

Summary— Follow-up of Report 15: 2013–14 Environmental regulation of the resources and waste industries

Report 1: 2017–18



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Front cover image is an edited photograph of Queensland Parliament, taken by QAO.

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Reference to comments

In accordance with section 64 of the *Auditor-General Act 2009*, we provided a copy of this report to the Department of Environment and Heritage Protection and the Department of Natural Resources and Mines. In reaching our audit conclusions, we have considered their views and represented them to the extent we deemed relevant and warranted when preparing this report.

Responses were received from the Department of Environment and Heritage Protection and the Department of Natural Resources and Mines. The responses are in Appendix A.

Audit cost

This audit cost \$115 000.

Your ref:
Our ref: 2017-P9160



19 September 2017

The Honourable P Wellington MP
Speaker of the Legislative Assembly
Parliament House
BRISBANE QLD 4000

Dear Mr Speaker

Report to Parliament

This report is prepared under Part 3 Division 3 of the *Auditor-General Act 2009*, and is titled *Follow-up of Report 15: 2013–14 Environmental regulation of the resources and waste industries* (Report 1: 2017–18).

In accordance with s.67 of the Act, would you please arrange for the report to be tabled in the Legislative Assembly.

Yours sincerely

Brendan Worrall
Auditor-General

KEY FACTS



220 000 hectares
of disturbed land in
Queensland



\$8.7 billion
estimated
rehabilitation
costs



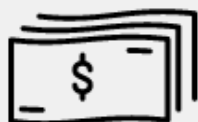
The state currently
holds \$6.8 billion in
financial assurance



Nine per cent of
disturbed land
has been
rehabilitated



By 2021
disturbed land will
be approximately
12 times greater
than areas under
rehabilitation



\$2.2 billion
contribution to
Queensland
economy in
royalties



60 000 people
directly employed
by Queensland
resource industry

Note: Land is disturbed if it has been the subject of human activity that has changed the land's surface.

Audit objective and scope

In this audit, we followed up on our recommendations from Report 15: 2013–14 *Environmental regulation of the resources and waste industries*.

Objective

We assessed whether the Department of Environment and Heritage Protection and the Department of Natural Resources and Mines actioned our recommendations and addressed the data and systems issues that led to the recommendations.

Scope

The Department of Environment and Heritage Protection's processes for environmental regulation and monitoring are the same for both the resources and the waste industries.

In Report 15: 2013–14, we focused on environmental regulation of the resources industry. We also followed up on the progress the department had made in addressing our six recommendations from Report 10: 2011 *Regulating waste: protecting the environment*.

This report therefore focuses on environmental regulation of the resources industry as it relates to the nine recommendations we made in Report 15: 2013–14.

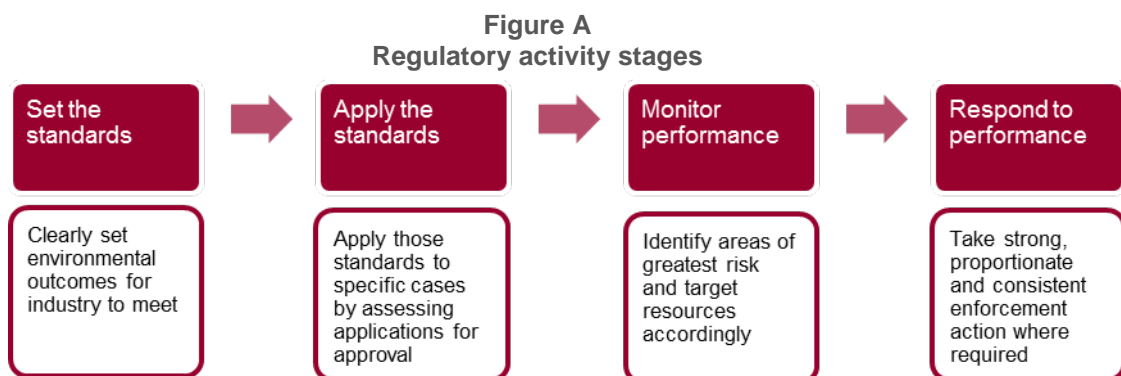
Summary

Queensland's resources industry adds significant economic and social value to the state through royalties, investment, employment, and community development. In 2016, the resources industry contributed over \$2.2 billion to the state's economy in royalties received and directly employed over 60 000 people.

However, resource activities can also cause environmental harm that may be irreversible or take years to rectify. By its very nature, exploring and extracting resources disturbs the land. Resource companies must successfully rehabilitate the land as a condition of their licence to operate. Currently, there are more than 220 000 hectares of disturbed land in Queensland. The estimated cost to rehabilitate this land is \$8.7 billion.

In Queensland, the Department of Environment and Heritage Protection regulates most resources and waste operators using 'environmental authorities'. These authorities detail the conditions imposed on companies to ensure their activities comply with the *Environmental Protection Act 1994*. If a resource company's activity is likely to cause environmental harm, including disturbing the land, this will be an environmentally relevant activity and the operator must hold an environmental authority.

Figure A shows how the Department of Environment and Heritage Protection regulates and enforces the resources industry's compliance with the *Environmental Protection Act*.



Source: *The Department of Environment and Heritage Protection Regulatory Strategy*.

The Department of Environment and Heritage Protection obtains financial assurance from environmental authority holders to ensure the state holds sufficient funds to:

- prevent or minimise environmental harm, or rehabilitate or restore the environment
- secure compliance with an environmental authority or small-scale mining tenure.

Similarly, the Department of Natural Resources and Mines regulates the resources industry's compliance with the *Mineral Resources Act 1989*, the *Petroleum and Gas (Production and Safety) Act 2004*, the *Petroleum Act 1923*, and geothermal and greenhouse gas legislation. The department administers permits for mining, petroleum and gas activities and provides geoscientific and resource information to assist operators with their exploration activities.

The Department of Natural Resources and Mines also manages financial assurance for mining activities, excluding petroleum and gas activities, which the Department of Environment and Heritage Protection administers.

Report 15: 2013–14

In Report 15: 2013–14 *Environmental regulation of the resources and waste industries* we examined the effectiveness of the Department of Environment and Heritage Protection and the Department of Natural Resources and Mines' compliance monitoring, reporting, and enforcement of environmental conditions for resource and waste management activities.

We examined whether they were effective in protecting the state from liability for rehabilitation and the environment from unnecessary harm. Specifically, we examined whether their:

- supervision, monitoring and reporting was risk-based, timely, and effective in ensuring compliance
- enforcement was timely and effective
- financial assurance was effectively used for rehabilitation.

Conclusion

We concluded that the Department of Environment and Heritage Protection was not fully effective in its supervision, monitoring, and enforcement of environmental conditions.

We also concluded that the two departments were not effectively managing financial assurance or mines that were in care and maintenance (mines that were not operating). This unnecessarily exposed the state to liability and the environment to harm.

Findings

We found that the Department of Environment and Heritage Protection's planning and risk assessments were hindered by poor data and inadequate systems. The Department of Natural Resources and Mines and the Department of Environment and Heritage Protection were not coordinating and sharing information.

The Department of Environment and Heritage Protection was often not requesting sufficient financial assurance to meet the rehabilitation costs of mining sites. Both departments were reluctant to take appropriate action where needed to revoke permits and claim financial assurance for the state. They did not have a clear record of financial assurance held by the state, as neither department had a reconciliation process. At times, Department of Environment and Heritage Protection staff did not know whether the Department of Natural Resources and Mines had requested, received or retained the financial assurance required from an environmental authority holder.

Recommendations

We made nine recommendations, all of which the two departments accepted. We recommended the departments improve data sharing and develop clearer guidelines and protocols when dealing with 'care and maintenance' sites. We made recommendations to the Department of Environment and Heritage Protection, to improve planning and reporting on environmental compliance activities, and the recovery of fees and costs, including how financial assurance is calculated and collected. Figure B lists the full recommendations.

Progress made by departments

Our follow-up process provides accountability in identifying agency progress in implementing audit recommendations or undertaking suitable alternative actions.

In this follow-up of Report 15: 2013–14 *Environmental regulation of the resources and waste industries*, we looked at the status of recommendations and whether departments' changes addressed the issues originally raised.

Audit conclusions

Overall, the two departments have gone to considerable effort and implemented most of our recommendations. To a large extent, the two recommendations not implemented have been overtaken by the government's proposed changes to the financial assurance scheme.

The Department of Environment and Heritage Protection has moved from a reactive compliance activity program, mainly responding to complaints and incidents, to more proactively targeting high-risk sites for inspection. They have increased the amount of financial assurance held by the state, addressed data issues, improved compliance with annual returns and reduced outstanding debts. But the recentness and ongoing nature of many of the changes means that it is still too early for us to determine how effective they will be in the long term.

The Department of Environment and Heritage Protection is now better placed to target its strategies, operations and resources to maximise compliance and effectively detect non-compliance. The new systems and processes will continue to mature as the Department of Environment and Heritage Protection and the Department of Natural Resources and Mines improve the way they collect, share and use data.

The departments have further progress to make on our recommendations for improving their calculation, collection, and management of financial assurance. The Department of Environment and Heritage Protection has improved the calculation of financial assurance, resulting in a \$1.85 billion increase in financial assurance held. But there is still a \$1.9 billion shortfall between estimated rehabilitation costs and the amount the departments collect, leaving the government and environment exposed. The government intends to address this risk through proposed changes to the financial assurance model, but there are still many aspects of the proposed model to be decided.

Finally, we have included in our *Strategic Audit Plan 2017–20* a proposed performance audit, *Monitoring environmental conditions for mining activities*. We have scheduled this audit for 2019–20, by which time many of the changes implemented by the departments will have matured and their effectiveness should be more evident.

Summary of audit findings

Please note this is a summary of the audit findings. More information is available in the following chapters.

Implementation status

The Department of Environment and Heritage Protection and the Department of Natural Resources and Mines have fully implemented the two recommendations made to both departments. The Department of Environment and Heritage Protection has fully implemented a further five recommendations, partially implemented one, and not implemented another. Figure B shows the implementation status of all nine recommendations. It also indicates which chapter contains the detailed findings.

Figure B
Implementation status of Report 15: 2013–14 recommendations

Recommendation		QAO assessment of status	Chapter
The Department of Environment and Heritage Protection and the Department of Natural Resources and Mines			
1	improve the exchange, coordination, and accessibility of information to achieve better planning and risk assessments to inform their compliance activities.	Recommendation fully implemented	Chapter 3
9	establish clear definitions, guidelines, and formal protocols for dealing with the ongoing management of, and where necessary the transfer of responsibility for 'care and maintenance' sites.	Recommendation fully implemented	Chapter 3
The Department of Environment and Heritage Protection			
2	pursues enforcement action to recover the long-term debt it is owed from annual fees.	Recommendation fully implemented	Chapter 4
3	utilises information provided in annual returns to inform its compliance planning and improves its supervision of the industries it regulates.	Recommendation fully implemented	Chapter 3
4	implements a program to proactively monitor compliance with environmental authorities with standard conditions and variations to standard conditions.	Recommendation fully implemented	Chapter 3
5	captures and recovers the full cost of investigating and prosecuting all non-compliance cases.	Recommendation fully implemented	Chapter 4
6	improves its performance measurement and reporting to demonstrate the effectiveness of its activities in achieving environmental outcomes.	Recommendation fully implemented	Chapter 3
7	assumes responsibility for administering all financial assurance including those currently collected and held by the Department of Natural Resources and Mines.	No substantial action taken	Chapter 2
8	ensures the financial assurance it calculates and collects reflects the estimated cost of environmental rehabilitation.	Recommendation partially implemented	Chapter 2

Source: Queensland Audit Office.

We have provided a summary of the progress made in implementing the recommendations in the following sections.

Managing financial assurance

This section covers recommendations 7 and 8.

The Department of Environment and Heritage Protection has not fully implemented either of the two recommendations to ensure that financial assurance arrangements meet resource companies' rehabilitation obligations. Further progress to fully implement the recommendations is on hold, pending implementation of the proposed Financial Assurance Framework.

Financial Assurance Framework project

A review by Queensland Treasury Corporation in November 2016 proposed a redesigned Queensland Financial Assurance Framework. The framework includes a proposed financial assurance scheme, which involves tailoring the financial assurance to the risk profile of the operator.

Following a global jurisdictional review, Queensland Treasury Corporation considered two financial assurance models in detail. It recommended the proposed financial assurance scheme as better for protecting the state's financial interest. Queensland Treasury Corporation noted that, while the scheme does expose government to potential loss in extreme scenarios, the risk is very low and the exposure is less than the current model. A project to develop and implement the framework is underway, with an expected implementation time frame of 1 July 2018.

While the Department of Environment and Heritage Protection will estimate the cost of rehabilitation, a Queensland Government scheme administrator will determine the type and amount of financial arrangement required from the operator and administer the state's financial assurance. The role of scheme administrator will be determined during the Financial Assurance Framework project.

Responsibility for administering financial assurance

We recommended that the Department of Environment and Heritage Protection assumes responsibility for administering all financial assurance. This has not yet occurred. Initially, this was because poor quality data and system limitations hindered the two departments from having a clear record of financial assurance held by the state.

The two departments have now improved the integrity of their data, but have held off transferring full responsibility for financial assurance pending implementation of the proposed new financial assurance scheme. This includes a proposed central registry for all financial assurance held by the state. In addition, a scheme administrator will administer the state's financial assurance.

Calculating and collecting financial assurance

The progress the Department of Environment and Heritage Protection has made on the recommendation to accurately calculate and collect financial assurances has assisted it in increasing the amount of financial assurance held by the state. It has improved how it calculates the amount of financial assurance required from an operator and the shortfall between the amount held and the amount required has reduced. The state currently holds \$6.807 billion in financial assurance, compared to \$4.957 billion held in 2013.

The amount held is still \$1.9 billion short of the \$8.7 billion needed to cover estimated costs to rehabilitate the environment. This is mainly due to the current practice of giving discounts to environmental authority holders based on environmental and compliance performance. Under the proposed new financial assurance scheme, discounts will no longer be offered in the future.

Monitoring compliance

This section covers five recommendations—numbers 1, 3, 4, 6 and 9.

The Department of Environment and Heritage Protection and the Department of Natural Resources and Mines have fully implemented the five recommendations to improve how they monitor compliance.

Improved data and systems

The Department of Environment and Heritage Protection has improved the way it collects and shares data. As a result, it has timely access to better information and data to plan its strategies, operations, and to target its resources to maximise compliance and detect non-compliance.

These improvements are due to:

- better systems—with the new Connect system progressively replacing the legacy EcoTrack system
- improved and clearer processes and protocols between the two departments that facilitate the collection and sharing of relevant information
- collection of quality data to inform environmental, client, and location risk and better understand financial risk of environmental authority holders.

Risk-based compliance activities

The Department of Environment and Heritage Protection has replaced its annual compliance plan with a risk-based approach to monitoring compliance, reflecting the department's regulatory strategy. It has developed the Compliance and Risk Evaluation workflow tool and the Compliance Prioritisation Model that together enable a proactive and targeted approach to inspection activities.

The Compliance and Risk Evaluation tool collates information about risk and compliance to inform the client and location risk profile. The Compliance Prioritisation Model prioritises sites for compliance activities based on environmental, client and location risks.

These tools assist compliance officers to deal proactively with priority compliance issues—poor performers and high-risk activities. The Department of Environment and Heritage Protection is unable to inspect all high-risk sites so, after determining the high-risk sites, it further prioritises based on other factors, such as prior compliance history, its available resources and seasonal conditions.

Managing care and maintenance sites

Both departments have worked collaboratively to define and document formal protocols on how they manage mines once in care and maintenance.

They now define a mine as being in care and maintenance when the environmental authority holder is no longer operating the site to produce resources, but is maintaining the site, infrastructure, and equipment. Because the site is not producing resources, the operator does not pay royalties to the state but it must pay rent and annual return fees. The risk of environmental harm remains.

The original report also noted the lack of complete records kept by both departments on sites in care and maintenance. This resulted in limited oversight and inappropriate monitoring of these sites. Record keeping has improved but there is still no central record of all sites in care and maintenance. In future, the Department of Environment and Heritage Protection will record information on sites in care and maintenance in the Compliance and Risk Evaluation tool.

Measuring and reporting performance

The Department of Environment and Heritage Protection has improved its performance measurement and reporting on its activities in achieving environmental outcomes.

The Department of Environment and Heritage Protection's external reporting through its service delivery statement now focuses appropriately on outcome performance measures, rather than output measures. These measures report on whether the department is successful in improving industry compliance or protecting the environment, and the reduction in overall risk to the environment.

Regulatory fees and costs

This section covers recommendations 2 and 5.

By implementing the two recommendations, the Department of Environment and Heritage Protection has increased both the recovery of overdue annual return fees, and legal and investigation costs.

Overdue annual fees

As a result of improvements to the department's debt management program, overdue annual fees have almost halved since our original audit. Overdue fees reduced from \$1 624 309 in 2013–14, to \$848 417 in 2015–16. The department has achieved this by using various initiatives, such as frequent and more direct reminders, to encourage on-time payment.

The amount of fees written off has also reduced by 17.4 per cent, from \$513 933 in 2013–14 to \$424 450 in 2015–16. The amount written off in 2015–16 includes a clean-up of historical debt. Given the department's changes to how it manages debt, we would expect the level of debts written off will continue to decrease.

In addition, the department has set a target to ensure that it receives 80 per cent of the annual fees on time. The percentage of annual return fees paid on time increased from 69 per cent in 2013–14 to 79 per cent in 2015–16.

Recovery of legal and investigation costs

In our original audit, we found that the Department of Environment and Heritage Protection knew its external costs, such as the cost of engaging lawyers, but did not capture internal costs such as the cost of investigation.

The department now captures and records both its internal and external costs of investigating and prosecuting all non-compliance cases. Of the 27 prosecution matters finalised in 2016, the department recovered 99.4 per cent of its total legal and investigations costs.

Auditor-General reports to parliament

Reports tabled in 2017–18

Number	Title	Date tabled in Legislative Assembly
1.	Follow-up of Report 15: 2013–14 Environmental regulation of the resources and waste industries	September 2017

Contact the Queensland Audit Office

