SCHEDULE A

THIS SCHEDULE A is made as of this 13th day of June, 2013,

Introduction

This Schedule A describes:

- the circumstances in which a Schedule A Report is required;
- the purposes of a Schedule A Report; and
- the required content of a Schedule A Report.

Requirement to Prepare and Submit a Schedule A Report

Proponents of oil and gas activities and ancillary activities located in Identified ALR Lands must prepare a Schedule A Report and submit it to the OGC unless the proposed oil and gas activities or ancillary activities are limited to:

(i) a single riser site that is directly related to the operation of a pipeline and is ≤ 0.1ha;

(ii) electric power lines with single-pole structures;

(iii) seismic lines (including cut lines made by hand or machine in the course of geophysical exploration) and temporary use sites for geophysical exploration (including camps) where the seismic lines and sites are immediately reclaimed following the completion of the geophysical exploration, if such reclamation is required by permit or by OGAA;

(iv) temporary winter access that is constructed in frozen conditions where no roadbed development is required; and/or

(v) temporary use sites for ancillary activities (for example, log decking sites, workspaces, campsites, geotechnical investigation areas, storage sites, etc.) where:
   (a) the site is only used during the construction phase of an oil and gas activity, and will be immediately reclaimed following the completion of the construction phase of the oil and gas activity;
   (b) no surface soil stripping or significant compaction or rutting (as compared to adjacent site) is reasonably expected to occur, and if such things do occur, the disturbed area is immediately reclaimed; and
   (c) the site will be available for farm use after the construction phase of the oil and gas activity has been completed.

Purposes of the Schedule A Report

A Schedule A Report is intended to include:

1. **Area Assessment,** to link with Appendix II Guidelines and document current land resource and agricultural use in the area of the application to aid in planning the activity location in a manner that minimize agricultural impacts;

2. **Pre-development Site Assessment**, to document baseline site information for soil management and reclamation planning;
3. **Recommendations for Soil Conservation** -based on an analysis of planned developments using the baseline site assessment; and
4. **Reclamation Planning,** i.e. a preliminary reclamation plan.

Required Content of a Schedule A Report

The different components of a Schedule A Report are described in detail below.

In most cases, a new or updated Schedule A Report will include all of these components. In cases where the proposed oil and gas activities and ancillary activities are located entirely on existing sites (i.e. no new land is required), the Schedule A Report may be limited to the components identified in Table 1 (below).

The Schedule A Report should be completed in consultation with the landowner if the oil and gas activity or ancillary use will occur on land other than Crown Land.

Table 1: Schedule A Requirements for Activities Entirely on Existing Sites

Item	Activity Type	Required Components of Schedule A Report			
		Area Assessment	Site Assessment	Recommendations re: soil/water/ noxious weeds; Existing As-built Plan	Reclamation Plan
1	New oil and gas activity or ancillary activity (other than Items 2 and 3)	Not Required	Not Required	Update required if needed[5]	Not Required
2	Pipeline	Not Required	Required	Required	Required
3	Conversion of existing oil and gas activity or ancillary activity site for non-farm use listed in Appendix I Item 5 (i)-(v)	Required	Required	Required	Required

1. AREA ASSESSMENT

A 1:20,000 scale or larger recent air photo or satellite imagery base that readily shows the surface land use and on which the following features are plotted:

- Agricultural Capability Units[6] (from published agricultural capability for agriculture maps);

[5] For example, an update may be required where: activity necessitates new topsoil handling; erosion is a known problems; or there is no current as-built plan.

- agricultural use, residences, and farm buildings (from air photo interpretation/stakeholder consultation and ground-truthing);
- existing oil and gas activities and ancillary activities (from OGC data-bases and ground-truthing);
- linear features, including roads and pipelines (from OGC data-base and ground-truthing);
- quarter section boundary lines, land ownership information and farm units (from Crown land /Land Title data-bases and stakeholder consultation);
- surface water features and other significant terrain features that may limit development; and
- the location of the proposed activities.

The features noted above must be plotted for the following area(s):

Activity Type	Land Type	Required plotting area
Road or Pipeline	Any	400 m either side of the proposed activity area.
Activities other than Road and Pipelines	Not suitable for agriculture (i.e. because the land is an existing oil and gas activity or ancillary activity site forested crown land, or is agricultural capability class 6 or 7)	All quarter section(s) on which the activity is proposed.
	May be suitable for agriculture	All quarter section(s) on which the activities are proposed, and all quarter sections contiguous to those sections.

2. SITE ASSESSMENT

The level of effort required to conduct site assessments will vary depending on local conditions, but the following requirements are the minimum information, which must be filed with the Oil and Gas Commission and the surface landowner. Site assessments will include: site information, site description, sampling procedures, soil assessment, invasive plants information, and maps.

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[6] The land capability classification system for agriculture in BC is the primary measure of land quality for these guidelines for preparing a Schedule A Report. The system evaluates the land potential for growing a range of crops based on climate, soils and landscape characteristics such as topography and drainage. Class 1 land is capable of the widest range of crops and class 7 has no potential for soil bound agriculture. The severity of eleven limitations or subclasses (such as climate, stoniness or topography) determines the potential capability class. In the Peace River region, climate limits much of ALR lands to class classes 3, 4, and 5. Class 3 and 4 land is primarily used for grain, oilseed, and seed production. Class 5 land is critical for forage and hay production for the beef industry.

In relation to this description of the site assessment, "surface lease" means all leases, easements, and rights-of-way which may be required for a well site, access road, pipeline, camp, workspace, sump, borrow pit and/or any other area related to oil and gas production.

Site Information:

- well name/location or pipeline location (tie-in to tie-in)
- proposed oil and gas development (list all)
- petroleum company name contact information
- location and legal description of property(s)
- name and contact information of surface landowner or specify if Crown land
- date of site assessment
- name and address, and profession of person conducting the site assessment
- approximate construction date

Site Description:

- soil classification, unit name, and parent material from published soil survey reports
- the agricultural capability rating from published maps
- current land use (cultivated cropland, hayland, uncultivated pasture, forested, forest with range/grazing or other)
- a rating of the surface drainage as good, moderate or poor and a description and location of any existing natural water courses
- a description of the site topography, indicating the gradient and aspect of slopes

Sampling Procedures:

The primary purpose of the site assessment is to document the soil quality, quantity, and profile of the surface lease. Soil sampling can be done with hand tools, an auger, or construction equipment. The procedures set out below must be followed.

- The soil conditions of a well site, camp, borrow pit etc. must be sampled at five locations: one sample must be taken 5 m inside from each comer of the surface lease boundary, and one sample must be taken at the center of the surface lease. This is the minimum number of samples; more may be necessary based on site conditions.
- Access roads and pipelines greater than 500 min length require one sample on the centerline of the surface lease for every 250m in length. This is the minimum number of samples; more may be necessary based on site conditions. If a change in landform/topography/soil characteristics/vegetation is noticed while traversing the right of way, that change should be inspected and/or sampled.
- Access roads and pipelines less that 250m in length require a minimum of two samples including one at the terminus and one at the midpoint.

- For wellsites, soil samples must extend 20 cm below the B horizon (20 cm into the C horizon), or to a maximum depth of 100 cm below the surface of the ground. Under frozen conditions, the soil samples must extend deep enough to accurately characterize the B horizon(s) and 20cm into the C horizon. For pipelines, soil samples must extend deep enough to accurately characterize the B horizon(s) and 20cm into the C horizon.
- There is flexibility in the sampling procedure based on the judgement of the qualified specialist. For example if the site has agricultural capability of class 6 or 7 then sampling intensity could be less.

Soil Assessment:
A visual analysis of the soil at each sample location should include the following information:

Sample Number	A Horizon Depth (cm) / Description		B Horizon Depth (cm)/ Description		C Horizon Description

The description of each horizon must include its texture class, based on the Canadian System of Soil Classification, Third Edition, 1998.

The A horizon from the five samples from a wellsite, camp, borrow pit etc. must be combined and thoroughly mixed. A portion of this combined sample must be sent to a laboratory for an analysis of its organic content, pH, and texture. A laboratory analysis for pipelines is not required.

Photographs:
Photographs must be taken which show the condition of the surface lease prior to disturbance. Each photograph should have noted with it the location, direction and any comments:

Noxious Weeds:
Listed noxious weeds (also referenced as invasive plants) must be controlled on oil and gas operating areas as required under the *Weed Control Regulation* B.C. Reg. 66/85 and/or Section 15 of the *Environmental Protection and Management Regulation* BC Reg. 200/2010. It is recommended that that the baseline condition of noxious weeds also be assessed for weed management during construction, operations and reclamation.

Maps:
Unless this information is already provided as part of a corresponding OGAA application, the site

assessment must include a large scale site map (such as a construction or survey plan) that includes the following information:

- location of where the soil samples were taken;
- topographical features such as, slope direction and drainage pattern;
- land use and current vegetation cover;
- location and description of works required to prevent soil erosion and manage surface runoff;
- location of proposed and existing oil and gas activity and ancillary activity surface structures and buildings within the operating area;
- a table or schedule identifying the area disturbed by all existing and proposed oil and gas activities (excluding pipelines) and ancillary activities on all sections or equivalent where these activities are proposed within the ALR. (Area calculations must be conducted in accordance with Appendix I.)

3. RECOMMENDATIONS FOR SOIL CONSERVATION

The site assessment will usually include general measures for conserving soil and controlling noxious weeds (such as, for example, the general measures outlined in Sections 7 and 9 of the OGC Environmental Protection and Management Guide). Where appropriate, the site assessment should also include any site specific measures for the construction and production phases that are recommended to achieve effective and efficient restoration as required under Schedule B, including measures relating to:

- topsoil stripping depths and storage;
- preventing or controlling erosion and compaction; and
- surface water management.

Where surface soils must be disturbed, then selective topsoil stripping and storage is required unless it is impractical or will provide no benefit (rationale should be provided).

If the construction season is unknown and recommendations would be different for frozen and unfrozen conditions, two prescriptions should be provided.

An as-built site plan showing the surface location of oil and gas structures, stored topsoil and subsoil, and any surface drainage features must be available for company field staff, site contractors, landowner, and OGC staff. The as-built site plan must be updated as oil and gas activity amendments occur and changes are made to surface soils. The as-built plan or clean-up report required under OGAA approvals can be used. The intent is that the location of stored topsoil and subsoil, and water management features are readily known so disturbance is minimized.

4. RECLAMATION PLAN

The primary goal of reclamation is to ensure that surface soil, topography, and vegetation of the operating area is restored to an equivalent condition as predevelopment when the site is no longer required for the oil and gas activity or ancillary activity. Specific criteria for reclamation of Identified ALR Lands are outlined in Schedule B.

Provide a brief preliminary reclamation plan for the proposed oil and gas activity based on planned oil and gas developments and the site assessment. Include the following elements in the plan:

- post oil and gas activity land-use objective
- Soil handling
- Re-vegetation

For pipelines this would be considered the final reclamation plan because surface restoration occurs as a continuum during pipeline construction and installation.

5. SIGNATURE

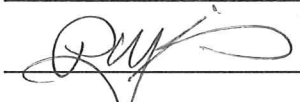
The Schedule A report must be signed by the Qualified Specialist(s) and by the proponent.

SIGNED THIS 13th DAY OF June, 2013

PROVINCIAL AGRICULTURAL LAND COMMISSION,
as represented by: Richard Bullock, Chair

I have authority to sign this Schedule A on behalf of the Provincial Agricultural Land Commission

OIL AND GAS COMMISSION,
as represented by: PAUL JEAKINS [Name]
Commissioner [Title]


[Signature]

I have authority to sign this Schedule A on behalf of the Oil and Gas Commission