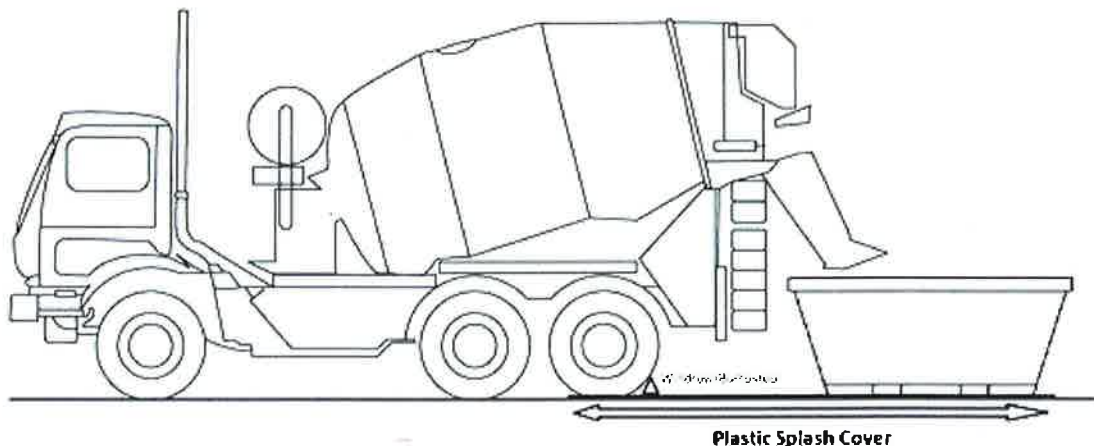


**MODIFICATION REQUEST:
Newcastle Gas Storage Facility
Tomago, NSW
(MP 09_0150 Mod 1) – Concrete Washout
Facilities**

To modify a statement in the Revised Statement of Commitment in section 7.1.1 of the Preferred Project Report to allow the washing out of concrete mixers and pump trucks on site, with appropriate controls.



Director-General's
Environmental Assessment Report
Section 75W of the
Environmental Planning and Assessment Act 1979

January 2013

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EXECUTIVE SUMMARY

On 10 May 2012, the Planning Assessment Commission, under the delegation of the Minister for Planning and Infrastructure, approved the Newcastle Gas Storage Facility. The project involved the construction of a gas storage plant at Tomago, 13 kilometres north west of Newcastle, that would process and store 30,000 tonnes of liquefied natural gas (LNG) at a temperature of minus 162° Celsius. During times of low demand, natural gas would be drawn from the NSW gas pipeline network at Hexham and be delivered via a high pressure gas pipeline to the gas plant where it would be converted to a compact liquefied form for storage. During times of peak demand, the process would reverse and LNG would be regasified and reinjected back into the network.

Construction works have commenced at the Tomago site in the Port Stephens local government area.

The proponent, AGL, has lodged a modification request to amend a construction commitment listed in Section 7 of the Preferred Project Report (PPR) regarding Revised Statement of Commitments. Section 7.1.1 includes the following commitment: "Ensure concrete mixers and pump trucks are not washed on-site".

The proponent has requested to modify the commitment to allow concrete mixers and pump trucks to utilise new concrete washout skips on site during construction.

The proponent has reasoned that it is necessary to prevent the uncontrolled discharge of remnant concrete or slurry from the truck while travelling from the site. Residual waste and concrete in the chute and agitator that remains following a concrete pour would be likely to fall from the truck during transit. This poses a contamination risk to groundwater, poses safety risks to motorists, and places liability on drivers for the illegal disposal of waste.

Hunter Water Corporation (HWC) and the NSW Office of Water (NOW) were consulted regarding the proposed modification and consider the revised measures appropriate. The Department also consulted with Port Stephens Council and the Environment Protection Authority (EPA). No agencies objected to the Proposal.

The Department has considered the Proponent's request and agency comments and considers the proposed modification to be beneficial as it would reduce the risk of potential environmental pollution from uncontrolled spillage of residual concrete whilst concrete trucks are in transit. Therefore approval is recommended.

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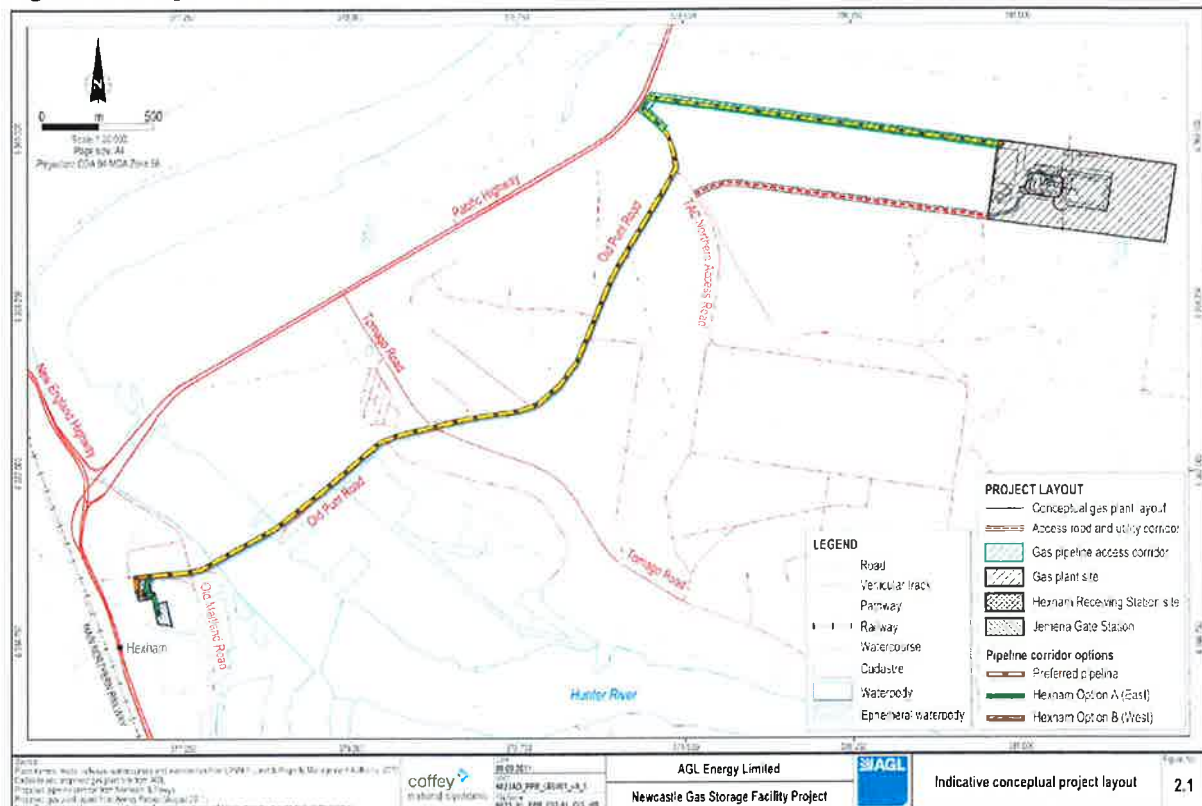
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1. BACKGROUND

Project approval for the Newcastle Gas Storage Facility was granted by the Planning Assessment Commission (PAC), under delegation of the Minister for Planning and Infrastructure, on 10 May 2012. The approval was for the construction of a gas storage facility at Tomago, in the Newcastle local government area, a gas receiving station at Hexham, in the Newcastle local government area, and a high-pressure gas pipeline connecting the two sites.

The project location is shown in **Figure 1**:

Figure 1: Project location



The project will have the capacity to draw natural gas from the NSW gas pipeline network at Hexham during times of low demand, process and store the gas into a compact liquefied form at -162° Celsius, and regasify and reinject it back into the gas network during peak demand periods.

There are five key components of the project:

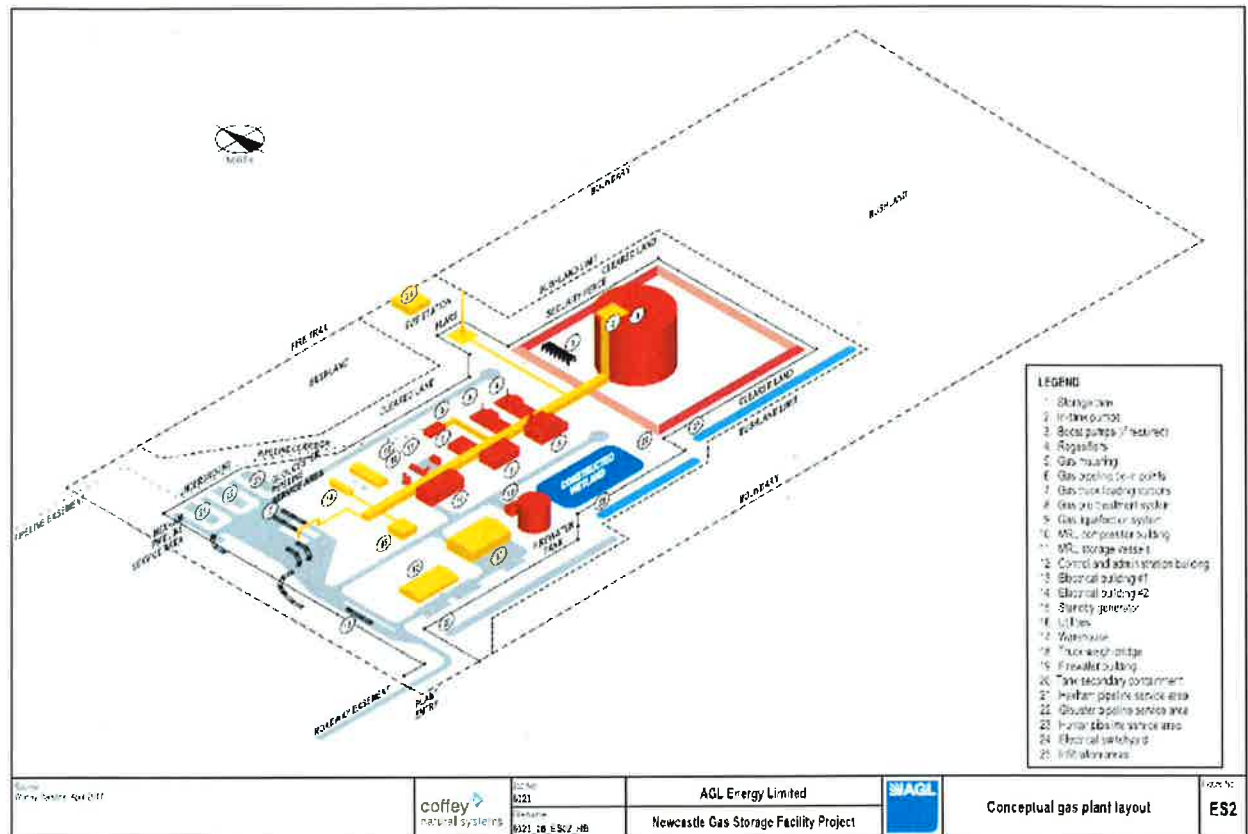
1. a gas storage plant;
2. a 1.4 kilometre vehicle access road to the plant, that will also provide a utility corridor (water and electricity);
3. a 1.7 kilometre secondary emergency access road to also contain the underground gas pipeline corridor along the northern boundary of the site;
4. a 5.1 kilometre high-pressure gas pipeline to connect the gas storage facility to the gas receiving station at Hexham; and
5. the Hexham receiving station and network connection.

The proponent has undertaken pre-construction (land clearing) activities at the Tomago site, comprising points 1 to 3 above.

The gas storage facility at the Tomago site is currently under construction with the Proponent having fulfilled the pre-construction requirements for this part of the project. The construction of the facility is likely to take 24 months and includes establishing large areas of concrete hardstand and other concrete structures.

Refer to **Figure 2** for the approved project layout.

Figure 2: Approved Project Layout



Currently, the project approval includes a commitment within section 7.1.1 of the Preferred Project Report (PPR) to “ensure concrete mixers and pump trucks are not washed on-site.” There is some concern now that compliance with commitment 7.1.1 could have detrimental environmental impacts for the following reasons:

1. When a concrete truck completes its pour, waste concrete and slurry may be contained in the chute and agitator, which is likely to fall from the truck during transit between the site and batch plant. These dropped piles of concrete are considered to be an illegal disposal of waste, could pose a safety risk to motorists, and be a potential contamination risk to groundwater.
2. If the commitment is not modified, and no concrete washout pit is installed on site, it may not be possible for concrete supply companies to deliver concrete to the site.
3. Failure to wash out the trucks on site may also lead to the trucks being damaged when the concrete dries, or may contaminate future loads of concrete.

Consequently, it is proposed that three concrete washout skips (CWS) are to be placed on site to capture liquid and concrete washout waste produced at the end of the concrete pours.

2. PROPOSED MODIFICATION

2.1 Modification Description

On 10 September 2012, the Proponent submitted a request for a modification under section 75W of the EP&A Act. Since the initial application, the proponent has twice revised its modification application and submitted final details to the Department on 27 November 2012 and supplementary information on 13 December 2012 (**Appendix A**).

The modification request seeks to authorise the washing out of concrete mixers and pump trucks on site during construction of the gas storage facility, using three concrete washout skips (CWS) with capacity of 3 cubic metres each and a combined capacity to capture up to 9,000 litres of wastewater. The CWS would be placed in close proximity to the area of the largest pour, and a minimum of 20 metres from storm drains, open ditches or water bodies.

The indicative locations of the CWS are shown in **Figure 3**.

The key aspects of the proposed modification are listed in **Table 1**.

Figure 3: Proposed Modified Layout

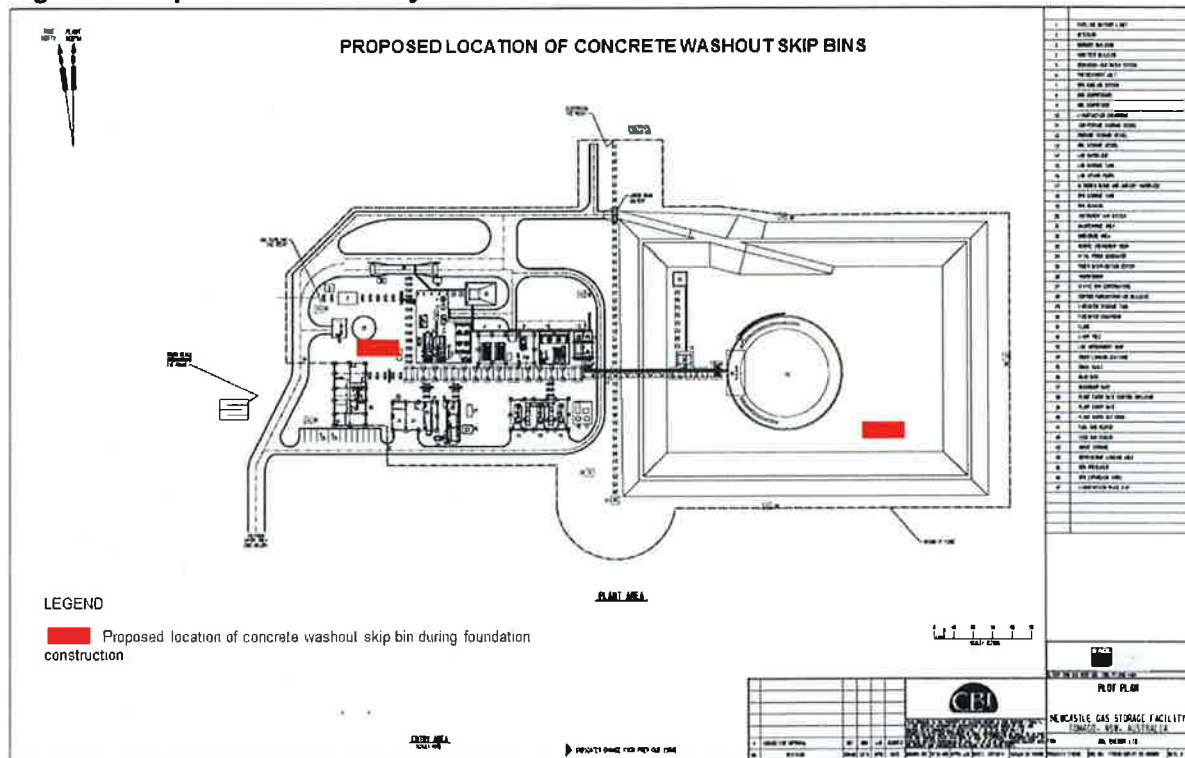
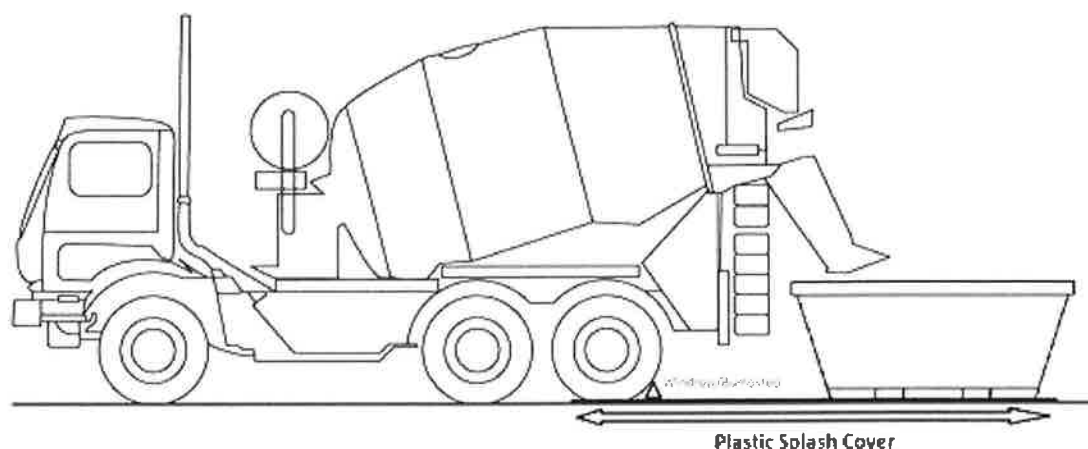


Table 1: Key Proposed Modifications

Aspect	Description
Concrete Washout Skips	<ul style="list-style-type: none"> The CWS would have a combined capacity of 9,000 litres. This capacity meets the minimum of 120% capacity to capture waste water generated during the most intense concrete pours. The use of three skips, side by side, would enable one to be pumped out, while the other two are being used. The skips would be clearly sign-posted, underlain with a plastic splash sheet and have a windrow or bump stop to guide trucks into the position. The skips would be water tight and have a cover to prevent rainwater intrusion. Each skip would be lined with plastic to prevent concrete waste hardening to the side and have a marker to indicate maximum capacity. A description of the concrete washout procedure is in Figure 4. Pump-out trucks would be required to enter the site to remove the wastewater from the skips. During the largest concrete pour (estimated at 450 cubic metres) there would be two such pump-out truck movements per day. However, there would be only three such pours over a six to ten week period. This would reduce to once per day for larger pours (approximately 200 cubic metres). All waste collected in the CWS will be transported to a local batching plant, disposed of at an approved landfill or by a waste concrete recycler. No additional clearing is required to install the CWS.

Figure 4: Proposed Modified Layout



3. STATUTORY CONTEXT

3.1 Modification of the Minister's Approval

In accordance with Clause 3 of Schedule 6A of the *Environmental Planning and Assessment Act, 1979* (EP&A Act), section 75W of the EP&A Act as in force immediately before its repeal on 1 October 2011 and as modified by Schedule 6A, continues to apply to transitional Part 3A projects.

Consequently, this report has been prepared in accordance with the requirements of Part 3A and associated regulations, and the Minister (or his delegate) may approve or disapprove of the carrying out of the project under section 75W of the EP&A Act.

3.2 Delegated Authority

On 28 May 2011, the Minister delegated his powers and functions under section 75W of the EP&A Act to the Planning Assessment Commission where:

- the application is not for major infrastructure development and the proponent is not a public authority (other than a local authority), or
- a statement has been made disclosing a reportable political donation in relation to the project, or
- a statement has been made disclosing a reportable political donation in connection with any previous concept plan or project application.

The project meets the above criteria because the Proponent is a private company and has provided, with its modification application for the subject proposal, a statement indicating it has made a reportable political donation (**Appendix A**). The Planning Assessment Commission can therefore determine the modification request under delegated authority.

4. CONSULTATION AND SUBMISSIONS

4.1 Exhibition

Under Section 75X(2)(f) of the EP&A Act, the Director-General is required to make the modification request publicly available. The modification request was made available on the Department's website, however due to the minor nature of the proposed modification it was not exhibited by any other means. The Department did consult with Port Stephens Council and the EPA.

The Department received 5 submissions from public authorities during the exhibition of the modification request. No submissions from the general public and special interest groups were received.

4.2 Public Authority Submissions

The **Environmental Protection Authority (EPA)** and **Port Stephens Council** were invited to comment on the modification and on the revised modification. The EPA and Port Stephens Council did not raise any objections.

The **NSW Office of Water (NOW)** and the **Hunter Water Corporation (HWC)** were invited by the Proponent to comment on the modification. **NOW** provided comment that having reviewed the concrete washout procedure, it was satisfied that the concrete washout facility could be managed in a way which protects the water quality of the Tomago Sandbeds Aquifer. **HWC** considered that the proposal would adequately protect the Tomago Sandbed Drinking Water Catchment.

The Commonwealth **Department of Sustainability, Environment, Water, Population and Communities** was notified by the Department of the modification as the gas storage was controlled action. No objection was received.

The Department has considered the issues raised in the submissions in its assessment of the proposed modification.

Submissions received are provided at **Appendix B**.

5. ASSESSMENT

The Department considers the key issues for the proposed modification to be water quality and hydrology, waste and traffic.

5.1 Water Quality & Hydrology

The potential contamination of the Tomago Sandbeds Catchment Area and Tomago Sandbeds Aquifer, supplying 40% of Newcastle's drinking water, was identified as a key issue during the assessment of the original project application. The Proponent outlined measures to be applied to ensure that the aquifer would not be impacted by the development in its statement of commitments. These were augmented by stringent conditions of approval developed by the Department in consultation with HWC and the NOW, which were imposed by the PAC.

The Department considers the Proponent has demonstrated that the proposed modification to allow appropriately controlled washing of concrete trucks will better protect groundwater quality and surface water run-off by minimising the potential for concrete residue escaping trucks exiting the site, and infiltrating the groundwater, or being washed into surface water drainage lines. No further conditions are recommended by the Department.

5.2 Waste

The Proponent has proposed a number of waste management controls within a revised 'Waste Management Sub Plan' (WMS), which forms part of the Construction Environmental Management Plan (CEMP).

The WMS has been expanded to include how the CWS should be established, what wastes can be placed within it, the washing out procedures, inspection and maintenance procedures and procedures for the removal of waste concrete from the CWS. The Department is satisfied the Proponent's proposed waste management controls will provide adequate measures for the management of waste during construction of the project. No further conditions are recommended.

5.3 Traffic

The Department raised the issue of the frequency of additional pump-out trucks accessing the site.

The Department is satisfied that the truck movements, incorporating the waste pump-out trucks, remain consistent with the Traffic Management Sub Plan that was approved by the Department in August 2012 (for offsite traffic).

6. CONCLUSION AND RECOMMENDATIONS

Project approval for the Newcastle Gas Storage Facility was granted by the Planning Assessment Commission (PAC), under delegation of the Minister for Planning and Infrastructure, on 10 May 2012. The approval was for the construction of a gas storage facility at Tomago, in the Newcastle local government area, a gas receiving station at Hexham, in the Newcastle local government area, and a high-pressure gas pipeline connecting the two sites.

The modification request seeks to authorise the washing out of concrete mixers and pump trucks on site during construction of the gas storage facility, using three concrete washout skips (CWS) with capacity of 3 cubic metres each and a combined capacity to capture up to 9,000 litres of wastewater. The CWS would be placed in close proximity to the area of the largest pour, and a minimum of 20 metres from storm drains, open ditches or water bodies.

The Department considers the key issues for the proposed modification to be water quality and hydrology, waste and traffic.

The Department is satisfied that the Proponent has addressed the potential impacts of the proposal, and that the activity and use of the CWS will reduce the possibility of any uncontrolled concrete waste being deposited either on or off site. Further, the Department is satisfied that the management procedures for the CWS will ensure the proper disposal of all wastes, which will mitigate potential risks to the environment and will not pose an unacceptable impact to truck movements in the vicinity of the site.

The Department considers that the modification is in the public interest, as it is to prevent the uncontrolled disposal of concrete residue both inside and outside the site and will best protect the drinking water catchment for Newcastle.

Felicity Greenaway
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