices should be rationalized and documented in the offset project plan.

A negligible emissions threshold has not been set for emission offset projects. Project emissions must be assessed according to the applicable quantification protocol. The quantification must include each relevant specified gas applicable to the project. The specified gases and applicable global warming potentials (GWPs) are listed in the Standard for Completing Greenhouse Gas Compliance and Forecasting Reports.

1.4 Expansion

Where a greenhouse gas emission reduction, or net CO₂ sequestration, activity is a result of expanding an existing facility or project, the expansion activity may be eligible to generate emission offsets. The offset project developer must submit a written request to the director for consideration of an offset project to be eligible to generate emission offsets for the expansion activity. The director will consider each request on a case by case basis and may approve or refuse the request. In addition to meeting all other program requirements the project developer must demonstrate that the following criteria are met:

- The expansion has increased production by more than 25 per cent,
- There is a clear accurate method for separating the emissions from the expansion activity from the original activity; and
- The investment in infrastructure is greater than 35 per cent of the cost to build a new facility capable of the same level of production as the expansion.

1.5 Right to Transact Emission Offsets

In order for an emission offset project developer to register emission offsets in the Alberta emission offset system they need to provide a statutory declaration stating that they have the ‘right’ to sell the emission offsets. The director relies on the statutory declaration as proof of the emission offset project developer’s right to transact. The evidence of emission offset project ownership may vary between projects and activity types, and may be more complex in the case of aggregated emission offset projects. It is the emission offset project developer’s responsibility to ensure that they are the owner and/or have the authority to transact on the emission offsets associated with an emission offset project. It is also the emission offset project developer’s responsibility to resolve any ownership disputes outside of the offset system process; the director and/or the department will not participate in ownership disputes.

1.5.1 Land Based Projects

Aggregated agricultural land based projects are required to have proof of practice records for the project activity both at the location where the reduction occurred and with the third-party aggregator. Both proof of practice and consent from the land owner are required for projects to generate emission offsets.

Indian reserves are administered and controlled by Her Majesty the Queen in right of Canada (“Canada”) for the use and benefit of a particular First Nation. A First Nation, a First Nation member or anyone engaging in relevant activities on reserve must enter into an agreement with Canada in order to register emission offset projects that occurred on reserve land.

Metis Settlement land is held in fee simple by the Metis Settlements General Council (MSGC) under letters patent issued by Her Majesty the Queen in right of Alberta. A Metis Settlement, a Metis Settlement member or anyone engaging in relevant activities on Metis Settlement land must enter into an agreement with the MSGC in order to register emission offset projects that occurred on settlement land.

1.6 Project Extension

An application for an extension period must include the following information for the director’s consideration:

- demonstration that the offset project continues to meet the Alberta emission offset system requirements,
- in the case of more than one extension, demonstration of the offset project’s financial need for the continued emission offset generation, and
- explanation of any changes to the baseline condition and offset project condition.

The director will provide a decision to the request in a letter, and a copy of the letter will be forwarded to the Registry. The decision will be posted on the Registry as part of the supporting information for the offset project.

Project developers who are applying to the director for an offset crediting period of ten years (with no potential for extension) must apply prior to submitting the offset project plan to the Registry.

1.7 Deviation Requests

Emission offset project developers may apply to the director for a deviation when one or more of the requirements of a quantification protocol cannot be met. Common examples of appropriate use of a deviation request include: an emission offset project that has a source or sink that is not identified in the quantification protocol, an emission offset project has a source or sink that can not be recorded or quantified as indicated in the quantification protocol. The director will only consider deviation requests for quantification protocols, and will not grant deviations for other system requirements.

An application for deviation must identify which quantification protocol requirements require a deviation and explain how the integrity of the quantification will be maintained if the deviation is granted. The director may consider a variety of factors, including but not limited to whether the deviation:

- will materially impact the quantification of emission offset tonnes in the project,
- will affect the additionality of the emission offset project,
- is conservative, and
- quantifies emission reductions that meet Alberta emission offset system requirements.

If approved, the director will issue authorization of the deviation with instructions to the emission project developer, and the deviation authorization will be filed with the Registry.

1.8 Quantification Protocol Flagged

Quantification protocols may be flagged for a number of reasons, including but not limited to:

- inconsistencies and/or errors in a quantification protocol,
- change in science,
- change in records requirements,
- potential for double counting,
- potential for double pricing of emission reductions,
- if the activity is no longer considered additional, and
- a change in regulatory requirements.

Flagged quantification protocols will be assessed by the director to determine if the quantification protocol will be withdrawn or replaced with a revised quantification protocol; and how the offset crediting period or extension period of any existing emission offset project will be affected.

See section 4 (6-9) of Part 1.

1.9 Quantification Protocol Withdrawn

See section 6 of Part 1.

Quantification protocols may be withdrawn for a number of reasons, including but not limited to:

- if the reduction activity
 - becomes required by law,
 - becomes directly priced,
 - could result in double counting of emission reductions,
 - is no longer additional,
- changes in science, and
- errors identified in the quantification protocol.

The reason for withdrawal will impact whether the quantification protocol is replaced. It will also affect whether, and the conditions under which, any projects initiated under the withdrawn quantification protocol may continue generating emission offsets.

Where a specified gas emission reduction associated with a quantification protocol becomes required by law, refer to section 6(6) of Part 1.

If a quantification protocol is withdrawn because the reduction activity becomes required by law, the offset crediting period (or extension period) for existing projects will end immediately, unless the withdrawn quantification protocol is replaced with a new quantification protocol. If the quantification protocol is replaced, the project must apply the new quantification protocol in accordance with Part 1 Sections 6(4) and (5).

If a quantification protocol is withdrawn because:

- the reduction activity is no longer additional,
- there are changes in science, and/or
- errors have been identified,

and the quantification protocol is replaced with a new quantification protocol, the project developer may choose whether to continue generating emission offsets using the withdrawn quantification protocol or using the new quantification protocol, in accordance with Part 1 section 6(3).

If a quantification protocol is withdrawn or withdrawn and revised because the reduction activity becomes priced or could result in double counting of emission reductions or for another reason not mentioned above, the treatment of existing projects will be determined by the director.

1.10 Requests to use more than one quantification protocol

Emission offset project developers may apply to the director for authorization to use more than one quantification protocol for the same emission offset project.

When reviewing requests to use more than one quantification protocol in an emission offset project, the director will consider if:

- the emission offsets quantified under each quantification protocol must be directly connected through a shared emission reduction activity,
- the application explains how the project will meet all of the requirements of each quantification protocol,
- the application identifies the risks for quantifying the offsets under more than one protocol, and
- the application outlines how the risks will be mitigated.

If an aggregated emission offset project is using more than one quantification protocol, the project developer must submit an aggregated project planning sheet and reporting sheet for each type of quantification protocol.

1.11 Carbon Offset Emission Factors Handbook

The Carbon Offset Emission Factors Handbook published by the department (the “Handbook”) contains a listing of common emission factors and quantification methodologies that emission offset project developers use in initiating and implementing emission offset projects. Emission factors and quantification methodologies are subject to periodic updates. Emission offset project developers must use the most current version of the Handbook when initiating an emission offset project.

If the Handbook is updated during the offset crediting period or extension period of an emission offset project, the emission offset project developer may continue to use the emission factors from the version of the Handbook that the project was initiated under for a project report, or may choose to use the updated emission factors. When using updated emission factors in a project report, the emission offset project developer must (1) use all applicable emission factors in the Handbook, (2) reassess and apply the updated emission factors to the baseline and project conditions, and (3) record the use of updated emission factors in the project report. The emission offset project developer must not use emission factors from different versions of the Handbook in a single project report. In the case of aggregated emission offset projects, this means that the addition of a sub-project will automatically result in a requirement to update all emission factors to the most recent version of the Handbook.

If the Handbook is updated during the offset crediting period or extension period of an emission offset project, the emission offset project developer may continue to use the methodology from the version of the Handbook the project was initiated under for a project report, or may choose to use the updated quantification methodologies. When using an updated methodology in a project report, the emission offset project developer must (1) also update to all applicable emission factors in the Handbook, (2) reassess and apply the updated quantification methodology to the baseline and project conditions, (3) update the offset project plan, and (4) use the most current quantification protocol.

When an aggregated emission offset project adds a subproject by updating the aggregated project planning sheet or master planning sheet to an existing emission offset project, the emission factors and methodology for all subprojects must be updated to the most recent version of the Handbook.

1.12 Sources and Sinks

An emission source is any process or activity that releases a greenhouse gas into the atmosphere. An emission sink is any process, activity, or mechanism that removes a greenhouse gas from the atmosphere. Each quantification protocol contains a detailed list of included and excluded sources and sinks applicable to the specific reduction or sequestration activity.

1.13 Validation

Emission offset project validation is optional in the Alberta emission offset system. Validation is initiated by the emission offset project developer to support the project design and inform appropriate monitoring, data collection, and calculations for the emission offset project. Validation occurs before the emission offset project begins and focuses on whether appropriate baseline and project conditions are used and whether the calculations of potential emission offsets are correct. Additional information on verification is provided in section 2.3 and additional information on project validation is available in ISO 14064.

1.14 Priced Emission Reductions

Emission offsets are a policy tool to extend the carbon price signal beyond activities required to pay a carbon price directly. In response to the implementation of the Alberta carbon levy, the department revised and removed several quantification protocols to avoid double pricing of emissions. Quantification protocols were revised to distinguish between levied and non-levied sources and sinks so that levied sources are excluded from the quantification of emission offsets.

Emission offset project developers were required to use these revised quantification protocols to quantify emission offsets no later than January 1, 2019 and no earlier than January 1, 2018. This means that it is optional to exclude levied emissions to quantify emission offsets that occurred in 2018. The Alberta carbon levy was repealed effective May 30, 2019. Emission offset project developers are required to exclude levied sources and sinks when quantifying emission offsets that occurred between January 1, 2019 and May 29, 2019. Emission offset project developers may include previously levied sources and sinks when quantifying emission offsets that occurred between May 30, 2019 and December 31, 2019.

Emission offset project developers were required to update their project plan by January 1, 2019 to use the quantification protocols revised to align with the carbon levy. Emission offset project developers who did not update their project plans because the exclusion of levied fuels removed the emission offset generation opportunity, and who would now like to continue their project, must update their project plan before March 31, 2019. The offset crediting period will be continuous and will not be adjusted.

The federal fuel charge under the *Greenhouse Gas Pollution Pricing Act*, will apply to fuel combustion in Alberta effective January 1, 2020, other than exempt users. For the purposes of using quantification protocols to quantify emission offsets, Alberta levied fuels are considered equivalent to fuels priced by the federal fuel charge. When quantifying emission offsets that occur after January 1, 2020, emission offset project developers are required to exclude emissions that are from fuels priced by the federal fuel charge. This includes an emission offset project, or emission offset subproject, that is using the engine fuel management portion of the Quantification Protocol for Engine Fuel Management and Vent Gas Capture.

1.15 Conventional Oil and Gas Facilities

TIER enables conventional oil and gas facilities below the emissions threshold to opt in or be designated as an aggregate facility to avoid paying the federal fuel charge. Regulated emissions for aggregate facilities include stationary fuel combustion emissions only. Therefore, whether a conventional oil and gas project is aggregated or pays the federal fuel charge, stationary fuel combustion emissions will be directly priced. If a conventional oil and gas facility opts in to TIER all direct emissions, except biomass CO₂ emissions, are

priced. The compliance period is from January 1 regardless of when the facility opts in or is designated as an aggregate facility.

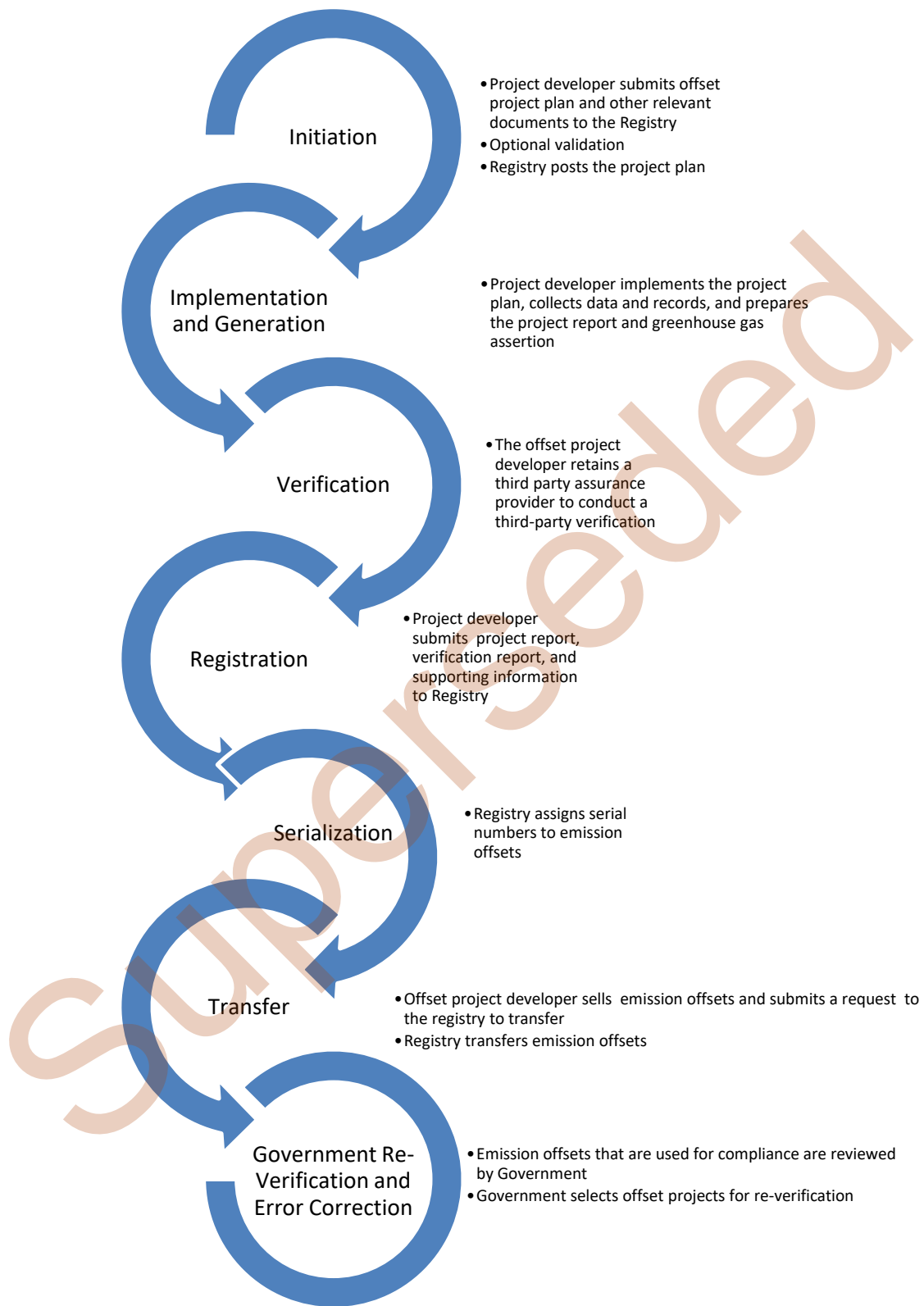
If an emission offset project, or emission offset subproject, that is using the engine fuel management portion of the Quantification Protocol for Engine Fuel Management and Vent Gas Capture is at a facility designated as an aggregate facility, the emission offset project or subproject will no longer be eligible to generate emission offsets. The reason that engine fuel management projects or subprojects will no longer be eligible to generate emission offsets if they are designated as an aggregate facility is because stationary fuel combustion emissions are included in the calculation of an aggregate facility's total regulated emissions. If an emission offset project or subproject that is using the vent gas capture portion of that quantification protocol is at a facility designated as part of an aggregate facility, the emission offset project or subproject is eligible to continue generating emission offsets because vented gas is not included in the calculation of an aggregate facility's total regulated emissions. Quantification of emission offsets in these cases must exclude sources associated with stationary fuel combustion.

If an emission offset project or emission offset subproject that is using the Quantification Protocol for Greenhouse Gas Emission Reductions from Pneumatic Devices is at a facility designated as an aggregate facility, the projects or subprojects may continue generating emission offsets because vented gas is not included in the calculation of an aggregate facility's total regulated emissions.

2.0 Emission Offset Project Lifecycle

The emission offset project lifecycle in Alberta is illustrated in Figure 1 and a more detailed description of each step in the lifecycle is provided in section 2.0. During the development stage the emission offset project developer will assess the proposed project to ensure that it will conform to the Alberta emission offset system requirements.

Figure 1: Description of Process of Emission Offset Project Lifecycle



2.1 Initiation

In order to initiate an emission offset project, the emission offset project developer must submit a completed project plan and other applicable documents to the Registry. The Registry checks the documents for completeness and, if complete, posts the emission offset project on the Registry. Registry processing times are generally 10 business days, however project developers can expect longer processing times during busy periods or if the Registry receives incomplete information. This does not constitute a validation, and the Registry does not assess whether an emission offset project conforms with regulatory or other standard requirements. Ensuring project documents meet system requirements remains the responsibility of the emission offset project developer.

The project plan is developed by the project developer and is a road map for the project. A project plan includes a description of project ownership structure and how the project will meet system requirements. The project plan is intended to be static for the entire project; however, there may be instances where the director requires an emission offset project developer to update the project plan. When the director requires a project developer to update the project plan, the director will indicate the deadline for updating the project plan. Examples of when a project developer is required to update the project plan include:

- extension granted,
- deviation granted,
- updating to use a new/revised approved quantification protocol or methodology,
- change in project condition that impacts the eligibility or quantification of sources and sinks,
- change of ownership to a project,
- if for any other reason an update is required by the director.

A project plan can be submitted to the Registry at any time during the calendar year. Emission offset project developers should be aware that projects are not eligible to generate emission offsets if they

- received a renewable energy certificate in respect of the associated emission reduction or carbon dioxide sequestration or
- received funding from a policy/program that claims ownership or prohibits sale or use of the associated emission reduction or carbon dioxide sequestration .

2.2 Implementation and Generation

Generation is a term used to describe emission offset projects undertaking activities to reduce specified gas emissions or sequester carbon dioxide. During this time, the emission offset project developer is collecting data and records and tracking the implementation of the emission offset project.

The project report is a document that describes the project operating conditions and the nature of the specified gas emissions reduction or carbon dioxide sequestration. The project report describes how the project was implemented relative to the project plan and any variance from the project plan must be documented in the project report.

The first reporting period begins on or after the offset start date. Reporting periods may not extend later than the last day of the offset crediting period (and in the case of a project granted an extension, beyond the last day of the extension period). The length of each reporting period is at the discretion of the emission offset project developer, however, the reporting periods of a single emission offset project cannot overlap with one another. The project developer will choose reporting periods that are most appropriate to minimize emission offset project administration costs while ensuring that emission offsets are marketed on desired timelines. Aggregated emission offset projects must use common reporting periods for all subprojects. Each project report must be verified. Once verified and submitted to the Registry, the project report is posted on the Registry.

2.3 Verification

Verification describes the process by which an independent third party assurance provider examines or reviews a project plan and project report (including the greenhouse gas assertion) and provides an opinion or conclusion on the accuracy of the assertion. The emission offset project developer is responsible for ensuring that the third party assurance provider they retain meets the qualification and independence requirements outlined in the Standard for Validation, Verification and Audit. The emission offset project developer is also responsible for providing the third party assurance provider sufficient information and access, including access to project site(s) and records, to evaluate the emissions reduction or sequestration quantified in the project report. The emission offset project developer is responsible for ensuring that all project information is complete and correct before the verification is finalized. This includes resolving any material verification findings identified. The emission offset project developer then submits the project report, the verification report and other applicable documents to the Registry for registration.

2.4 Registration

Registration is the term used to describe the process that the emission offset project developer follows to register an emission offset project and the emission reductions or sequestrations that occurred during the reporting period of the project report submitted. The emission offset project developer begins the registration process by submitting required documents to the Registry.

Emission offset project developers may choose to register an emission offset project at any time and are not required to adhere to a calendar year unless required in the applicable quantification protocol. The deadline for regulated facilities to submit compliance reports for 2019 compliance year is March 31, 2020. The deadline for regulated facilities to submit compliance reports for 2020 and forward is June 30. If an emission offset project developer is planning to sell emission offsets to a regulated facility to use the emission offsets in determining the facility's net emissions, the transfer must be complete prior to the compliance deadline. Emission offset project developers should allow adequate time for the Registry to serialize emission offsets. The Registry cannot guarantee processing and availability of emission offsets by the compliance deadline for projects registered less than 30 days before the compliance deadline.

Registering a project on the Registry does not constitute approval of that project, the project report, the verification report, or the third party assurance provider. Ensuring project documents meet system requirements remains the responsibility of the emission offset project developer.

2.5 Serialization

Serialization is the term used to describe the process the Registry follows when assigning unique serial numbers to emission offsets. Once an emission offset project developer completes the registration process, the Registry performs a completeness check on all documents submitted. The Registry will work with the emission offset project developer to correct incomplete documents. The Registry does not certify or validate emission offsets. Once the serial numbers are assigned, the Registry will post the project report (which includes the greenhouse gas assertion) and the verification report on the Registry.

Aggregated emission offset projects are not serialized by subproject. The Registry will not allocate tonnes based on percent ownership shares, or subproject ownership.

2.6 Transfer

Transfer is a term used to describe the transaction of emission offsets from one owner to another. Transfer occurs after serialization. The buyer and the seller negotiate the details of the sale and once an agreement is reached, the emission offset project developer submits a request to transfer to the Registry. Applicable forms for Registry transactions are available online from the Registry. A list of the documents and actions required by the Registry for transfers is shown in Table 3.

2.7 Government Re-verification

The Government of Alberta re-verifies a sample of emission offset projects to ensure that emission offset projects meet Alberta emission offset system requirements. The re-verifications help to assess and inform the overall performance of the Alberta emission offset system and identify opportunities for improvement. The typical steps of the re-verification process are as follows:

- Emission offsets submitted by regulated facilities for compliance,
- Department conducts desktop reviews,
- Department uses risk based process to select projects for re-verification,
- Department retains third party assurance provider to re-verify an emission offset project,
- Department notifies emission offset project developer and regulated facility,
- Re-verification is conducted by third party assurance provider,
- Department receives and reviews draft re-verification report,
- Department provides comments to third party assurance provider,
- Department receives and reviews final re-verification report,
- Department shares final re-verification report with project developer,
- Department hosts a close out meeting with the project developer,
- Department works with project developer on follow up actions, if applicable, and
- Department cancels any invalid emission offsets and notifies Registry, emission offset project developer and regulated facility.

The government may also re-verify a sample of emission offsets that have not been used for compliance. Each emission offset that is submitted for compliance is reviewed by the government in the desktop review process. The purpose of the desktop review is to ensure completeness and identify potential risks with the project. The desktop review is not a re-verification or an assurance that the emission offset meets all Alberta emission offset system requirements. The information from the desktop review is used in conjunction with a risk-based approach and a random component to select emission offsets for re-verification.

Emission offset projects or emission offset project developers may be the subject of more than one re-verification so that the department can better understand how projects are tracking emission reductions, or carbon dioxide sequestration over time. Once the re-verification selection process is complete, the government will initiate the procurement process to retain third party assurance providers. Project reports selected for re-verification are considered final and cannot be changed over the course of the re-verification. The emission offset project developers and regulated facilities will be notified in writing that their project report has been selected for government re-verification.

The government re-verification process uses a similar approach to third-party verification. Third party assurance providers retained by the government must meet the requirements of a third party assurance provider outlined in the Technology Innovation and Emissions Reduction Regulation and the Standard for Validation, Verification, and Audit. Third party assurance providers will not be assigned to re-verify an emission offset project where there is actual or perceived conflict of interest.

The re-verification will be conducted in accordance with the Standard for Validation, Verification, and Audit. The third party assurance providers will work directly with the emission offset project developer to set up an appropriate re-verification schedule and to request supplemental information needed to complete the re-verification. Criteria for the re-verification are set by the government and the third party assurance provider. The verification plan is submitted to the government and a copy is forwarded to the emission offset project developer prior to the site visit. A site visit is required and emission offset project developers must enable this. Failure to allow access may result in a qualified verification finding, and could result in a compliance investigation. The emission offset project developer can provide additional information during the re-verification to clarify how the project was implemented, but cannot make changes to the emission offset project or greenhouse gas assertion once the re-verification is initiated.

At the conclusion of the re-verification, the government will schedule a close-out meeting with the third party assurance provider to discuss key findings and preliminary results. The third party assurance provider will issue a draft and final verification report that summarizes any errors identified during the re-verification. Once the report is finalized, the government will host a re-verification close out meeting with the emission offset project developer and communicate the re-verification results. At the conclusion of the re-verification, the government will issue written notice to the emission offset project developer outlining the audit follow up process.

Where an error correction process is applicable, the government will notify the Registry that no further transactions will be allowed on the emission offsets until the error correction process is completed. If the errors are systemic, the scope of the error correction process may be expanded to other project reports or to other emission offset projects that were initiated and implemented by that emission offset project developer. Any regulated facility that used the emission offsets from the emission offset project will be notified in writing that errors have been identified with the emission offset project.

In the event of an error correction process that requires a second re-verification, the verification team will, in most cases, be the same team that identified the initial error. However, an alternate re-verification team may be chosen. For second re-verifications, the emission offset project developer will be responsible for the costs of the re-verification. The emission offset project developer and the regulated facility will receive written notice from the director once the re-verification and, if applicable, second re-verification is closed.

Third party assurance providers contracted by the government are bound by Government of Alberta confidentiality requirements for data, and must comply with all appropriate government regulations. Government contracts explicitly reference confidentiality requirements under the *Freedom of Information and Protection of Privacy Act*.

2.8 Error Correction

Any corrective actions between the buyer and seller of emission offsets to address invalid emission offsets are beyond the scope of the government regulatory system.

2.8.1 Error Identified During Verification

If a third party assurance provider identifies immaterial errors, the emission offset project developer is required to correct them on a go forward basis. It is the third party assurance provider's responsibility to ensure that immaterial errors from previous verifications are corrected when conducting a subsequent verification. If the third party assurance provider identifies material errors, the emission offset project developer is required to make corrections to the project report and greenhouse gas assertion before the verification can be completed. Once the project developer makes the corrections, the third party assurance provider must confirm the corrections and then may complete the verification.

The project report, including the greenhouse gas assertion and supporting information such as the aggregated project reporting sheet, cannot be changed once the third party assurance provider has signed the statement of verification. Changes made to documents after the third party assurance provider has issued a statement of verification will not be accepted.

2.8.2 Error Identified by Emission Offset Project Developer

If an emission offset project developer becomes aware of errors that cause a previously issued verification to be incorrect or inaccurate, the emission offset project developer must apply the following error correction process. If the error is an understatement or an immaterial overstatement, the error must be corrected in the next project report(s). Corrections cannot be made to register missed tonnes from previous project report registrations. If the error is a material overstatement, the error must be corrected as outlined in Part 1 section 18(3).

Once the re-verification is complete, the emission offset project developer must remove invalid emission offsets from the Registry to reflect the correction to the project report. The emission offset project developer must notify the department when invalid emission offsets have been removed.

2.8.3 Error Identified During Government Re-verification

If a third party assurance provider identifies an understatement or immaterial overstatement during a re-verification, the emission offset project developer must correct the error in the next project report(s). The director also has the discretion to require the project developer to correct immaterial overstatements in the report that is the subject of the re-verification. Corrections cannot be made to register missed tonnes from previous registrations. Corrections made due to follow up from government re-verification must be documented in subsequent project report and the scope of the verification of the subsequent report must confirm that corrective actions are complete.

If a third party assurance provider identifies a material overstatement, the error must be corrected in the report that is the scope of the re-verification and will be subject to a second re-verification as described in Part 1. The Director may also require the project developer to correct errors in previous project reports and/or on a go-forward basis.

If new errors are identified during the second re-verification, the director will give the project developer the option to repeat the re-verification or have associated emission offsets cancelled. In the case of a second re-verification the corrective actions will be at the discretion of the director.

2.8.4 Removal

Removals are permanent and irreversible.

Emission offsets must be removed from the Registry if an emission offset project developer decides to sell their emission offsets elsewhere (e.g. voluntary market).

If a project developer would like to remove emission offsets, they must complete the required Registry forms. Emission offsets will be delisted and their status changed to removed, and will no longer be available for compliance. No further transactions are permitted on these emission offsets, and any corrective actions between the buyer and seller of emission offsets are beyond the scope of the Alberta emission offset system.

3.0 Registry Process

The Registry interface is a website that shows information about an emission offset project including project status, supporting documentation and unique serial numbers. The project status as defined by the Registry is shown in Table 2.

Table 2: Registry Project Status Terminology

Status	Description
Registered	Emission offsets that have been serialized and posted on the Registry These emission offsets are available for purchase or transfer.
Pending Retired	Emission offsets that have been submitted by a regulated facility in determining the net emissions for the regulated facility. The emission offsets are no longer available for use or transfer.
Retired	Emission offsets that have been used by a regulated facility in determining the net emissions for the regulated facility The emission offsets are no longer available for use or transfer. Emission offsets may also be retired by the owner of the offset for another reason (i.e. voluntarily).
Removed	Emission offsets that have been withdrawn from the Registry by the project developer due to errors identified by the project developer.

Emission offsets that have been withdrawn from the Registry because the project developer has decided to sell their emission offsets elsewhere.

The emission offsets are not available for use or transfer.

Cancelled

Emission offsets that have been cancelled in accordance with section 22(2) of TIER.

The emission offsets are not available for use or transfer.

The emission offset project developer is required to submit specific documentation to the Registry at various stages in the emission offset project initiation process. The documents required by the Registry for project initiation, serialization, and transfer are included in Table 3.

Emission offset project developers should be aware that all Registry submissions are subject to a minimum 10 business day processing time. The Registry may require additional time if they identify issues during the completeness review outlined in Emission Offset Serialization. Partial or incomplete submissions will delay Registry processing times.

Applicable Registry processing fees are listed on the Registry. Late payment for transactions may result in transactions or projects being temporarily suspended until payment is received.

Table 3: Actions and Documents Required for the Registry for Transactions

Action	Documents Required by Registry
Project Initiation	Enter applicable Project Creation information for Registry processing within user account, Actions (previously referred to as Schedule D) Project Plan Validation Report (optional) Aggregated Project Planning Sheet (if applicable) Master Planning Sheet (if applicable)
Registration	Enter applicable Project Registration information for registry processing within user account, Actions (previously referred to as Schedule D) Project Report which includes the greenhouse gas assertion Third-Party Verification Report Statutory Declaration Aggregated Project Reporting Sheet (if applicable)
Transfer	Enter applicable Transfer information for registry processing within user account, Actions (previously referred to as Schedule D) Download, complete, upload “Notice of AEOR Instructions.pdf” and obtain Authorization by designate company user

The project developer may designate an ‘authorized project contact’ by completing the Registry forms. If a project developer has designated an authorized project contact, the department may contact the authorized project contact for administrative questions or to arrange a government re-verification. However, the responsibility for the project remains that of the emission offset project developer.

4.0 Records

Records are a key in demonstrating the validity of emission offsets. The verification process relies heavily on the quality and availability of records. Attestation is not considered objective evidence and will not be accepted as a 'record'. The types of records required to demonstrate that an emission offset project meets regulatory and quantification protocol requirements will vary and should be clearly outlined in the project plan.

Records are required to be:

- Legible, identifiable, traceable;
- Centrally located;
- Dated;
- Easily located (easily searched);
- Orderly;
- Retained in accordance with section 31 of the Technology Innovation and Emissions Reduction Regulation; and
- Prevented from loss.

Project developers (including aggregators) are required to retain copies of all required records and any additional records needed to support emission offset projects. The project developer must establish and apply quality management procedures to manage data and information. Written procedures must be established for each measurement task outlining responsibility, timing and record location requirements. The greater the rigour of the management system for the data, the more easily a verification or re-verification will be conducted for the project.

Records are required to prove completion of the project as planned. Records include but are not limited to project plans, project reports, greenhouse gas assertions, invoices, contracts, metered results, maintenance logs, calculations, data, databases, photographs, calibration records etc. Project specific records requirements are identified in the quantification protocols and in the project plan. In the case of an aggregated emission offset project, individual project proponents should also retain sufficient records to demonstrate that the Alberta emission offset system requirements are met. Records must be available and be disclosed to a third party assurance provider or government third party assurance provider upon request.

4.1 Data Management

Data management can be manual, automated or a combination of the two, and may range from internally developed tracking sheets to third party software. Systems that rely more heavily on manual data transfers and excel spread sheets are inherently less robust than more automated systems. Automated systems, if correctly set up, tend to be less prone to error than manual systems, and therefore provide a higher level of accuracy and security around data handling. Project developers must develop and make available data flow charts for their specific system including sample calculations for all calculations used in the project. Third party assurance providers will want to assess the equations used in automated systems to ensure the data management systems are correctly calculating project information.

Data controls are procedures conducted to ensure that the data is complete, accurate, valid, and not subject to corruption. Data controls are integral to the data management system and should serve to meet the following objectives:

- Completeness – ensuring the data is complete according to the project plan and quantification protocol;
- Accuracy – ensuring the data has been calculated appropriately and the measurements reflect the correct values;
- Validity – making sure no erroneous information is introduced into the data;
- Restricted access – addresses the security of the data management system.

Controls should exist throughout the data management system, but are most essential whenever there is a transfer or exchange of data or information. Examples of data controls include passwords on computers, read access requirements on files, reasonability limits on data inputs, record length checks on file transfers, approvals and testing procedures for algorithm changes, distribution lists for reports, and management review of reports.

In all cases, developing and implementing good quality assurance/quality control (QA/QC) checks can reduce the likelihood of errors and improve confidence in the overall reporting. Security access also improves the overall robustness of the system and general comfort with the data.

Any comments or questions regarding the content of this document may be directed to:

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Original signed by: _____

Date: November 13, 2019

Justin Wheler, Executive Director
Regulatory and Compliance

Superseded

Superseded

APPENDIX A: Project Plan Form

APPENDIX B: Project Report Form

Superseded