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How is the Orphan Fund Levy Set? Alberta's Oil and Gas Clean-up Costs in 2022

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Decision Commented On: The Upcoming Orphan Fund Levy for 2022/2023

ABlawg has covered the orphan and inactive oil and gas well issue for [around five years now](#) and those who have not followed the issue can become lost in the complexities of the regulatory system. This post is an entry point for those first starting to look carefully at the issue. It describes Alberta's oil and gas clean-up obligation and costs problems in detail, explains why it is difficult to get clear information about the precise size of the problem, and ends by describing what is at stake in the upcoming policy decision: the annual decision of the Alberta Energy Regulator (AER) to set the amount of the 2022/2023 Orphan Fund Levy.

The problem of ensuring clean-up from oil and gas development is common in oil and gas producing jurisdictions. Alberta's orphan and inactive oil and gas asset problem is notably large, however, [British Columbia](#), [Colorado](#), [Texas](#), and many other jurisdictions have similar problems. The longer the problem is kicked down the road, the more likely it is to become a catastrophic fiscal or environmental problem.

The moment an oil and gas well is drilled, a pipeline installed, or an oil and gas facility built, the need to eventually remove it and clean the surrounding area emerges. This post will use the generic terms 'clean-up obligations' and 'clean-up costs', but in other contexts a variety of terms including 'abandonment and reclamation obligations', 'post-closure liabilities', and 'remediation responsibilities' have been used to describe this process.

Categories of Wells and Facilities: Active, Inactive, Missing Orphans, and Designated Orphans

A well, pipeline, or facility is considered "active" by the AER when it is still in use, or has recently been in use for production, injection, or disposal. A well, pipeline, or facility is considered "inactive" by the AER if it has been shut-in or not in use for longer than 6 or 12 months, depending on the type of site – for example, critical sour gas wells are considered inactive after six consecutive months while other wells are considered inactive after twelve consecutive months (see [AER Directive 013: Suspension Requirements for Wells](#)). An inactive well can in theory be reactivated or repurposed, but in practice most wells become inactive when their recoverable resource is depleted and the wells [will never be reactivated](#). There are less AER directions relating to inactive pipelines, and suspending a pipeline seems to consist of simply emptying the pipeline and not using it. Inactive wells have clean-up costs alone and no significant remaining value.

Alberta has around 90,000 inactive wells. The AER's tool for reducing the number of inactive wells is the new [mandatory closure spend targets](#).

Once a well, pipeline, or facility is considered inactive it must be "suspended." Suspension obligations vary depending on the type of well, pipeline, or facility but are intended to ensure public and environmental safety. Suspending a well means ceasing operations, installing a temporary down-hole plug, locking the wellsite, and performing periodic inspections. While suspension is an important step to prevent leaks, it is not part of the actual clean-up process. The AER has had [difficulty ensuring compliance with suspension requirements](#).

The clean-up process is often divided into a three-step process of abandonment, remediation, and reclamation. Abandonment consists of removing the infrastructure from the landscape, or, in relation to wells, permanently plugging the well and removing the wellhead (see [AER Directive 020: Well Abandonment](#)). Remediation consists of removing or repairing any contamination present on site. Reclamation consists of returning the site to a land capability equivalent to what existed prior to the development (see section 2 of the *Conservation and Reclamation Regulation, Alta Reg 115/1993*). The clean-up process ends when a reclamation certificate is granted to the licensee of the asset, but the process can continue if the reclamation certificate is revoked if contamination or other problems appear on the site and the landowner files a statement of concern. Reclamation certificates are revoked often – the AER issued 21 orders revoking reclamation certificates [in the first two months of 2022](#).

The AER has released videos explaining [well-lifecycles](#), [inactive and suspended wells](#), and [abandoned and orphaned wells](#). These videos provide basic information, but tend to gloss over problems, describing how the regulatory system was intended to work rather than considering how it actually has worked.

A well, pipeline, or facility becomes a designated 'orphan' when it does not have a financially solvent owner capable of carrying out the closure work, and the AER designates it an orphan pursuant to section 70(2)(a) of the *Oil and Gas Conservation Act, RSA 2000, c O-6 (OGCA)*. The requirement for wells to be designated as orphans by the AER often goes unnoticed in reporting on the orphan issue, which is misleading because there are a large number of 'missing' orphans with no solvent owner to pay for their closure costs that have not yet been designated as orphans counted in the Orphan Well Association (OWA) inventory. After an oil and gas company enters bankruptcy, it can take several years for the bankrupt company's oil and gas assets to be designated orphans. The OWA's inventory therefore undercounts the true number of oil and gas assets with no solvent owner.

The Statutory Basis for the Orphan Fund Levy and Orphan Well Association

The purpose of the Orphan Fund Levy is to uphold the polluter pays principle, meaning that the clean-up costs of the oil and gas industry should be borne by industry. Regulatory attempts to address the orphan and inactive asset problem start in the mid-1980's, when it was hoped that the interest on a one-time \$3,000,000 fund would be sufficient to handle the clean-up cost of orphans.

This plan was wildly over-optimistic, and the orphan fund was designed by industry and the AER's predecessor, the Energy Resources Conservation Board. (see J.R. Nichol, "Orphan Wells: Who is Responsible – For How Long and at What Cost" (April 1991))

The orphan fund was created [in 1994](#) (called the "abandonment fund" until [2000](#)) (*OGCA*, section 69). The fund is used to pay for the maintenance and clean-up of designated orphans (*OGCA*, section 70) and to pay the share of the insolvent operators' clean-up costs for assets where there are other working interest participants that remain solvent (*OGCA*, section 71).

The OWA, officially titled the Alberta Oil and Gas Orphan Abandonment and Reclamation Association, is a society under the *Societies Act*, [RSA 2000, c S-14](#) that began operations in 2002. The OWA's role is established by the *Orphan Fund Delegated Administration Regulation*, [Alta Reg 45/2001](#), section 3 of which delegates AER functions relating to the use of the Orphan Fund to the OWA.

When will the Orphan Fund Levy be Set?

No statute or regulation specifies when the Orphan Fund Levy must be set each year, and historically it has been set at inconsistent times each year. In 2016 the Orphan Fund Levy was issued in two installments, on [March 18th, 2016](#) and on [August 2nd, 2016](#). In 2017 the Levy was again issued in two installments on [February 6th, 2017](#) and [August 3rd, 2017](#). Since 2018 the Orphan Fund Levy has been released in one installment, but still not at a consistent time of year: [April 9th in 2018](#); [May 3rd in 2019](#); [September 10th in 2020](#); and [April 6th in 2021](#). The next time the legislature amends the *OGCA* they should consider setting a fixed date for the Orphan Fund Levy to be announced to provide industry and the public some certainty on when they can expect the annual levy.

The Process for Setting the Orphan Fund Levy

The *OGCA* sets out the statutory rules on the setting of the Orphan Fund Levy. Section 73(2) of the *OGCA* requires the AER to set an orphan fund levy sufficient to cover a few purposes:

73(2) In prescribing the orphan fund levy for a fiscal year, the Regulator shall provide for a total levy that will be sufficient to cover

- (a) the costs referred to in [section 70\(1\)](#) for the fiscal year, as estimated by the Regulator,
- (b) any deficiency arising out of the operations of the fund from the previous fiscal year, and
- (c) any surplus for emergency and non-budgeted expenditures that the Regulator considers is necessary.

Section 70(1) has 12 clauses, but clauses (a) through (d) are the most important:

70(1) The orphan fund may be used

(a) for the purpose of paying the costs of providing reasonable care and measures to prevent impairment or damage in respect of a well, facility, well site or facility site, and paying for the costs of providing reasonable care and measures to prevent impairment or damage, suspension costs, abandonment costs, remediation costs and reclamation costs in respect of orphan wells, facilities, well sites and facility sites, where the work is carried out

(i) by the Regulator, or

(ii) by a person ordered, directed or authorized by the Regulator;

(b) for the purpose of repaying the principal and paying interest and any other borrowing costs under a loan agreement entered into by a delegated authority established or designated under this Part for the purposes of providing reasonable care and measures to prevent impairment or damage in respect of wells, facilities, well sites and facility sites, and for the purposes of suspension, abandonment, remediation and reclamation in respect of orphan wells, facilities, well sites and facility sites;

(c) for the purpose of monitoring the behaviour and condition of orphan wells, facilities, well sites and facility sites;

(d) for the purpose of paying for costs incurred in pursuing reimbursement for the costs referred to in clause (a) or (c) from the person responsible for paying them;

Note that section 73(2) assigns the AER the responsibility to set the amount of the orphan fund levy, not the OWA or industry. The amount of the annual Orphan Fund levy is set by annually amending section 16.530 of the *Oil and Gas Conservation Rules*, [Alta Reg 151/1971](#) to update the fiscal year and the dollar amount of the industry-wide levy used to calculate the levy for each licensee. It currently reads:

16.530(1) For the 2021-2022 fiscal year of the Regulator, the orphan fund levy payable by a licensee or approval holder is calculated in accordance with the following formula:

Levy = A/B x \$70 000 000

where

A is the licensee's or approval holder's deemed liability on April 3, 2021 for all of its facilities, wells and unreclaimed sites included within the LLR and OWL

programs, as calculated in accordance with Directive 006, Directive 011 and Directive 075, and

B is the sum of the industry's liability on April 3, 2021 for all facilities, wells and unreclaimed sites included within the LLR and OWL programs, as calculated in accordance with Directive 006, Directive 011 and Directive 075.

But how is the amount of the Orphan Fund Levy actually determined? The clinic used a *Freedom of Information Act*, [RSA 2000, c F-25 \(FOIP\)](#) request to see how it was set for 2021. The records show the OWA sent a letter to the AER saying:

“The Alberta Oil and Gas Orphan Abandonment and Reclamation Association (“Orphan Well Association” or “OWA”) has reviewed our 2021 fiscal operational needs and has consulted with the OWA’s industry members, the Canadian Association of Petroleum Producers (CAPP) and the Explorers and Producers Association of Canada (EPAC), in regards to the 2021 Fiscal Orphan Fund Levy.

The OWA recommends that the Alberta Energy Regulator establish the 2021 Orphan Fund Levy amount at \$70,000,000 and requests that the levy be collected as soon as practical in the 2021 fiscal year. CAPP and EPAC will be providing a separate letter acknowledging our consultation and endorsing the levy.”

The OWA is governed by a board of directors, which the OWA’s bylaws stipulate is to be made up of three representatives from CAPP, two representatives from EPAC, and one representative from the AER. One representative from Alberta Environment and Parks was added as an honorary, non-voting member in 2008. In addition to their voting power within the OWA, the AER’s expectation is to receive a letter endorsing the proposed Orphan Fund Levy from both CAPP and EPAC.

When the AER posted the Orphan Fund Levy, they used to say: “The Orphan Well Association (OWA), Canadian Association of Petroleum Producers (CAPP), and Explorers and Producers Association of Canada (EPAC) have approved” (see the levy announcements in [2019/2020](#) and [2020/2021](#)). But for [2021/2022](#) the AER de-emphasized CAPP and EPAC’s involvement by switching to saying “The Government of Alberta has approved this levy of \$70 million to fund the Orphan Well Association's (OWA's) operating budget for fiscal year 2021/22.” The *FOIP* record shows the internal process still consisted of having the OWA (controlled by EPAC and CAPP) suggest a levy, and then the AER and Alberta Energy approve that levy. In practice, CAPP and EPAC have been allowed to set the Orphan Fund Levy. Other groups with an interest in the OWA’s work, including Albertan landowners, rural municipalities, and the Canadian public get no role in the process, and can only learn about the process later with *FOIP*. The policy problem with letting industry lobbying groups set the orphan fund levy paid by their own industry should be obvious: EPAC and CAPP have a financial incentive to set the levy as low as possible to save their industry

money, and those who would benefit from a levy large enough to handle the orphan problem get no voice.

Has the Orphan Fund Levy Been Set Properly in Past Years?

Considering OWA finances in 2022, it should be beyond dispute that the Orphan Fund Levy has been set too low for years. What is disputable is precisely when it started being set too low, and by exactly how much. The first evidence is from the Statements of Operations in OWA annual reports, ([previously discussed here](#)) which show an excess of expenditures over revenues every year starting in 2015, and accelerating in 2018.

Table 1 - OWA Excess of Expenditures over Revenues (in 1000's of dollars, for OWA fiscal year ending on March 31)

2015	2016	2017	2018	2019	2020	2021	Cumulative, 2015-2021
1,180	591	1,626	17,678	51,459	47,115	97,549	231,324

Better evidence of the Orphan Fund Levy being set too low comes from government loans and grants to the OWA. The OWA received a [\\$30 million grant in 2009](#), and received large loans from the Provincial and Federal governments after Bill 14 in 2017 altered the *OGCA* to expressly allow the OWA to borrow money by adding what is now section 70(1)(b) and enabled the provincial government to loan the OWA money (see Bill 14, [An Act to Support Orphan Well Rehabilitation](#), 3rd Sess, 29th Leg, Alberta, 2017).

The OWA's combined government loans and government-paid interest now totals \$565 million since 2017 – suggesting that the levy has been cumulatively at least \$565 million too low since collection commenced. To put that in perspective, the total amount collected by the OWA Levy from 2002-2021 is roughly \$438 million.

However, the \$565 million is *just* the deficiency between the amount collected by the Orphan Fund Levy and the cost of the closure work that the OWA has actually done. Despite the OWA's massive spending of borrowed money, the OWA's orphan inventory remains large. As of March 1, 2022, the inventory has 2,709 orphan well sites for decommissioning, 2,700 orphan pipelines for decommissioning and 5,845 orphan sites for reclamation.

How Much Should the Orphan Fund Levy be for the Coming Years?

Oil and gas clean-up costs are the public's problem so long as the regulatory system fails to ensure that industry pays. Canadians and Albertans have already paid a significant portion of the tab for the problem. The OWA currently has loans of around \$250 million from the Provincial government and \$200 million from the Federal government (assuming the OWA has paid back the loan at the arranged rate set in the loan agreement). The loan from the Provincial government is scheduled to be repaid by 2031, and the loan from the Federal government is scheduled to be paid back by 2035. The Federal government paid an additional \$30 million to cover the interest on the provincial loan.

These long-term interest-free government loans to the OWA are just the start. The Federal government's \$1 billion in funding for Alberta's [site rehabilitation program](#) was another [subsidy from the government to the oil and gas industry](#) to handle oil and gas clean-up liabilities. That program paid for the clean-up of inactive wells rather than of orphan wells. The government insisted that the funding went to oilfield service contractors rather than to the oil and gas companies, but that makes no difference. Private companies that have not entered bankruptcy had their clean-up liabilities paid for using government money. If someone pays for your lunch, you get a free lunch even if you never touch the money; it would be absurd to argue buying someone lunch is not a benefit to them because the money goes to the restaurant.

The OWA's 2022 business plan includes a three-year consolidated budget, and shows the current plan is for a \$72 million orphan levy for the next three fiscal years (2022-2023, 2023-2024, and 2024-2025). This budget is very optimistic about the rate of incoming orphans, as it anticipates a decrease in OWA spending from \$169 million in 2022/2023 down to \$66 million in 2023/2024 and then \$38 million in 2024/2025. Keep in mind that part of the levy will need to go into paying back the loans until 2035. The *FOIP* records show the plan (as of February 2021) was to pay back the provincial loan with \$30 million a year from 2022 to 2026, \$7.5 million in 2027, and \$25 million a year from 2028 to 2031, and then the federal loan with \$50 million a year from 2032 to 2035.

The AER's repeated choice to allow the Orphan Fund Levy to be set so low is substantially defeating the statutory scheme of the *OGCA* that was meant to ensure industry would pay for the clean-up costs of orphan oil and gas assets. It is questionable whether their past decisions were even compliant with sections 70 and 73 of the *OGCA*. The AER needs to stop listening only to CAPP and EPAC. The AER is able to set a levy sufficient to cover "any surplus for emergency and non-budgeted expenditures" (*OGCA*, section 73(2)(c)). The planned \$72 million is far too low – especially given the context of rising oil prices that hit an 8 year high at \$108 a barrel on March 2, 2022. An orphan fund levy as high as \$750 million (to immediately repay the outstanding \$450 million loan and put another \$300 million towards clearing the backlogged inventory) would be a reasonable start on correcting for the years of underfunding.

Two Exclusions from the Orphan Fund: Large Facilities and Oilsands Mines

Although the orphan fund levy covers AER licensed wells, pipelines, and other facilities, it does not cover "large facilities." The term "large facilities" is defined in section 1(1)(aa.1) of the *OGCA*:

(aa.1) "large facility" means a facility that is

- (i) a central processing facility as defined in the rules made under the Oil Sands Conservation Act with a Regulator approved design capacity of 5000 cubic metres or more per day,

- (ii) an oil sands upgrader integrated into a central processing facility as defined in the rules made under the Oil Sands Conservation Act with a Regulator approved design capacity of 5000 cubic metres or more per day,
- (iii) a processing plant designated by the Regulator as a stand alone straddle plant, or
- (iv) a gas processing plant that has or has had sulphur recovery, with a sulphur inlet of one tonne or more per day;

A separate “Large Facility Liability Management Program” was established for these “large facilities” by Bill 28, [The Energy Statutes Amendment Act](#), 2nd Sess, 27th Leg, Alberta, 2009. Large facilities have a levy and fund separate from the general orphan fund, although both funds are managed by the OWA (*OGCA*, sections 73(3) and 70(1)(h)). A Large Facility Levy was necessary for the first time in 2021 to pay for the cleanup of the Mazeppa Gas Plant, left behind for the OWA by the [bankruptcy of Lexin Resources in March 2017](#). Take note of the four-year gap between the bankruptcy and the gas plant becoming a designated orphan that is the responsibility of the OWA. The AER set the 2021-2022 Large Facility Levy [at \\$3.5 million](#). The OWA’s December 2021 business plan anticipates a \$6 million large facility levy for 2022/2023 and \$1 million in the two following years.

The second major type of oil and gas infrastructure that is not covered by the orphan fund is the oilsands and their associated infrastructure – these are treated as mines and covered by the [Mine Financial Security Program](#) (see [this post](#) for more on that program). The effect of this is that under the current orphan levy structure, the oilsands mines do not contribute towards paying for the clean-up of conventional oil and gas assets.

Conclusion

The current OWA’s Three Year Business Plan for 2022-2025 shows the OWA plans to pay back the loans for the work done between 2011 and 2021 until 2035, while massively slowing down the OWA’s spending on clean-up work in coming years. This plan is untenable given that Alberta’s conventional oil and gas reserves are depleting and that the future likely holds higher carbon prices.

Despite the laws and regulations aimed at holding industry responsible for their environmental liabilities, industry has already found ways to shift a lot of their costs onto the public, and there is a risk of even more of these costs being shifted onto the public through ‘one-time’ subsidies in the form of responses to unforeseen crises. One solution to reduce this risk to the public is easy: when the AER sets the Orphan Fund Levy, it just needs to write down a significantly higher number. Alberta squandered decades of opportunities to fix this problem. The current high oil prices mean that now is probably the last good chance Alberta will get.

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