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Contact: Craig Lamberton 9995 5593

Jonathon O'Dea MP  
Chair  
Legislative Assembly Public Accounts Committee  
Parliament of New South Wales  
Macquarie Street  
SYDNEY NSW 2000

Dear Mr O'Dea MP

I write in response to your letter of 11 March 2013 seeking the EPA's response to follow-up questions relating to the implementation of the recommendations of the Auditor-General's Report on Transport of Dangerous Goods, tabled on 10 May 2011.

I am pleased to provide answers to your questions in the attachment to this letter.

Should you require any further information on this issue please contact Mr Craig Lamberton, EPA Director Hazardous Incidents and Environmental Health on (02) 9995 5593.

Yours sincerely

A handwritten signature in blue ink, appearing to read 'Barry Buffier'.

**BARRY BUFFIER**  
**Chair and CEO**  
**Environment Protection Authority**

Enclosure

**03 APR 2013**



# Performance Audit Follow Up's- Questions on notice Transport of Dangerous Goods

## NSW EPA

### 1. What action has been taken to improve the availability of information and data on the movement of dangerous goods on road and rail?

As was stated in the initial report on the implementation of the Audit's recommendations, the EPA now collects:

- *Compliance data* through the implementation of the new workflow management system (explained below);
- *Incident Data* through legislative requirements (introduced in 2012) for the timely notification by industry of the release of pollutants (including dangerous goods) to response, regulatory and public health agencies. This information is also entered into the new workflow management system to monitor follow-up action and for analysis.

The EPA continues to liaise with industry to improve the release of (potentially commercially sensitive) information on the movements of dangerous goods in NSW.

### 2. What information/data is routinely shared? Have any gaps been identified and any action been taken to close these gaps?

Routine information sharing occurs through meetings of the Hazmat Incidents Review Group (HIRG). At those meetings, information is tabled on compliance activities undertaken, the levels of compliance found and significant issues found. Information on dangerous goods incidents is also shared and individual incidents are discussed where appropriate to identify problems and improve performance.

Some potential problems were identified in the sharing of information between the EPA and Roads and Maritime Services and as a result, the two agencies are in the process of preparing an MOU to facilitate the gathering and sharing of information.

Information is also shared in other forums such as the Senior Liaison Group which includes senior management from the EPA, WorkCover and NSW Health. This group meets regularly and provides an important forum for sharing regulatory and policy information between the 3 agencies.

### 3. What ongoing consultative mechanisms are in place with transport operators and transport groups?

The EPA participates in forums involving industry representatives to raise awareness of dangerous goods issues and improve compliance. Examples of these include an EPA presentation to the National Bulk Tankers' Association on 6 September 2012 and the EPA presentation on the outcomes of recent dangerous goods compliance campaigns at the upcoming *Hazmat 2013* Conference in Sydney on 2 May.

The EPA has also initiated contact with and continues to develop consultative relationships with major transport companies and companies who have been identified as poor performers in compliance campaigns. This consultation is undertaken with other regulatory action as necessary.

**4. Please explain the new workflow management system. How has it improved the quality of data collected and the management of data?**

For workflow management, the EPA uses the *Compliance Incident Reporting and Management* (CIRAM) system. This system is used to store data on dangerous goods inspections carried out, the parties involved, the breaches identified and the enforcement action taken. The EPA is now able to use CIRAM to assess compliance rates, identify potential systemic problems and highlight repeat offenders.

**5. How does the EPA coordinate and communicate the compliance program process across the regions and relevant agencies?**

The Hazardous Materials and Radiation Section provides the policy and technical expertise for the EPA. It also manages and supports the *Dangerous Goods Regional Reference Group* that provides the following support to regional offices:

- *Educational activities for industry that complement the compliance campaigns;*
- *Media and transport industry group liaison;*
- *Development and standardisation of campaign resources;*
- *Pursuance of recalcitrant companies;*
- *Special campaigns;*
- *Support for regional DG activities and campaigns; and*
- *Some technical advice to regional field officers.*

The *Dangerous Goods Regional Reference Group* comprises dangerous goods specialists from each of the EPA's regional offices. They organise and coordinate compliance inspection programs on major transport routes and address high risk dangerous goods activities within their regional areas.

**6. How does the EPA communicate with industry associations to keep them in touch of what is being done by transport operators and transport groups to self-regulate?**

As stated in question 3, the EPA participates in industry conferences and workshops and also actively cultivates consultation with major companies and poor performers.

Another example of the EPA fostering communication with industry is the initiative being implemented at Port Botany. The Port has been identified as a high risk area of concern with regard to dangerous goods transport because of the large quantities of goods being shipped through the port. In response, the EPA has developed relationships with each of the terminal operators, the Sydney Ports Authority, and the Australian Transport Association (NSW) to facilitate a sustained improvement. As the interaction between the port authority, terminals and trucking companies is quite complex, the EPA is working with each of the groups involved individually as well as having some involvement with the Sydney Ports Cargo Facilitation Committee.

**7. What progress has been made on the 2012-2013 compliance programs and how has the new risk assessment methodology been implemented?**

The table on the following pages demonstrates how the process described in the response to question 6 has been implemented using 2012 activities as an example.

## 2012-2013 COMPLIANCE CAMPAIGN PROGRAM (TO DATE)

### Priority 1 – Port Botany

Risk Factor	Risk Assessment
Substance involved	A wide range of dangerous goods are imported through Port Botany, including petrol. Large quantities of dangerous goods are handled at and transported from Port Botany.
Activity being undertaken	Dangerous goods are unloaded from ships at Port Botany onto road and rail vehicles which are then transported from the site. In addition to the general risks associated with loading and transport, there is a risk that imported goods will not be correctly packaged and labelled.
Performance history of the person or business undertaking the activity	A number of businesses transport dangerous goods from Port Botany. There is currently insufficient data available to assess the overall performance of these businesses, but it is reasonable to expect that they include good and poor performers. Discussions with industry indicate there may be some poor performers operating out of Port Botany.
Environmental sensitivity of the location where the activity is being undertaken	Port Botany adjoins the south eastern suburbs of Sydney and Sydney Airport. Dangerous goods are transported by road and rail from Port Botany through heavily populated areas of Sydney. Major transport routes to the north and west of Port Botany include prohibited routes (tunnels – see priority 2).

Campaign	Description	Other Priority Risks Addressed	Date(S)	Lead Region/ Section	Resources	Other Agencies Involved
<u>Roadside</u> General compliance inspections	Joint inspection with ITSR targeting all vehicles carrying dangerous goods.	Priority 6	24/01/2012 (1 day, single shift)	EPA-Hazardous Materials, Chemicals and Radiation (HMCR)	1 EPA Officer (HMCR)	ITSR.
<u>Transport Hub</u> Port Botany Rail yards Joint inspections with WorkCover and ITSR	Significant quantities of dangerous goods arrive in NSW via Sydney Ports and transferred to the rail network for distribution - includes large quantities of ammonium nitrate (security sensitive material)	Priority 6	28/03/2012	ITSR leading campaign With EPA-HMCR	1 EPA Officer (HMCR)	ITSR WorkCover

### Priority 2 – Prohibited Routes

Risk Factor	Risk Assessment
Substance involved	A wide range of dangerous goods, with bulk transport of flammables such as petrol being of particular concern.
Activity being undertaken	Dangerous goods are not permitted to be transported through tunnels. However, large volumes of dangerous goods are transported between destinations where a tunnel provides the most direct route.
Performance history of the person or business undertaking the activity	The campaign aims to identify any transporters unlawfully transporting dangerous goods through tunnels.
Environmental sensitivity of the location where the activity is being undertaken	Transport of dangerous goods through tunnels is particularly hazardous (the reason for the prohibition) due to the confined space and normally heavy volumes of traffic.

Campaign	Description	Other Priority Risks Addressed	Date(S)	Lead Region/ Section	Resources	Other Agencies Involved
<u>Tunnels</u> M5 Tunnel Joint inspections with RMS	Experience overseas shows that accidents involving dangerous goods in road tunnels can lead to catastrophic consequences.	Priority 1 Priority 4 Priority 6	Follow-on from campaign in October-November 2011, undertaking inspections in response to notifications by RMS when they catch potential DG vehicles	RMS lead with EPA-HMCR	1 EPA Officer (HMCR)	RMS

### Priority 3 – Driver Training and Licensing

Risk Factor	Risk Assessment
Substance involved	Training is relevant to all dangerous goods
Activity being undertaken	The safe transport of dangerous goods depends heavily on the skills and knowledge of the driver. The dangerous goods driver training program is integral to providing drivers with the knowledge needed to safely transport dangerous. The integrity of the driver licensing scheme is critical to ensuring only properly trained drivers transport dangerous goods
Performance history of the person or business undertaking the activity	The campaign aims to identify any corrupt activity in the driver training program. While no cases of corruption have been identified in driver training, discussions with industry indicate that some trainers may be taking short cuts. The Dangerous Goods Audit identified driver training and licensing as a possible area of corruption.
Environmental sensitivity of the location where the activity is being undertaken	Training is relevant to all areas dangerous goods are transported

Campaign	Description	Other Priority Risks Addressed	Date(S)	Lead Region/ Section	Resources	Other Agencies Involved
RTO compliance checks	Desktop audits of RTOs to check compliance with driver training course requirements.		February – April 2012	HIEH - HMCR	1 EPA officer	

Priority 4 – Petrol Tankers

Risk Assessment	
<b>Risk Factor</b>	Petrol constitutes around 75% of all dangerous goods transported. It has high volatility and flammability.
Substance involved	Petrol is usually transported in bulk which, together with its volatility and flammability, means that it poses a high risk of fire or explosion during transport.
Activity being undertaken	There is currently insufficient data available to assess the overall performance of businesses transporting petrol. However, given the dominant position of petrol in the dangerous goods market, it is reasonable to expect that there will be both good and poor performers. The assumption that, because of the specialised nature and high value of petrol tankers, this sector of the dangerous goods market should be amongst the better performing, will be tested by this campaign
Performance history of the person or business undertaking the activity	Petrol is transported throughout the state. Petrol tanker-specific campaigns will be in heavily populated areas but regional roadside campaigns will also check where the activity is being undertaken

Campaign	Description	Other Priority Risks Addressed	Date(S)	Lead Region/ Section	Resources	Other Agencies Involved
<u>Roadside</u> Joint EPA+RMS DG tankers safety near Port Botany	Major distribution centre for petrol - location chosen based on RMS concerns about roadworthiness of vehicles using this route.	Priority 1 Priority 6	19-21/03/2012 (3 day, 3 shift, 24 hour operation)	HIEH - HMCR	3 EPA officers (2 HMCR + 1 Albury)	RMS

Priority 5 – Packaged Dangerous Goods (focus on line haul)

Risk Assessment	
<b>Risk Factor</b>	A wide range of substances with varying types and levels of risk. A particular risk for this sector relates to incompatible substances being co-located, creating a risk of hazardous chemical reactions (e.g. heat and/or gas emissions)
Substance involved	Loading and transport. The risk associated with loading includes incorrect stowage, including incompatible dangerous goods being co-located (i.e. insufficient separation distance). Line haul often involves packaged dangerous goods being picked up from several consignors prior to long distance transport, placing added complexity on achieving correct stowage and documentation.
Activity being undertaken	Previous dangerous goods campaigns have identified packaged dangerous goods transport as an area of poor compliance.
Performance history of the person or business undertaking the activity	Packaged dangerous goods are transported in urban and regional areas. Loading and unloading may be in urban areas or at distribution points on the fringe of
Environmental sensitivity of the location where the activity is being undertaken	

Campaign	Description	Other Priority Risks Addressed	Date(S)	Lead Region/ Section	Resources	Other Agencies Involved
<u>Roadside</u> Daroobalgie (Newell Highway)	Major interstate line haul route (where poor performance previously identified)	Priority 4 Priority 6	9-11/10/2012 (3 day, 3 shift)	South - Bathurst	6 EPA officers (2 Bathurst + 1 Albury + 4 HMCR)	RMS

<u>Industry awareness Liaison</u>	Attend trucking industry events and meetings and educate industry about requirements, common problems and expectations	Priority 3 Priority 4	06/09/2012 (NBTA) 02/05/2013 (Hazmat 2013)	HIEH – HMCR	1 EPA Officer	
<u>Industry awareness Promotion within trucking industry media and publications</u>	Approach industry associations to include articles in publications on requirements, problems and expectations	Priority 3 Priority 4	June –Dec TBC	HIEH - HMCR	1 EPA Officer	

Priority 6 – Major Transport Routes

Risk Factor	Risk Assessment
Substance involved	A wide range of dangerous goods are transported along major transport routes
Activity being undertaken	Large volumes of dangerous goods being transported, often in heavy traffic
Performance history of the person or business undertaking the activity	Campaigns to date suggest that the compliance performance of transporters along major transport routes is typical of that of the industry as a whole.
Environmental sensitivity of the location where the activity is being undertaken	Campaigns will focus on major transport routes, including routes used to avoid vehicle checking stations.

Campaign	Description	Other Priority Risks Addressed	Date(S)	Lead Region/ Section	Resources	Other Agencies Involved
<u>Roadside Mt White (F3)</u>	An extremely busy route with poor accident record.	Priority 4 Priority 5	17/07/2012	North - Newcastle	2 DG officers (1 Newcastle + 1 Armidale)	RMS
<u>Roadside 12 mile (Pacific Highway)</u>	Major route for both dangerous goods and passenger vehicles.	Priority 4 Priority 5	07/11/2012	North - Newcastle	2 DG officers (1 Newcastle + 1 other)	RMS
<u>Roadside Murrangaroo (Gt Western Hwy)</u>	Major dangerous goods route for western NSW.	Priority 4 Priority 5	12-14/12/2012	Police lead with North – Armidale	2 DG Officers (2 Armidale)	Police



**8. How are risk assessments being used to guide the 2012-13 inspection/compliance program, training awareness program and communications strategy with the key agencies and industry groups?**

The EPA is implementing a risk assessment methodology for its environment protection licences and this methodology has been adapted for the development of the dangerous goods compliance program. The methodology draws on the UK's OPRA risk assessment process. In adapting these to identify high risk areas, the underlying considerations of substance involved, activity being undertaken, performance history and environmental sensitivity of the location assesses risk against the following criteria:

- *Substance involved* – Dangerous goods are, by definition, substances that pose risks during transport and storage. In broad terms, the nature of the risk associated dangerous goods is specified by its dangerous goods code (e.g. class 6.1 is toxic substances). Within a particular class, the level of risk can vary (e.g. some class 6.1 dangerous goods are more toxic than others).
- *Activity being undertaken* – Dangerous goods transport involves loading, transport and unloading and each stage has inherent risks associated with it. Loading and unloading can be undertaken at the point of manufacture or import, major or minor distribution points and the final delivery location.
- *Performance history of the person or business undertaking the activity* – Dangerous goods transport is undertaken by businesses ranging from multinational corporations to individual truck owners. The parties involved in dangerous goods transport include the consignor, prime contactor, driver and vehicle owner. The performance histories of all of the parties involved impact of the level of risk. For example, a consignor with a poor performance history may pose a risk by incorrectly identifying the substance to be transported or not identifying the substance as dangerous goods at all.
- *Environmental sensitivity of the location where the activity is being undertaken.* In the context of dangerous goods transport, the risk relates to both human health and safety and the natural environment and so both are considered as part of "environmental sensitivity." Dangerous goods are transported through heavily populated urban areas and rural areas, including food growing areas and national parks. The transport of dangerous goods through particularly "sensitive" (i.e. high risk) areas, such as tunnels, is prohibited.

**9. What involvement does the EPA have in maintaining awareness about the safe transport of dangerous goods?**

See responses to questions 3, 6, and 7.

**10. Has the Memorandum of Understanding (MOU) with Australian Skills Quality Authority (ASQA) been finalised? If so, what fraud and corruptions measures have been incorporated in the MOU?**

The Memorandum of Understanding (MoU) between the Australian Skills Quality Authority (ASQA) and the EPA was finalised and signed on 26 November 2012. This MoU provides a platform for engagement between the EPA and ASQA in the registration of new Registered Training Organisations (RTO's) or existing RTO's wishing to have the current dangerous

goods driver training course added to their scope. Previously the EPA was heavily involved in reviewing trainers and training documents, however ASQA's role as the National Training Regulator provides for a more rigorous and structured assessment process, with the EPA available to provide technical advice.

ASQA utilises a risk management approach in their assessment of RTO's. Dependant upon the risk rating given, audits may be scheduled at three stages: at the initial registration stage; the addition of a new course to scope; or if complaints received warrant further investigation. The MoU provides that at any of these stages, ASQA will invite the EPA to attend an audit and/ or provide expert technical advice. The MoU enables better communication between parties to assist in identifying any potential poor performance of training providers.

As such, fraud and corruption control is achieved through ASQA's in-built risk assessment methodology to screen and determine suitability of RTO's. The open communication between EPA and ASQA will allow for joint audits and inspections, and the sharing of information on RTO performance and technical dangerous goods advice.

**11. What was included in the \$1.6 million funding submission to enable Roads and Maritime Services to commence issuing licenses, and the reason for the Treasury rejection of the submission?**

In the submission to Treasury to enable Roads and Maritime Services (RMS) to commence issuing dangerous goods driver licences, it was proposed that EPA continue to assess licence applications and maintain a register of licensees in the Government Licensing System (GLS). It was proposed that data be exchanged between GLS and the RMS driver licensing database ('DRIVES') and that licences, renewals and reminder notices would be issued by RMS. The RMS issued licence would incorporate all the fraud control technology of vehicle driver licences, unlike the current laminated licences issued by EPA.

Several options were considered, including separate or combined vehicle driver and dangerous goods driver licence cards, with all options falling within \$50,000 of each other. The option providing the highest level of customer service and security, a single licence card covering both vehicle driver and dangerous goods driver licences was selected and proposed. This option eliminated the risk of drivers fraudulently using a separate dangerous goods driver licence card if their vehicle driver licence has been suspended or revoked.

The Treasury submission for funding from the ICT Reinvestment Pool successfully passed the screening stage. However after the second detailed application was submitted, the proposal was rejected by Treasury. The main reason given for the rejection was that the business case did not include cash savings, therefore resulting in a negative Net Present Value. Instead, the proposal included licence fees (which are funding source) and potential economic savings, both of which are not regarded as cash savings. Overall the proposal would have resulted in social and economic benefits to the community as a whole, but did not provide cash savings to Government.

**12. Has the Hazardous Incidents Review Group been able to collect meaningful data for each performance indicator from relevant agencies and how are these being monitored and reported?**

Meaningful performance indicators were developed and agreed on through the Hazmat Incidents Review Group and were set out in the EPA's previous submission. The Group is due to meet in the next 3 months and discussions on how these should be monitored and reported will take place at that meeting. However, as stated above, the introduction of the EPA's new workflow management system will assist with this task by better identifying compliance issues and potential dangerous goods incidents.

