



Prepared by the Department of Environment and Science

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# INTRODUCTION

### **Our vision:**

# Our compliance effort protects the health of Queensland's environment and communities.

As Queensland's environmental regulator, the Department of Environment and Science (the department) has an adaptable compliance and enforcement framework designed to achieve the community's expectation that the state's unique ecosystems and heritage places are protected. The framework is based on a number of strategic priorities, which provide a targeted and transparent compliance approach. It ensures that the compliance effort is focused on actively reducing risks to the environment and advising regulated operators about what to expect.

In 2020–2021, the three strategic compliance priorities were: coal seam gas, waste and estimated rehabilitation costs.

Our broader compliance effort continued to manage, monitor and respond to environmental risks despite the ongoing impacts of the COVID-19 pandemic. We continued to work with operators to understand their circumstances, implemented detection measures and escalated our intelligence efforts, which included 138 Remotely Piloted Aircraft System flights. Our adaptable compliance framework enabled us to continue to implement a risk-based regulatory approach that focused on environmental harm and serious non-compliance.

# 2020-2021 HIGHLIGHTS

With the department's compliance workforce geographically located throughout the state, site inspections were able to be undertaken across many different industries and activities. This resulted in a range of enforcement actions including prosecutions for serious offences and penalty infringement notices and warnings for less serious offences.



### Successful prosecutions resulting in convictions and a public benefit order:

A transporter of regulated waste was fined \$87,000 and ordered to pay \$1,500 in legal costs and \$2,065 in investigations costs after being convicted of 140 charges. The charges related to: being a transporter of trackable waste and failing to record and give to the receiver prescribed information about the waste; carrying out an environmentally relevant activity (ERA) without an environmental authority (EA); and wilfully contravening a requirement of an environmental protection order.

**A waste company** was fined \$300,000 for accepting 326,137 extra tonnes of waste over its allowed limit at its landfill in Swanbank and ordered to pay \$2,500 in legal costs and \$1,984.20 in investigation costs. Convictions were recorded.

**The holder of an environmental authority** for chemical manufacturing, chemical storage and waste transfer at an alumina refinery was fined \$500,000.

The charges related to one offence of causing serious environmental harm and one offence of contravening a condition of an environmental authority due to an uncontrolled release of alkaline bauxite slurry resulting in extensive damage to property in a nearby industrial estate.

Of the total fine amount, \$100,000 was ordered to be paid to the department as a public benefit order for the purpose of grant funding for a project aimed at enhancing the environment in the region. The holder of the environmental authority was also ordered to pay \$1,500 in legal costs and \$4,488 in investigation costs.

#### STRATEGIC COMPLIANCE PRIORITY:

# Coal seam gas

#### What we set out to achieve:

- Develop effective response to causative factors for unplanned releases of CSG water.
- Enhance reporting on regulation of the CSG industry.
- Improve community confidence in the management of risk associated with the CSG industry.

#### **Case study**

RESOURCE COMPANY FINED \$60,000 FOR THE UNAUTHORISED RELEASE OF CSG WATER FROM A PUMP STATION.

On 11 June 2020, 1.1 mega litres of CSG water was released from the company's pump station to the surrounding land.

The release was not authorised under the conditions of its EA.

Following an investigation by the department, the company was charged with one offence contrary to section 430(3) of the *Environmental Protection*Act 1994 for contravening a condition of its EA and releasing contaminants to land.

In addition to the \$60,000 fine, the company was ordered to pay \$1,750 in legal costs and \$2,292 in investigation costs.

No conviction was recorded.

The focus on the coal seam gas (CSG) industry in 2020–2021 highlighted the known logistical challenges in regulating CSG activities due to the vast and remote nature of project areas. These challenges increased the importance of having the right information submitted on time by operators.

The 2020–2021 compliance activity identified the continuing need to work on risk assessments, planning and reporting by operators on their CSG activities.

The department has now informed industry about its compliance effort by publishing annual data. The community can be assured that the department is inspecting sites, and, where a non-compliance is identified, that the appropriate enforcement response is undertaken. Enforcement response included the prosecution of a CSG company for unplanned CSG water releases and the issuing of two PINs for failing to comply with EA conditions relating to stimulation risk assessment and failure to submit historical fracture monitoring data (no environmental harm occurred).

New Geographic Information System (GIS) mapping tools, and reporting improvements on high-risk CSG activities, enhanced the department's ability to identify risk and initiate a response. Notifications received from a company undertaking hydraulic fracture were used to determine when further assessment and inspections were required. Assessments considered well location and specific risks including landholder groundwater bores; land tenure/environmental authority details; environmental values and the industry's risk profile. Where a notification of an unplanned CSG water release was received, spatial data informed the risk assessment to determine the appropriate response. This process ensured that the activities of the CSG industry were subject to ongoing compliance focus so that environmental values including impacts to groundwater and land were being closely monitored.

A range of enforcement responses as a result of CSG related non-compliance were undertaken. A need to improve information on new CSG water storage facilities in order to better assess environmental risks was identified and work will continue on this in the 2021–2022 financial year. It was not possible to definitively determine whether community confidence was improved, however, it is noted that there continues to be ongoing community concern over CSG expansion activities.

### **Target industries and activities**

**Industry:** Coal seam gas industries

**Activity:** Storage, management and treatment of coal seam gas water,

re-injection of ground water, management of salt and brine waste,

hydraulic fracture stimulation and air-quality monitoring



Targets	Achievements				
Validation that industry risk assessment process for 90% of wells hydraulically fractured in Queensland meet or exceed regulatory requirements.	More than 90% of we hydraulically fracture Queensland were val 72 wells fractured for notification was rece Department of Resou validated for having it assessment processes	d in idated. All which a ived by the rces were industry risk	<ul> <li>where a PIN had a fracture risk a</li> <li>A PIN was issue for failing to sul fracture monito</li> <li>A GIS tool was capture and risk well notification</li> <li>Inspections of 1 were completed</li> </ul>	I out with the Gas Inspectorate I been issued for ssessment. I to an operator omit historical ring data. I eveloped to c assess fractured	
All high-risk unplanned releases of CSG water are investigated and where appropriate enforcement action and/or remediation is undertaken.	All reported unplanned of CSG were investigated unplanned releases of were inspected. One subject of an ongoing	ated. Five of CSG water of which is the	<ul> <li>Prosecution proceedings commenced against three CSG companies for releases of CSG water during the 2019-2020 financial year.</li> </ul>		
Publish CSG industry specific compliance data on the department's website with links to partner regulatory agencies.	Information relating to CSG compliance activity is published in the report and then will be done annually.		<ul> <li>Enforcement actions published on the department's Public Register.</li> </ul>		
Undertake audits of integrity and management of high-risk salt management systems and brine storage.	Audits of integrity and management of high-risk salt management systems and brine storage were undertaken.		structures/brine dams		
		Achieved	In progress	Not achieved	

17

## Coal seam gas compliance and enforcement

Coal seam gas activities are regulated by the Department of Environment and Science to avoid and/or minimise environmental impacts. CSG compliance and enforcement activities carried out by the department during the 2020–21 financial year are detailed below. Additionally, a map 'Coal seam gas compliance and enforcement activities 2020–21' is also provided which shows the locations of the department's concentrated compliance and enforcement activities related to these CSG activities.

#### Reports and notifications

The department responds to Reports and Notifications of non-compliance from the community and industry, which includes resource activities such as those associated with CSG related Environmental Authorities (EAs).





All reports were received from the Western Downs Regional Council area

26 notifications relate to CSG w ater releases and the remaining relate to various other reporting requirements including fraccing notifications

Reports

23

Notifications 100



The department issued 21 enforcement actions where non-compliance was identified from these reports and notifications

reports and notifications

Further information: Reports from the community include environmental nuisance and significant pollution incidents. Notifications are made by operators under the duty to notify of environmental harm (including serious and material environmental harm) under ss. 320 to 320G of the Environmental Protection Act 1994 and under condition requirements of their EA.

#### Compliance activities

Through appropriate Compliance Activities such as Site Inspections and Desktop Actions, the department monitors the performance of licensed operators, detects and responds to unlicensed and/or non-compliant activities and ensures the environment is being protected.

### 90 compliance activities

Site Inspections

31

**Desktop Actions** 

15 **59** 



The majority of site inspections were conducted within the Western Downs Regional Council area

The majority of desktop actions involved assessment of operator reporting requirements including groundwater monitoring and regulated structure audits



Further information: Site Inspections include targeted, risk-based inspections. Desktop Actions can include any action that does not involve a physical inspection. This may include reviewing reports and submissions, desktop site reviews to assess culpability and environmental impacts and any other review of departmental holdings.

#### **Enforcement**

If the department identifies that a person or company has breached a condition of the relevant EA or failed to comply with an obligation under legislation, the department will take action to bring the person or company back into compliance. The type of Enforcement Action taken by the department will depend on the nature and seriousness of the offence and the most effective means to achieve compliance and minimise any impact to the environment.





Nearly all enforcement actions were issued within the Western Downs Regional Council area



All enforcement actions were issued as a result of impacts to water and land



All infringement notices were issued in response to breaches of EA conditions

21 enforcement actions

14 Warning

3 Infringement Notice

3 Clean-up Notice

Prosecution Commenced

Further Information: The department's Regulatory Strategy and Enforcement Guidelines is available at https://environment.des.qld.gov.au/management/compliance-enforcement

#### **CSG** water releases

To produce CSG, wells are drilled into underground coal seams, bringing water (CSG water) from the seams to the surface. The quality of CSG water varies greatly, however it is generally rich in salts and other minerals. The department's CSG Water Management Policy guides CSG operators in managing CSG water which includes monitoring and notification requirements under their EA.

### 26 CSG water release notifications



All CSG water releases were responded to by the department through compliance activities

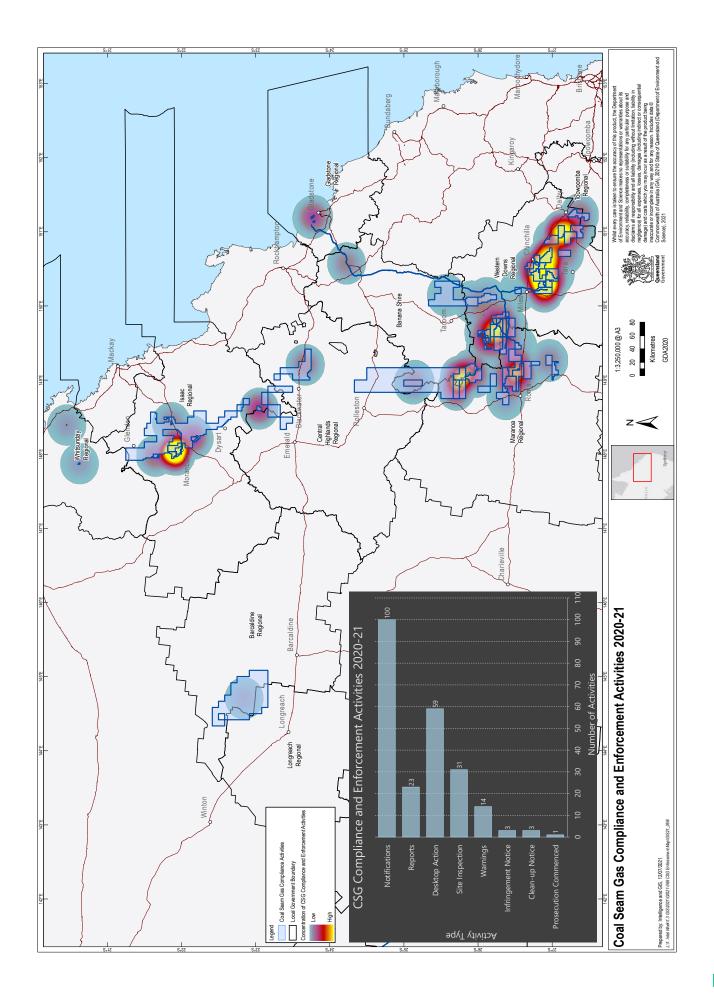


CSG water releases were predominately reported from within the Western Downs Regional Council area



In response to these notifications, 5 warnings were issued and a prosecution was commenced





#### STRATEGIC COMPLIANCE PRIORITY:

## Waste

#### What we set out to achieve:

- Waste operators clearly understand expectations of performance and are guided on how to comply.
- Poor performing and unlicensed waste operators are held to account.
- Illegal dumping is deterred through investigation and enforcement in collaboration with local governments under the Local Government Illegal Dumping Partnerships Program.
- Serious matters involving offences under the *Criminal Code Act 1899* (e.g. fraud) are addressed through referral to the Queensland Police Service.

In 2020–2021, the waste sector accounted for the highest number of unlicensed activities in the state. The department successfully detected and responded to 147 unlicensed waste activities and took 177 enforcement actions against illegal waste operations.

While intelligence data was used to successfully dispatch compliance officers to the correct locations of unlicensed activities, there is still work to be done to ensure a level playing field within the industry and the level of environmental risk is being appropriately managed and monitored. Over the next 12 months, there will be a continued focus on unlicensed waste activities and waste levy evasion as well as strengthening the successful partnership with local government to combat litter and illegal dumping offences.

The compliance waste program identified and responded to waste offences that undermined the Waste Management and Resource Recovery Strategy. The successful identification of unlicensed waste activities and strong enforcement across the state disrupted unlawful operators and created a disincentive for non-compliance. The use of Penalty Infringement Notices and direction notices requiring unlicensed operations to immediately cease activities helped create a level playing field for the waste sector.

The department continued to foster effective communications with waste industry organisations in order to promote good environmental outcomes and compliance. This included the release of the Guideline on Prevention of Fires in waste stockpiles.

Intelligence and technology were enhanced to better identify locations and volumes of waste stockpiles. When combined with waste data submitted by the operators of waste management facilities, those operators who may not have been complying with the law, were identified. It has also been made clear to the largest landfill operators with the greatest levy liabilities, that the department is monitoring their stockpiles and landfill cells and that the department will enforce the law where waste levy evasion is identified.

Partnerships with 27 local governments helped increase the state's capacity to respond to illegal dumping offences and protect the health of Queensland's environment and communities. More than 12 million litres (50,000 wheelie bins) of waste were removed from the environment and more than 800 Penalty Infringement Notices were issued by local government to offenders. The Queensland community can have confidence that illegal dumping is being detected and dealt with appropriately through enforcement actions.

## **Target industries and activities**

**Industry:** Licensed waste management operations

**Activity:** Correct calculation, reporting and payment of the waste levy

**Industry:** Unlicensed waste management operations

**Activity:** Unlawfully undertaking environmentally relevant activities

including transport, stockpiling and disposal of wastes



Targets	Achievements	
The top 70% of total waste levy contributors (landfills) are inspected, including volumetric surveys undertaken.	The top 70% of total waste levy contributors were inspected, including volumetric surveys.	<ul> <li>32 inspections (including remotely piloted aircraft system surveys) were conducted of Queensland's largest waste facilities.</li> </ul>
90% of alleged unlicensed waste operations are inspected within four weeks of coming to the department's attention.	All alleged unlicensed waste operations were inspected within four weeks of coming to the department's attention.	<ul> <li>An Unlicenced Waste Team was established to investigate and take enforcement action against unlicensed waste operations.</li> <li>Inspections of unlicenced waste operations have resulted in 113 enforcement actions, including 64 Direction Notices and 49 Penalty Infringement Notices.</li> </ul>
90% of illegal dumping incidents reported to the department have had investigations commenced or referred to local government within four weeks of receiving the report.	90% of illegal dumping incidents reported to the department have had investigations commenced or referred to local government within four weeks of receiving the report.	• The Litter and Illegal Dumping Compliance Operations team received more than 800 illegal dumping reports. 100% of those were dealt with, or referred to local government, within 4 weeks of being received.
offences under the <i>Criminal Code Act 1899</i> , e.g. fraud, are referred to the Queensland Police Service (QPS).	ninal to the QPS in September 2020. investigation by QPS with assistance provided by the	

Achieved

In progress

Not achieved

# The Local Government Illegal Dumping Partnership Program

The Local Government Illegal Dumping Partnership Program provided funding to Queensland local governments to employ 31 compliance officers to specifically tackle illegal dumping. Training in illegal dumping compliance skills was provided to all 27 participating local governments and support services were provided to an additional 10 non-participant councils. Local government program partners investigated more than 8,000 illegal dumping incidents and issued more than \$1.3 million worth of Penalty Infringement Notices and removed more than 12 million litres (50,000 wheelie bins) of waste from the environment.

### **Highlights 2020-2021**

9,600 illegal dumping incidents reported to council

8,000

incidents litres of dumped investigated by council

860

60 \$1.3 million

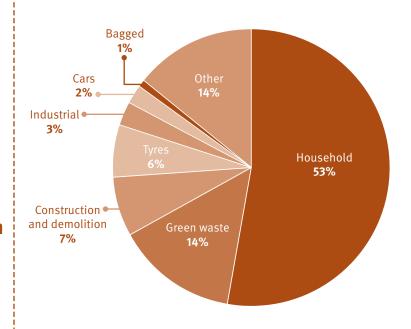
fines issued by council

worth of fines issued by councils

### 12 million

litres of dumped waste removed from the environment (equivalent to 50,000 wheelie bins)

# Illegal dumping type of waste reported





### 27 local governments

are participants in the program and have received funding from the department



### 31 compliance officers

are funded by the department and employed by local governments to conduct illegal dumping investigations



### \$3.6 million

in funding provided by the department to local governments to employ compliance officers for 12 months



### 37 local governments

trained in illegal dumping investigations since April 2020 with more than 150 officers trained

# Spotlight: Remotely piloted aircraft system



Detecting unlicensed activities using RPAS

Staff can avoid hazards using RPAS  $\,$ 

The evolving technology and sensor functionality of remotely piloted aircraft systems (RPAS) play a vital role in compliance activities.

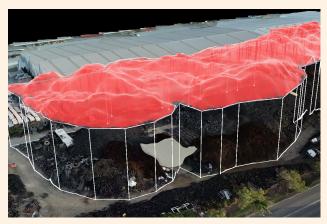
RPAS can detect unlicensed activities that would previously have been resource intensive or difficult to obtain on the gound or using more traditional data collection tools.

RPAS technology enables the collection of information using an aerial platform. It has been successfully used to:

- capture photographic and video evidence for regulatory and compliance purposes
- capture and process spatial imagery as an additional tool and data set to assist in regulatory functions, including wast levy compliance
- enhance staff safety by utilising RPAS to access areas and collect information known to include a variety of hazards and risk to staff.



Identification of illegal waste stockpiles using aerial footage from RPAS



Volumetric surveys of waste stockpiles from RPAS

#### STRATEGIC COMPLIANCE PRIORITY:

# Estimated rehabilitation costs

#### What we set out to achieve:

 Development and implementation of a risk-based compliance monitoring and enforcement response related to the estimated rehabilitation In collaboration with the Financial Provisioning Scheme Manager (Scheme Manager), the department implemented a strategy to identify and respond to unpaid estimated rehabilitation costs (ERC).

Compliance effort is targeted at outstanding ERC that poses the greatest financial risk to the state. This is determined by factors including the amount of outstanding ERC and other circumstances including if there is no ERC decision in effect. The department will continue to apply its compliance and recovery processes to unpaid ERC.

It is a condition of an environmental authority (EA) for resource activities (under section 297 of the *Environmental Protection Act 1994*) that the EA holder must not carry out, or allow the carrying out of, an activity unless an ERC decision is in effect, they have paid scheme assurance and complied with the requirements under the *Mineral and Energy Resources* (*Financial Provisioning*) *Act 2018*.

Over the past 12 months, the department worked with the Scheme Manager to develop a risk-based strategy for identifying and managing those EA holders who aren't meeting their ERC obligations. Taking compliance action against those who don't pay their ERC reduces the financial risk to the state should the EA holder not comply with their environmental obligations.

Where the EA holder has not complied with their ERC obligations, the department took a risk-based, tailored approach to recover outstanding ERC. This compliance effort reduced the reportable amount of outstanding ERC that was due up to 30 June 2020 by 76%.

### **Target industries and activities**

**Industry:** Mining and resource companies

**Activity:** Compliance with the legislated requirements for ERC.



Targets	Achievements			
Reduction in number of oustanding sureties that were overdue as at 30 June 2020.	There has been a redunumber of oustanding were overdue as of 30	sureties that	amount of outst was due up to 3  The department with Scheme Ma the number of of sureties through communication with oustanding continued regul  The department lodgement of or excess of:  — \$1,000,000 i site-specific of Queensland. been outstan — \$887,000 in	to the reportable tanding ERC that to June 2020. It worked closely anager to reduce outstanding hongoing with EA holders granteres and latory pressure. It secured testanding ERC in a relation to a mine in Far North The ERC had adding since 2014.
Develop and implement an ERC recovery strategy to minimise the state's risk from an EA holder's failure to comply with environmental management and rehabilitation obligations.	ERC recovery strategy the state's risk from an failure to comply with management and reha	n EA holder's environmental	<ul> <li>An ERC compliance strategy for dealing with outstanding sureties was developed and implemented. The strategy is based on the amount of outstanding surety and risk of failure to comply with environmental management and rehabilitation requirements.</li> <li>The department will continue to work with the Scheme Manager to implement the ERC compliance strategy.</li> </ul>	
		Achieved	In progress	Not achieved

15

# Compliance actions



**Reef regulations** commenced in December 2019, and are being rolled out over three years in different regions based on water quality priorities. Voluntary compliance is encouraged through an educative compliance model and continues to produce positive results.

Inspections indicate that primary producers are voluntarily making positive changes to their farm practices after the initial site visit.

A formal compliance strategy is now being implemented.



**Odour Abatement Taskforce** continued to investigate and respond to community concerns about odours, dust and other environmental nuisance around Swanbank.

Inspections resulted in a number of compliance actions, including environmental protection orders relating to stockpile management at a waste disposal facility and contaminant release from a compost facility.



**Pre-wet season inspections** aim to ensure that mines are well prepared prior to each wet season.

A primary risk screen was conducted, which focussed on water inventories and water management practices across all mine sites.

A risk triage was then undertaken to identify the 64 sites to be inspected during 2020-2021.

### Compliance highlights

683

1641

total enforcement

total inspections

total infringement notices

total direction notices

450

waste inspections infringement notices

direction notices

inspections

pre-wet season infringement notices

warnings

illegal operators infringement notices

direction notices



The department continues to respond to notifications about **HERITAGE**-related alleged offences under the Planning Act 2016 including carrying out unlawful development on a heritage place.



Regulation of coastal activities, such as dredging, that have the potential to cause harm to the coastal environment continued to be monitored.

Inspections are conducted in response to reports received through the department's pollution hotline.