

2013/14

Orphan Site Reclamation Fund Summary

BC Oil and Gas Commission



Table of Contents

About this Summary	3
Analysis	4
More information	6
Appendix 1 – Designated Orphan Sites	7

About the BC Oil and Gas Commission

The BC Oil and Gas Commission is the provincial regulatory agency with responsibilities for regulating oil and gas activities in British Columbia, including exploration, development, pipeline transportation and reclamation.

The Commission's core services include reviewing and assessing applications for industry activity, consulting with First Nations, cooperating with partner agencies, and ensuring industry complies with provincial legislation and all regulatory requirements. The public interest is protected by ensuring public safety, respecting those affected by oil and gas activities, conserving the environment, and ensuring equitable participation in production.

For general information about the Commission, please visit www.bcogc.ca or phone 250-794-5200.



Mission

We regulate oil and gas activities for the benefit of British Columbians. We achieve this by:

- Protecting public safety,
- Respecting those affected by oil and gas activities,
- Conserving the environment, and
- Supporting resource development.

Through the active engagement of our stakeholders and partners, we provide fair and timely decisions within our regulatory framework.

We support opportunities for employee growth, recognize individual and group contributions, demonstrate accountability at all levels, and instill pride and confidence in our organization.

We serve with a passion for excellence.

Vision

To be the leading oil and gas regulator in Canada.

Values

Respectful

Accountable

Effective

Efficient

Responsive

Transparent

2013/14 Orphan Site Reclamation Fund Summary

About this Summary

Restoration of land used for oil and gas activities in B.C. is regulated by the BC Oil and Gas Commission (Commission). Operators are required by law to properly deactivate projects, such as wellsites, pipelines and facilities, and restore the associated land. The final step in restoring a site is for the operator to achieve a Certificate of Restoration (CoR). CoRs are issued by the Commission and confirm a site was restored in accordance with current standards and requirements, and any known contamination issues or hazards were mitigated.

To ensure operators have the financial means to restore a site the Commission has a [Liability Management Rating Program](#), wherein operators with insufficient assets are required to submit a deposit prior to being allowed to operate. However, there are rare occurrences where a permit holder for an existing site is insolvent or cannot be identified. These sites can be designated by the Commission

as Orphan Sites.

Once designated an Orphan Site, the Commission may use the Orphan Site Reclamation Fund (OSRF) to decommission and restore the site to obtain a CoR. The OSRF is a levy on oil and gas production paid by industry that protects taxpayers from paying for restoration liability. This summary provides details on activities associated with the OSRF in the 2013/14 fiscal year.

In 2013/14 the OSRF funded \$2.8 million in orphan site decommissioning and restoration work, carrying a balance at the end of the year of approximately \$4 million. Another initiative over the year was the addition of orphaned pipelines to the BC One Call system. At the time of inception to BC One Call, the fund was actively managing 63 kilometres of pipelines in northeast B.C. As new sites and facilities are designated, additional pipelines will be added to the OSRF inventory in BC One Call.



A fully reclaimed wellsite that achieved a CoR.

Analysis

Inventory and Spending Breakdown

The OSRF managed a total of 32 Orphan Sites at the end of 2013/14, including eight sites that have received CoRs (see Appendix 1). At the beginning of 2013/14 there were 26 designated orphan sites (and ancillary developments including, but not limited to, remote drilling waste disposal areas and pipelines) requiring CoRs.

Work on orphan sites is completed under five main categories. Spending in 2013/14 is broken down by costs associated with each category below, and explained in the following sections:

- Well Abandonment \$1.9 million
- Facility Decommissioning \$577,000
- Site Investigation \$263,000
- Site Remediation \$38,600
- Site Reclamation \$16,500

Well Abandonment

Orphan sites with wells that have not been permanently plugged require: plugging of the producing zone(s) to ensure production fluid and gases do not migrate within the wellbore, assessing and repairing any wellbore integrity issues and cutting and capping the wellbore following downhole plugging.

Three wells designated in the previous fiscal year (B-040-K/094-P-12, D-071-D/094-P-12 and A-002-D/094-P-12) were abandoned and decommissioned in 2013/14. Five remaining sites require well abandonment and decommissioning.



A-002-D/094-P-13 (WA# 21051) was abandoned in December 2013 and cut and capped in February 2014. (Top to bottom) Workers plug the well; the well is capped, and the area around the well is re-filled with soil.



The D-071-D/094-P-12 (WA# 20522) facility was decommissioned in February 2014.

Facility Decommissioning

Orphan sites with surface and subsurface facilities require the safe removal and disposal of structures prior to completing environmental assessments and site reclamation. Decommissioning activities also include the removal of any facility flow lines, piles, concrete and debris. Pipelines must be cleaned, purged with inert gas, capped and signage must be installed.

The three sites that had wells abandoned during 2013/14 also had facilities that required decommissioning. Two sites (B-040-K/094-P-12 and A-002-D/094-P-13) were central dehydrator facilities and one (D-071-D/094-P-12) was a separator and line heater facility. A pipeline between orphan site D-071-D/094-P-12 and another facility was also abandoned and decommissioned.



Site C-A088-K/094-H-01 (WA# 22305) was investigated and received a CoR Part I in December 2013.

Site Investigation

Obtaining a CoR is a two-part process. Part I requires a site investigation and remediation, if necessary, and Part II requires an assessment of surface reclamation activities in restoring site productivity.

The first step in obtaining a CoR Part I is an environmental assessment to identify potential areas of concern from the site's operational history. A soil and groundwater investigation of the potential areas of concern will establish if

contamination is present and subsequently if remediation is required for site closure.

In 2013/14, site investigations were completed at six sites (D-B096-C/094-A-16, D-A056-C/094-A-16, C-A088-K/094-H-01, B-040-K/094-P-12, D0710D/094-P-12 and A-002-D/094-P-13).

One site (C-A088-K/094-H-01) received a CoR Part I approval.

Site Remediation



Site remediation on 10-08-079-16 W6M (WA# 2538) in 2008.

If a site investigation identifies contamination, remediation is required prior to the application and acceptance of a CoR Part I. Remediation may include the excavation, transport and subsequent disposal of contaminated soil at a licensed facility, or treatment of the soil to provincial standards and subsequent use as backfill for the excavation. No site remediation was completed in 2013/2014.

Site Reclamation



Site inspection for CoR Part II in fall 2013 on 05-21-085-15 W6M (WA#9361).

Part II of the CoR process ensures the land has been properly reclaimed so it meets appropriate land use productivity. Surface reclamation commonly includes surface contouring, topsoil replacement, re-vegetation, and monitoring to return the site to pre-disturbance conditions. While no orphan sites received a CoR Part II in 2013/14, several were undergoing reclamation monitoring and should be ready for a CoR Part II in 2014/15.

More Information

This is the first summary for the OSRF and it will be updated annually. The OSRF is planning to complete work on orphan sites in each category in the next fiscal year and continue to move sites through the CoR process. For more information on site restoration see the [2011-2012 Site Restoration Summary](#). For specific questions or enquiries regarding this document or the OSRF please contact ogc.communications@bcogc.ca.



Appendix 1

Table 1 – Designated Orphan Sites

Orphan Site Name and Location	Well #	Site Status and Scope of Work	Orphan Site Name and Location	Well #	Site Status and Scope of Work
Wolf D-014-G/094-A-15	2062	CoR issued in 2011.	Boundary 09-03-086-14 W6	6651	CoR Part I in progress.
Sunrise 10-08-079-16 W6M	2538	CoR issued in 2013.	W Beatton B-041-L/094-H-02	6691	CoR Part I in progress.
Sunrise 11-06-079-16 W6M	2560	CoR Part II in progress.	W Beatton D-041-L/094-H-02	6727	CoR Part I in progress.
Sunrise 11-09-79-16 W6M	2564	CoR issued in 2010.	E Rigel B-028-K/094-A-09	6870	CoR Part II in progress.
Sunrise 11-04-079-16 W6M	2569	CoR issued in 2011.	Grassy B-A95-D/094-G-07	7465	Site divested.
Sunrise 07-12-079-17 W6M	2772	CoR issued in 2010.	Paradise 05-21-085-15	9361	CoR Part II in progress.
Sunrise A11-06-079-16 W6M	2878	CoR Part II in progress.	Elleh C-008-K/094-I-12	9702	Requires abandonment and decommissioning.
Sextet C-022-K/094-I-12	2884	Requires abandonment and decommissioning.	Milo D-020-B/094-J-11	14587	Site divested.
Sunrise 06-07-079-16 W6M	2983	CoR issued in 2011.	Comox C-042-I/092-F-11	14607	CoR Part II in progress.
Sunrise 10-05-079-16 W6M	2998	CoR issued in 2010.	Milo C-065-B/094-J-11	14663	Site divested.
Sunrise 11-02-079-17 W6M	3360	CoR issued in 2011.	Th Quesnel NO. A-00-A/093-G-01	15594	CoR Part I in progress.
Elleh B-008-K/094-I-12	4343	Requires abandonment and decommissioning.	Dilly B-040-K/094-P-12	20506	CoR Part I in progress.
Buick A-041-D/094-A-15	4446	Legacy well. Confirming environmental quality of the site.	Tsea D-071-D/094-P-12	20522	CoR Part I in progress.
Louise B-070-L/094-P-03	4799	Requires abandonment and decommissioning.	Crush D-B096-C/094-A-16	20629	CoR Part I in progress.
Louise D-071-I/04-P-04	5156	Requires abandonment and decommissioning.	Currant D-A056-C/094-A-16	20634	Remediation required.
Wendy C-073-G/094-H-06	5625	CoR Part I in progress.	Petitot A-002-D/094-P-13	21051	CoR Part I in progress.
Boundary 08-17-084-13	5712	Legacy well. Confirming environmental quality of the site.	Drake C-A088-K/094-H-01	22305	CoR Part II in progress.
Boundary 16-03-086-14	6325	CoR Part I in progress.			