
Conservation and Reclamation Requirements for Renewable Energy Operations

**Project Lead - Shane Patterson, Ph.D.,P.Ag.
Science and Technology Specialist, AEP**

**Canadian Solar Industries Association
Annual Conference, June 21st, 2018**

**Susan McGillivray, P.Ag.
Reclamation Policy
Alberta Environment and Parks**

Outline

- **Background to legislative amendments**
- **Amendments to the Conservation and Reclamation Regulation**
- **Overview of the Draft *Conservation and Reclamation Requirements for Renewable Energy Operations***
 - **process for submitting your comments/feedback**
- **Key Messages**

Background

- **The Renewable Electricity Act established a requirement that 30 per cent of electricity produced in Alberta will be from renewable energy sources by 2030**
- ***Environmental Protection and Enhancement Act (EPEA)* was amended in 2017 to include:**
 - **the generating of wind electric power, or**
 - **the generating of solar electric power.**
- ***Environmental Protection and Enhancement Act (EPEA)* already enabled coverage of:**
 - **The generation of thermo electric power & hydro-electric power;**
 - **Electric power from hydro/moving water,**
 - **Electric power from heat from the ground/geothermal & sustainable biomass**

Background

- Under EPEA:
 - **An operator of specified lands has a duty to reclaim; operator must:**
 - (a) conserve specified land,
 - (b) reclaim specified land, and
 - (c) unless exempted by the regulations, obtain a reclamation certificate in respect of the conservation and reclamation.
- Under the Conservation and Reclamation Regulation:
 - ***Specified Land*: land that is being or has been used or held for or in connection with: (examples taken from the C&R Regulation):**
 - the construction, operation or reclamation of a well, an industrial pipeline or a battery; oil production site; plant; or a renewable energy operation

Renewable Energy Operations: Conservation and Reclamation Program

- Conservation (*EPEA* definition)

“The planning, management and implementation of an activity with the objective of protecting the essential physical, chemical, and biological characteristics of the environment against degradation”

- Reclamation (*EPEA* definition)

“any or all of the following: (i) the removal of equipment or buildings or other structures or appurtenances; (ii) the decontamination of buildings or other structures or other appurtenances, or land or water; (iii) the stabilization, contouring, maintenance, conditioning or reconstruction of the surface of land; (iv) any other procedure, operation or requirement specified in the regulations”

Conservation and Reclamation Regulation

- **1 Definitions**
- **2 Objective**
- **3 Standards, criteria and guidelines**
- **12 Application for a Reclamation Certificate**

- a) Footprint
- b) Renewable Electricity
- c) Renewable Energy Operations
- d) Specified Lands:
Renewable Energy Operations

- **15 Operator liability after reclamation certificate**
 - 15.1 Reclamation certificate not required

- Reclamation Liability:
 - Post Certification
 - Exemptions

Section 1: Definitions

New Terms

- **Footprint:** means any direct land disturbance, temporary or permanent, made from an activity referenced in clause (t).



**Footprint / Disturbance
Boundary**

Georgia Solar Farm

<http://dtydzegapv70r.cloudfront.net/wp-content/uploads/2014/02/GeorgiaSolarFarmInser.jpg>

Section 1: Definitions

New Terms

- **Renewable Electricity:** means electricity that has been produced as defined in the Renewable Electricity Act.
- **Renewable Energy Resource:** means an energy resource that occurs naturally and that can be replenished or renewed within a human lifespan, including, but not limited to:
 - moving water,
 - wind,
 - heat from the earth when used for electrical power generation
 - sunlight, and
 - sustainable biomass.
- **Renewable Energy Operation:** means a site or plant generating renewable electricity from a renewable energy resource.

Section 1: Definitions

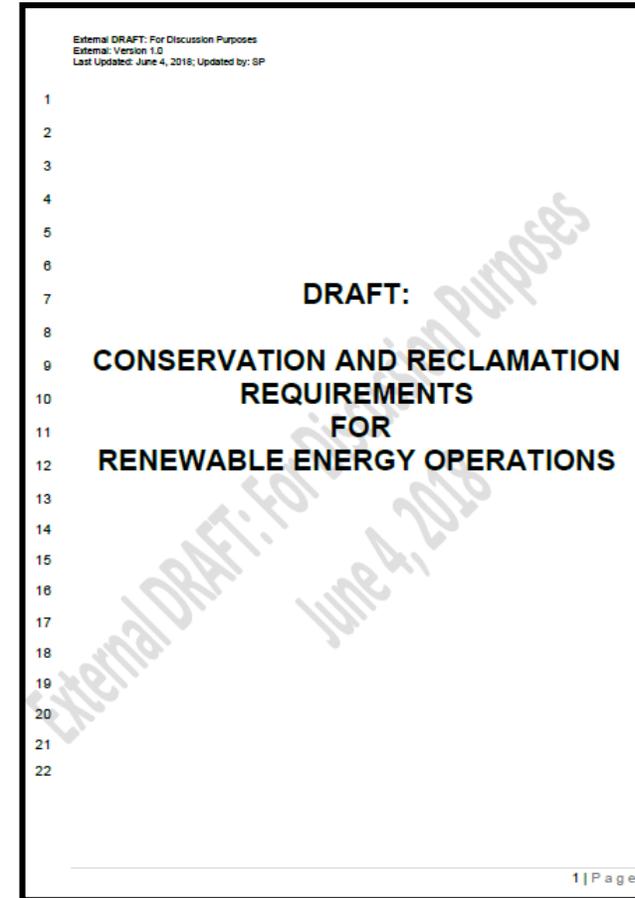
New term to provide clarification

- **Specified Land:** means land that is being or has been used or held for or in connection with
 - (ix) the construction, operation or reclamation of a plant, or
 - (x) the construction, operation or reclamation of a renewable energy operation.

Section 3:

Standards, Criteria and Guidelines

- Sets out the Director's ability to create standards, criteria and guidelines related to the conservation and reclamation of specified lands
- Section 3 enabled the development of the working draft
- Amendments to the Regulation did not result in changes to this section



Section 15:

Operator Liability After Reclamation Certificate

- Where a reclamation certificate is issued in respect of an activity referred to in section s.1 (t)(ii) to (viii) and (x, **Renewable Energy Operation**) no environmental protection order regarding conservation or reclamation may be issued under the following conditions:
 - more than 5 years after receiving the reclamation certificate, in a case where no approval was held on the date of issuance of the reclamation certificate
- For example, for the Upstream Oil & Gas Sector, the post-reclamation liability is 25 years for sites certified after October 1, 2003

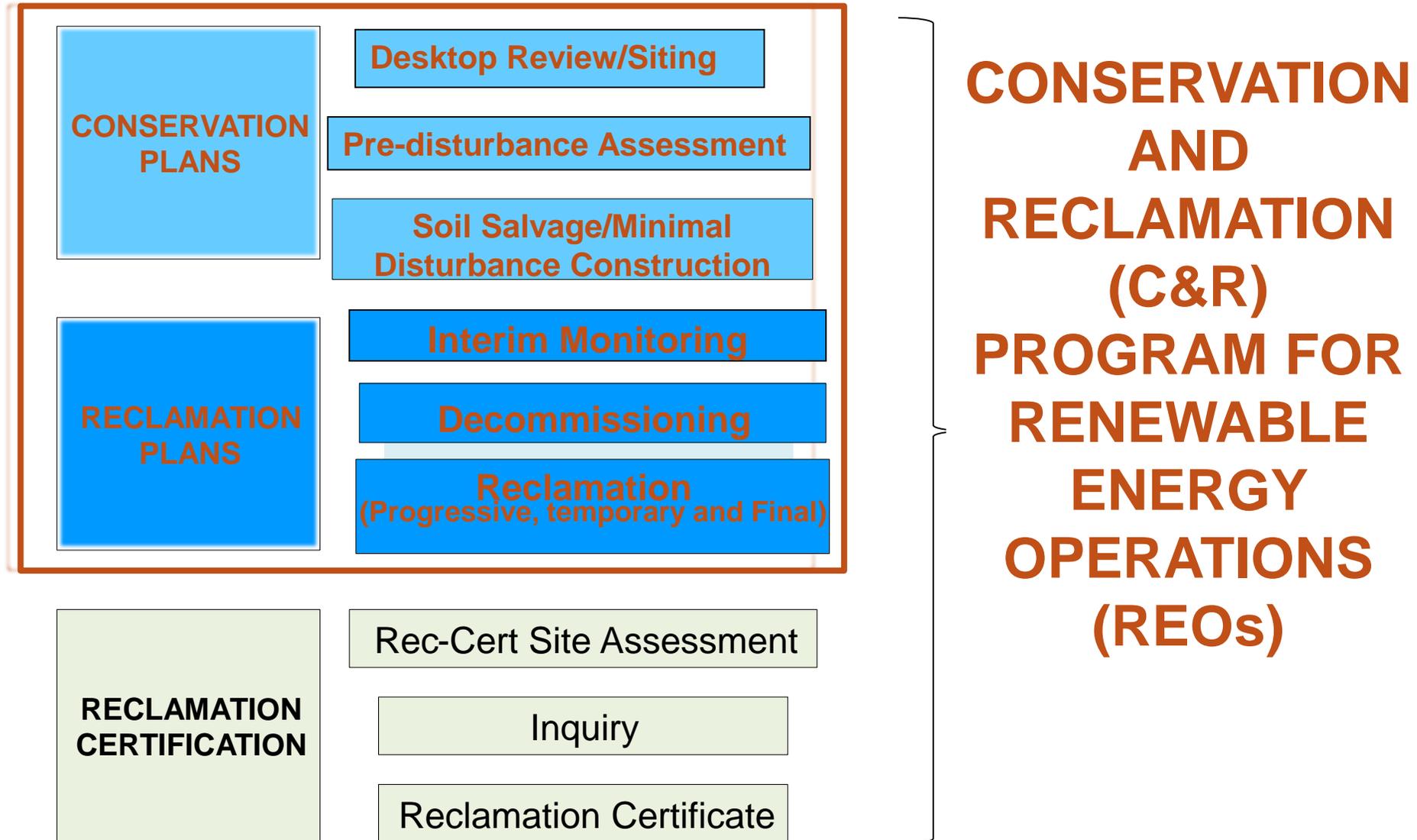
Section 15:

Reclamation Certificate not required

- Operators are exempt from Section 137 of EPEA under the following conditions:
 - where that activity is:
 - a renewable energy operation referred to in s.1 (t)(x):
 - that was reclaimed prior to July 1, 2018, or
 - where the renewable electricity generated or produced is less than or equal to that which is defined for large micro-generation in the *Micro-Generation Regulation* and the total footprint boundary is no greater than 1 hectare (2.47 acres) in size

REO C&R **Draft** Requirements

Overview of major components:



REO C&R **DRAFT** Requirements:

Implementation Timelines: Regulation & Requirements

- Conservation and Reclamation Regulation
 - Regulation comes into force June 15, 2018
- Conservation & Reclamation Standards:
 - Need to enable requirements based on projects status:
 - Existing Operational Projects:
 - Projects that have received AUC approvals but not constructed;
 - Projects in an application phase, but not constructed;
 - New projects

REO C&R **DRAFT** Requirements:

Implementation Timelines: Regulation & Requirements

- Reclamation and Reclamation Certification Requirements:
 - Reclaimed before July 1/18: certificate not required
 - Reclaimed on/after July 1/18: certificate required

Timelines for **Draft:**

Next Steps: What is the schedule for the draft?

- **Stakeholder sessions**
 - June 6-7 (Calgary, AB)
 - June 21-22 (Lethbridge, AB)
- **Written feedback: ~ 6 weeks**
 - Document Circulated: June 5, 2018
 - Feedback Due: July 13, 2018

(document and feedback template is available from project lead Shane.Patterson@gov.ab.ca)
- **Review and edit working draft based on written feedback**
 - July to mid-August
- **Release final C&R Plan Requirements Document**
 - September 1ST

Key Messages

- Conservation and Reclamation Regulation amendment will include Renewable Energy Operations, as of June 15, 2018.
 - Conservation and reclamation components of the regulation now apply to Solar as defined in the regulation
 - Draft Conservation Reclamation Requirements document is available for your review including direction on:
 - Conservation Plans
 - Reclamation Plans
 - Reclamation Certification process
- If you have not received the draft, you may request it from Shane.Patterson@gov.ab.ca.

Questions?

Shane Patterson
Shane.Patterson@gov.ab.ca