

Freedom of Information Document Schedule for FOI: File: 2011/17811

Name: Mr [redacted]

Establishment and operations of Energy Services Environmental (ESI), a
Re: company which provided dechlorination and recycling services from a
 site on Dacre Street in Mitchell.

Document Number	Page Number	Description of Document	Date of Document	Status: Full Release, Partial or Exempt	Reason for Exemption: Section 37 (1)(a) Documents affecting enforcement of the law and protection of public safety Section 41(1) Documents relating to personal privacy. Section 43 Documents relating to business affairs	Details
1	1-8	Use of Emergency Alert during the Mitchell Hazardous Material Fire	27/09/2011	Full Release		
2	9-10	Answer to Question on Notice - List of people that the ESA consulted in regard to the management of the Mitchell Fire	6/10/2011	Full Release		
3	11-19	Mitchell - chemical fire - Statement by Minister 20 September 2011	undated	Full Release		
4	20-24	Annual Report Hearing Brief - ACT Fire Brigade - Mitchell Fire	31/10/2011	Partial Release	Section 43	Specific business details
Total Documents						
4						

Full = 3
 Partial 43 = 1

JUSTICE AND COMMUNITY SAFETY

ANNUAL REPORT HEARING BRIEF

Minister: Minister for Police and Emergency Services
 Correct and accurate as at: 31 October 2011

ISSUE: ACT Fire Brigade – Mitchell Fire

Context

At 11:11pm on 15 September 2011, the ACT Fire Brigade received a request to attend a large fire at Energy Services Invironmental at Dacre Street in Mitchell.

Talking Points

Incident Details

- At 11:11pm on 15 September 2011 the ACT Fire Brigade (ACTFB) responded to a call at Energy Services Invironmental at Dacre Street in Mitchell. A copy of your Ministerial Statement to the Assembly tabled on 20 September 2011 can be found at ([Attachment A](#)).
- Energy Services Invironmental is a recycling plant for transformer oil. The business operator of the facility advised the ACT Fire Brigade that significant quantities of transformer oil and solid sodium were stored on site. I understand there were some hundreds of thousands of litres involved, but this will be confirmed through investigation processes.
- The fire escalated quickly and a 300 metre exclusion zone was established while the ACTFB worked with the business operator to identify potential hazardous materials on site. The 300 metre exclusion zone was established based on the intensity of the fire and the number of explosions at the site. Houses located across the road from Energy Services Invironmental were located outside of the 300 metre exclusion zone and were therefore not evacuated at this time.
- The ACT Fire Brigade conducted atmospheric monitoring throughout the incident. The by-product of the substance being burned – Polychlorinated Biphenyls (PCB), formed a smoke plume that potentially contained Phosgene. Phosgene is known to cause irritation to skin and eyes, sore throat, nausea, headaches and dizziness, vomiting, chest pain and difficulty in breathing. Based on results from the atmospheric monitoring, the ACT Fire Brigade believed the risk to the community was low but continued to take all precautions throughout the incident.
- At approximately 1:20am on Friday 16 September 2011 an Emergency Control Centre (ECC) was activated at the ESA Headquarters at Fairbairn to facilitate a Whole of Government response to the fire. The following Government agencies participated in the ECC:
 - ACT ESA – including: ACT Fire Brigade, ACT Ambulance Service, ACT State Emergency Service, ESA Risk and Planning and ESA Media and Community Education;
 - ACT Policing;
 - Security and Emergency Management Branch;
 - TAMS Directorate – including Roads, Action Buses and ACT Government Veterinarian;
 - ACT Health;

- Environment Protection Authority;
 - Community Services (Recovery);
 - Education and Training Directorate;
 - NSW Fire and Rescue; and
 - Aviation Rescue and Firefighting Services.
- At approximately 3:45am on Friday 16 September 2011, the Public Information Coordination Centre (PICC) was activated. ESA Media and Community Education worked with local and national media to keep the Canberra Community informed and updated regarding the incident and any potential health risks to the public.
 - A chronology of operational response to the incident is provided below.

Date	Time	Action
15 Sept 2011	11:11pm	Initial request for assistance to attend a large fire at Energy Services Invironmental Dacre Street Mitchell
	11:21pm	First ACT Fire Brigade pumper arrives on scene
	11:26pm	Hazardous chemicals identified on site
	11:45pm	A high level of incident command implemented on site
	11:51pm	Owner of Energy Services Invironmental arrives on scene
	11:54pm	ESA Risk and Planning requested to attend site
16 Sept 2011	12:22am	Environment Protection Authority contacted and advised they will attend
	12:24am	ACTFB crews started to retreat due to intensity of fire and explosions
	01:15am	ACT Fire Brigade ordered the evacuation of the suburb of Mitchell including a number of campers and livestock at Exhibition Park
	01:20am	ECC activated at ESA Headquarters at Fairbairn.
	02:02am	Change of strategy in fighting fire due to explosions
	02:23am	Fallback to new command
	02:27am	Incident Control transferred to ESA Headquarters at Fairbairn from unified command post on scene.
	02:30 – 03:00am	Approximately 200 calls received at Triple Zero '000' Communications Centre due to explosions
	02:40am	Fire and Rescue NSW support activated
	02:47am	ACTFB request 10km alert area
	02:49am	Evacuation Centre established at Dickson College and a reception area at Canberra Stadium which could be used as an evacuation centre if required.
	06:25am	Briefing – fire not under control – oil has impacted the bund.
	05:25pm	Second strategic attack utilising all ACT resources of foam supply appears to have been successful.
17 Sept 2011	04:00am	Flare up due to re-ignition of flammable liquid. 400 litres of foam applied, fire subdued.
	10:00am	Fire extinguished.

- In total 250 ACT Firefighters have been involved to date in responding to the Mitchell fire with a maximum of 50 firefighters on scene at any one time.

Community Impact

- At approximately 1:15am on Friday 16 September 2011, the ACT Fire Brigade ordered the evacuation of the suburb of Mitchell including a number of campers and livestock at Exhibition Park. All roads leading into and out of Mitchell were closed.

- An evacuation centre was established at Dickson College and a reception area at Canberra Stadium which could be used as an evacuation centre if required.
- The Education and Training Directorate made the decision to close all ACT Public Schools located north of Lake Burley Griffin on Friday 16 September 2011 due to the potential risk of exposure to toxins from the smoke plume and the disruption to ACTION Bus services.
- Action Bus Services were cancelled from the northern suburbs of Canberra in the morning of Friday 16 September 2011 and reinstated in the afternoon of Friday 16 September 2011. Bus services into and out of the Mitchell were progressively reinstated once the exclusion zones were reduced.
- Roads into and out of Mitchell remained closed throughout the weekend based on advice from the Environment Protection Authority and were progressively reopened on Sunday as the exclusion zones were reduced in Mitchell.
- In emergency situations the safety of the community must be the paramount consideration. I would like to thank all personnel and volunteers who worked tirelessly to contain the fire and ensure there was no risk to life or surrounding property.

Usage of Emergency Alert

- During the hazardous material fire at Mitchell, two Emergency Alert campaigns were run. This was the first operational use of the system in the ACT. The commencement of messaging was at 0138 and 0319 on the morning of 16 September 2011 for the first and second campaign respectively.
- A detailed analysis of the use of the system has been undertaken following this operational activation. A copy of a publically released document titled "Use of Emergency Alert during the Mitchell Hazardous Material Fire 16 September 2011" can be found at ([Attachment B](#)).
- There has been some criticism levelled at the ACT Government regarding the ambiguity of the messages and spelling errors in both messages issued via SMS.
- The Emergency Alert System issues warnings via voice recording and SMS, based on predefined templates for particular emergencies. The template of the voice message requires the originator to submit words in writing spelt phonetically to ensure that words will be pronounced correctly when the system automatically converts text to voice. The voice message was prepared first. The phonetic spelling of the voice message was then inadvertently copied into the text messages when they were issued.
- Analysis of both campaigns also identified issues relating to the number of fixed telephone lines and mobiles in the target area that were not dialled and did not receive the warning messages.
- This was particularly significant on the second "shelter in place" warning, with approximately 80% of fixed landline telephones in the target area not dialled before the campaign expired.
- In preparing the campaign, there was an expectation that voice mail and SMS messages would be issued to the target area within 30 minutes due to the nature and urgency of the incident. The system captured areas and accepted the nominated campaign time however analysis of the campaigns identified that a significant number of phone messages and SMS messages were not delivered as the time specified for the system proved to be too short to dial all the numbers in the target area.
- The wording and issue of any future alerts using the Emergency Alert System will be critically examined as part of the ACT Fire Brigade After Action Review for this incident. Pending the outcomes of the review the ESA will undertake the following measures in relation to the future use of the system:

- the provision of additional training on the use of the Emergency Alert system to the staff of the ESA;
 - review of the internal procedures relating to the operation of the system, including quality assurance and authorisation processes;
 - recognition that in future campaigns, the use of multiple and smaller campaigns may be more appropriate where there are a large number of voice and text messages required to be delivered.
- The Emergency Services Commissioner will also provide written feedback to the systems managers about the ACT's experience of this operational activation of the system, including suggesting potential improvements in the operator's interface, such as the provision of a "Red Flag" warning for circumstances where the size of the campaign exceeds the time nominated for delivery of the message.
 - The ACT will also raise issues associated with the ACT's operational use of the system in appropriate emergency management fora (including the National Emergency Management Committee and the Standing Council on Police and Emergency Management) at the next convenient opportunity.
 - Phase Two of Emergency Alert is not yet operational, but aims to provide a location-based mobile telephone emergency warning capability with the ability to provide messages to all mobile phones in a defined area, not just those with a billing address in the area, which is the existing operational capability.
 - The Victorian Department of Justice on behalf of all jurisdictions is currently evaluating the location based telephony warning capability proposals formally submitted by telecommunications carriers.
 - Implementation is contingent on carrier proposals meeting national technical, commercial and legal requirements and the outcomes of subsequent negotiation.

Background

At 11:11pm on 15 September 2011, the ACT Fire Brigade received a request to attend a large fire at Energy Services Invironmental at Dacre Street in Mitchell.

ESA Media and Communications through the use of social media, websites, local radio, television and print media kept the Canberra Community informed throughout the fire at Energy Services Invironmental at Mitchell.

The Emergency Alert System was used to issue warnings to residents who were impacted by the recent fire at Mitchell.

Emergency Alert is a nationally coordinated telephony based warning system designed to send messages to the landline and mobile telephones of residents in a defined geographic area. The ACT is a partner in Emergency Alert and has established a capacity to use the system operationally in the ACT.

Under the Intergovernmental agreement in relation to the management of the contract for the National Emergency Warning System, of which the ACT is a signatory, the Victorian Government is responsible for the management of the contract with Telstra Corporation Limited for the provision of the National Emergency Warning System, or Emergency Alert.

Emergency Alert will not provide messages to mobile phones within the target area that have billing addresses outside that area. Likewise, it will send messages to mobile phones outside the target area if their billing address is inside that area.

Cleared as accurate and complete as at 31 October 2011

By:

Ext:

Action officer

Ext:

Mitchell—chemical fire - Statement by minister 20 September 2011

MR Tolonglo—Attorney-General, Minister for the Environment and Sustainable Development, Minister for Territory and Municipal Services and Minister for Police and Emergency Services), by leave: I rise to give members an account of last week's serious chemical fire in Mitchell and to outline how the government and its agencies are responding to ensure the continuing safety of the Canberra community and the health of its environment.

I do so to demonstrate this government's commitment to transparency and accountability and to ensure that reliable and up-to-date information is readily available to the public. I will undertake to provide subsequent advice to the Assembly as necessary.

Just after 11 pm on Thursday, 15 September the ACT Fire Brigade attended at a fire at the Energy Services Invironmental site on Dacre Street, Mitchell. This facility is a privately owned and operated transformer oil PCB de-chlorination and recycling plant.

PCB is the common term for the chemical polychlorinated biphenyl. PCBs are injurious to human health and are persistent pollutants of the environment. Imports of PCBs to Australia have been banned since 1986. However, PCBs were widely used as an insulating fluid inside electrical transformers, and ESI treats that fluid to remove and destroy the PCBs so that the oil can be recycled. Some of the chemical reagents used in this process are also dangerous. This means the company requires a number of approvals to operate. I shall return to the regulation of this facility later.

The fire was fuelled by the dangerous substances on the site and this restricted the ability of firefighters to aggressively attack the fire. There was also considerable concern that the smoke plume from the fire was potentially toxic. For this reason the Fire Brigade commenced and continued atmospheric sampling at appropriate locations around the fire.

Heavy smoke, followed by a series of explosions on the site, caused the ACT Fire Brigade to pull back for the protection of firefighters. This allowed a reassessment of the fire and the marshalling of resources, ensuring a concentration of fire-fighting efforts to contain the fire while planning for an effective solution.

ACT firefighters continued to contain the fire throughout the night while the incident management team operating from the Fairbairn headquarters and the unified command on the scene planned a comprehensive attack strategy to be implemented over the following eight hours.

The potential toxicity of the smoke plume resulted in a decision by the unified command team on the scene to evacuate Exhibition Park in Canberra. Campers at Exhibition Park were evacuated to a centre established at Dickson college. Premises operating in Mitchell overnight were also evacuated.

In the early hours of Friday morning an emergency alert system warning, using the emergency alert telephone-based warning system, was issued to Canberra residents within a 10-kilometre radius of the fire. The warning was to stay indoors and turn off air-conditioning equipment.

Based on the results of the atmospheric testing, the area of concern was later reduced. However, because of fears for the safety of members of the public, Mitchell, including major roads through the suburb, was closed.

The fire was brought under control at approximately 10 pm on Friday, 15 September. Concerns about the impact of the fire and the potential for contamination by chemical toxins resulted in a decision to keep Mitchell closed for the weekend. Final extinguishment of the fire was achieved at 10 am on Saturday, 17 September after a strategic attack mounted between 4 pm and 6 pm on Friday evening and dealing with a flare-up overnight at approximately 4 am.

All available class foam supplies in the ACT were utilised with the support of Aviation Fire Fighting and suppliers, while additional supplies were sourced from interstate. At the peak of the fire, 11 Fire Brigade units, including hazmat and aerial fire-fighting vehicles, and over 50 personnel attended the scene.

ACT Policing provided road blocks to the Mitchell area, which was closed to all traffic, and all persons were evacuated. Police also advised people in adjacent areas that they may need to be evacuated depending on the direction and severity of the smoke plume. ACT Policing were part of the unified command team on the site at Mitchell.

Atmospheric monitoring commenced as part of the ACT Fire Brigade initial response. Hazmat crews monitored the atmosphere throughout the 48-hour firefight and continued to support the Environment Protection Authority thereafter.

A Fire and Rescue New South Wales hazmat response was also activated in accordance with cross-border arrangements. A hazmat crew responded by helicopter from Sydney, while two fire trucks were dispatched to Queanbeyan for use in responding with ACT Fire Brigade to daily business across the territory.

The EPA was on site early Friday morning. Its initial focus was to seek to prevent potential contaminants from entering the environment, particularly the stormwater system. Temporary earth bunding was quickly put in place along affected waterways.

Once the fire was contained, the EPA, in collaboration with their colleagues from New South Wales, set up a comprehensive sampling regime. Multiple samples were taken from soil, water, air and residue in and around Mitchell, through the likely affected waterways and right across the plume trail across the ACT and into parts of adjacent New South Wales. These samples have been transported to the New South Wales EPA's environmental chemical analysis laboratory in Lidcombe. This facility is a specialist, expert and experienced facility and utilises internationally accredited analytical techniques.

Samples were tested against these standards for a number of factors, especially the presence of organic chemicals and heavy metals. These two categories of substances effectively cover the chemicals known to have been in the factory as well as likely products of the combustion and recombination of those chemicals.

The results for the factory site and the surrounding parts of Mitchell were received on Sunday evening and all were negative; that is, they contained no traces of chemical toxins. This is consistent with the fact that the fire burned at a very high temperature of over 1,000 degrees.

Of course the EPA is not suggesting that there was no pollution emanating from the fire. The area in and around the fire contains amounts of residue, ash and other remnants of fire-fighting material. However, the testing is conclusive that it poses no threat to human life or the environment.

ACT Health, based on the results of this testing, concluded that risk to the health of people in this area from chemicals released in the fire is low. On this basis, the incident controller for the recovery phase decided on Sunday evening to reduce the Mitchell exclusion zone to the area immediately surrounding the fire; that is, Dacre, Tooth and Pelle streets.

To further reduce the very low risk posed by any material deposited by the fire, ACT Health issued information for people returning to Mitchell. This is a series of simple precautions designed to avoid accidental exposure, including such things as washing hands after cleaning premises and washing any food left in the open. People were also advised that if they encountered any unfamiliar ash, liquid or solid material at their premises, they should contact Canberra Connect, who would advise a visit with the EPA.

The remaining exclusion zone that is still in place is necessary because of the extensive presence of a residue which does not pose a significant human health hazard but which can best be cleaned up under the supervision of the EPA. Once this is completed, access back into that area, except for a site around the factory and its immediate environs, will be allowed.

The EPA is now focused on three key tasks:

- analysis of the remainder of the test results, once they have been completed by the Lidcombe laboratory, to allow any further necessary environmental protection or remediation measures to be put in place;
- clean-up of the fire site itself to ensure that it is no longer a potential source of contamination; and
- clean-up of other areas, especially the bunded ponds and affected waterways.

This last task is already underway. Liquid and solid waste is being removed by expert and appropriately authorised contractors to secure sites from where it will eventually be remediated and then properly disposed of under strict conditions.

The EPA will continue to monitor the impact of the incident on the environment over the long term and will use the coercive powers under the Environment Protection Act to ensure that the owner meets its obligations in relation to the restoration and clean-up of the incident site. Temporary bunding will remain in place in waterways and around the site until clean-ups are complete.

Again, reflecting this government's commitment to transparency on this matter, I have asked the EPA to put all the final test results and associated information, along with contextual advice, on its website as soon as is practicable.

Let me now turn to the planning and regulation of this facility. The first point I would make is that this is the only hazardous chemical processing facility of its type in the ACT. On 28 March 2008 a development application was lodged for the proposed

waste oil recycling facility with associated offices and storage areas at block 15 section 22 Mitchell.

The application reflected the company's move from old premises in Mitchell to a state-of-the-art factory with superior environmental safeguards. The site is located in the IZ1, general industry zone, under the territory plan.

At the time of lodging the DA the 2002 territory plan identified the site as precinct "a", general industry precinct, of part B3, industrial land use policies. The development is defined under the territory plan as a "hazardous waste facility". Hazardous waste facility means the use of land for the collection, storage, treatment or disposal of hazardous waste. Hazardous waste facility is a permitted use in the IZ1, general industry zone.

The application was lodged prior to the Planning and Development Act having effect. As such the application was assessed in accordance with all the relevant requirements of the Land (Planning and Environment) Act. The characteristics of the proposal were such that it fell under the list of prescribed classes of defined decisions in appendix II of the territory plan that required a mandatory preliminary assessment; that is, "any proposal involving the disposal, storage, transfer of hazardous chemicals/substances".

The final preliminary assessment was submitted to the planning authority in June 2008. The PA and the DA were publicly notified in the *Canberra Times* on Saturday, 28 June 2008 and by notifiable register on the legislation register in accordance with part 4 of the land act. No written representations were received. Consultation with relevant agencies, including the EPA, was undertaken.

In accordance with the requirements of section 121(2) of the land act, consideration by ACTPLA was given to the PA to determine whether further environmental impact assessment was required. The PA was found to have adequately identified the range of possible impacts of the proposal on the physical, natural and human environments. As a result of this, it was decided that no further assessment was required.

The DA was approved subject to conditions on 26 September 2008. Condition 3(e) required the DA applicant to lodge a statement clarifying that the equipment proposed to be used in the new development was identical to that tested in the preliminary assessment.

A statement dated 12 October 2008 was submitted by ESI to verify that the existing equipment and storage tanks, being MRP5000 oil regeneration plant and PCB de-chlorination plants, were relocated to the new site. In other words the already approved and tested equipment used to process the waste oil in the original factory was relocated to the new premises.

As they are obliged to, ESI currently hold an environmental authorisation under section 41A of the Environment Protection Act. The conditions contained in the authorisation were developed in consultation with the then commissioner for the environment and other environment protection authorities to minimise the risks associated with treating hazardous waste and to provide for sound environmental outcomes. A clear environmental advantage of the treatment process is that it removes

and renders safe the PCB while not destroying the de-chlorinated oil which is then able to be reused in the electrical network.

Before the authorisation was issued, the EPA undertook background checks on ESI. The company was incorporated in the ACT in March 2002 with the purchase of the Oil Services Section of Energy Services International.

A copy of the authorisation is available on the Environment and Sustainable Development website. The authorisation indicates that the facility is located in Winchcombe Court, Mitchell. As already noted, the facility has moved to Dacre Street. The authorisation relates to the chemical storage and processing and the conditions in the factory. EPA staff have based their decisions, including their reviews, on inspections of the current premises.

The EPA undertakes annual reviews of this authorisation. The most recent review, conducted in accordance with the requirements of section 57(1) of the Environment Protection Act, covered the period 4 April 2010 to 3 April 2011. It was completed in May 2011. This review which was conducted determined that ESI was operating in accordance with the requirements of their authorisation. The EPA did request ESI to update its hazop plan, the water management plan and the waste management plan. The EPA has been working with ESI to assist them in meeting this request.

Consistent with the conditions of the environmental authorisation, the facility is operated in accordance with the Australian and New Zealand Environment and Conservation Council polychlorinated biphenyl management plan. All PCB waste coming into the ACT must be transported in accordance with the national environment protection measure for the movement of wastes between states and territories. The EPA has dealt with ESI around potential breaches of its authorisation on three occasions.

Firstly, the ACT Fire Brigade responded to a fire on 12 February 2005 at the previous Winchcombe Court site. The fire was limited to a transformer which was connected to equipment that reclaimed residual oil from the transformer. Following an initial review by the EPA, an infringement notice under the Environment Protection Act was issued. Secondly, an environmental infringement notice was issued to ESI on 11 July 2005 for the minor offence of waste within 10 metres of a drain or entry to the storm water system. Thirdly, a warning letter was issued to ESI in January 2011 for transporting and accepting a controlled waste for disposal/storage at the facility without a valid consignment authorisation. This was due to an administrative oversight by the waste producer; that is, not by ESI. A warning letter was also sent to the waste producer.

The other relevant regulatory framework is the Dangerous Substances Act and the Dangerous Substances (General) Regulations 2004 which contain specific requirements for certain premises, plant or systems to be registered or notified but not licensed under the regulation. The person in control of the premises must notify the chief executive, or now the director-general, if they "handle" a "placard quantity" of any dangerous substance. A placard quantity of a dangerous substance can be as little as 50 litres or kilograms or as great as 5,000 litres or kilograms, depending on the type of substance.

Once a premises has a placard quantity of a dangerous substance, whether that be of a single class of dangerous substance or a mixed class of substances, the director-general must be notified of all other dangerous substances on the premises. A register of each dangerous

substance must be kept at the premises and be readily accessible. The register must be accompanied by a current safety data sheet for each substance.

ESI was previously located at Winchcombe Court, Mitchell, and had registered these premises with WorkSafe ACT in accordance with this provision. The new premises at Dacre Street in Mitchell have not been registered by ESI in accordance with the requirements of the Dangerous Substances Act and regulations. ESI had been made aware, when registering its previous premises, of its obligation to revise the registration should circumstances such as changes in quantity or location occur.

WorkCover had been made aware by ESI's architects that the company was planning to relocate its premises. WorkCover formally reminded the architects of their previous advice to ESI that the substances held at any new premises would need to be notified as part of a new registration. No subsequent registration was received.

The primary purpose of registration is to ensure that information is available to emergency services in the case of an incident. To this end, the business is also required to have such information, a manifest, available in a place, kept in a red weatherproof container inside and as close as practicable to the main entrance, that can be readily accessed by emergency services. Initial advice from the Fire Brigade is that emergency services were able to quickly access this manifest information on site on the night of the fire. The exact circumstances surrounding this issue will be covered in the WorkSafe investigation.

Over a period since early 2005, there have been five incidents in which WorkSafe ACT and its predecessor, WorkCover, have been involved with ESI. These incidents involved a small fire, which I mentioned earlier, and an explosion, occurring in 2005 and 2006. A chemical spill also occurred in 2009. All these matters were attended to by WorkSafe ACT. All these incidents occurred at the previous premises of the company. Inspectors from WorkSafe ACT and its predecessor, ACT WorkCover, managed these issues with ESI at the time, issuing notices and requiring improvements in systems and processes in line with the legal requirements.

An outcome of the 2009 visit to the former site was that WorkSafe reviewed the ESI environment, health and safety management plan and noted that the company was, as is appropriate when such complex operations are involved, in the process of reviewing its standard operating procedures and OH&S requirements.

There are three separate investigations of the incident underway or soon to commence. WorkSafe will undertake an investigation of this incident. The Environment Protection Authority will also conduct an investigation under its statutory powers. ACT Policing and the ACT Fire Brigade are already jointly preparing a report for the coroner, who is authorised to investigate fires in the ACT. All these investigations are independent of the government and their terms of reference and conduct are matters for the relevant authorities utilising their statutory powers under legislation.

WorkSafe will examine questions such as whether the manifest was complete and whether it complied in all other ways with legislative requirements. Similarly, there is conflicting advice at this stage as to whether there was appropriate placarding in place and this will also be examined by WorkSafe investigators.

A more thorough consideration will be given to WorkSafe's compliance response to the registration issues that I have identified. This may include:

- examination of the dangerous substances register;
- identification of sites with any similar substances and, if necessary, in concert with other appropriate regulatory bodies, a review of the management of substances at those sites;
- identification of any sites which have failed to renew their registration and determination of whether this has happened for appropriate reasons or whether re-registration should occur;
- implementation of an ongoing process to identify and notify sites where registration will expire in the near future; and
- consideration of whether all registered sites should be reminded again of their obligations under the Dangerous Substances Act and associated regulations.

This incident has also raised a number of questions in the community over planning policies and regulations as they relate to the location of hazardous industries in relatively close proximity to residential areas. The government is committed to ensuring a safe and secure environment for the people of the territory and, therefore, I believe these policies and practices should be examined in light of contemporary best practice used in other jurisdictions both nationally and internationally.

To that end, I can advise the Assembly that I have instructed the director-general of the Environment and Sustainable Development Directorate to commission an independent and expert review of these matters. I will announce terms of reference and the identity of the independent reviewer in the near future.

Finally, I will turn to the issues around communications to the public about this incident. Emergency alert is a nationally coordinated, telephony-based warning system designed to send messages to the landline and mobile telephones of residents in a defined geographic area. The ACT is a partner in emergency alert and has established a capacity to use the system operationally in the ACT.

Two emergency alert messages were issued as a result of this incident. The first was issued at approximately 1.40 am on Friday, 16 September. It was issued to people with registered billing addresses for mobile and landline telephones within the suburb of Mitchell, including EPIC and the Canberra racecourse. The first voice message advised:

Emergency. Emergency. The ACT Fire Brigade is responding to a Chemical incident in Mitchell. Residents are advised to evacuate the suburb immediately including the racecourse and EPIC. Further information is available via Canberra Connect, or go to www.esa.act.gov.au.

The first text message advised:

Emergency. Emergency. The ACT Fire Brigade is responding to a Chemical insadent in Mitchell. Resadents are advised to evacuate the suburb immediately.

A second emergency alert was issued at approximately 3.20 am to people with registered billing addresses for mobile and landline telephones within the suburbs of Franklin, Crace, Harrison, Watson, Downer, Kaleen, Lyneham and Hackett. The second voice message advised:

The ACT Fire Brigade is responding to a chemical incident in Mitchell. Residents of Franklin, Crace, Harrison, Watson, Downer, Kaleen, Lyneham, Hackett are advised to shelter indoors, immediately. If you are indoors, close all windows, doors, vents and turn off, air conditioning. Further information is available via Canberra Connect, or go www.esa.act.gov.au.

The second text message advised:

The ACT Fire Brigade responding to chemical insadent in Mitchell. Resadents of Franklin, Crace, Harrison, Watson, Downer, Kaleen, Lyneham, Hackett stay indoors.

There has been some criticism levelled at the ESA regarding the ambiguity of the messages issued. I am aware there were spelling errors in both messages issued via SMS and it is regrettable that this led to uncertainty regarding the origin and authenticity of the messages to some people.

The emergency alert system issues warnings via voice recording and SMS, based on predefined templates for a particular emergency. The template of the voice message requires the originator to submit words in writing spelt phonetically to ensure that words will be pronounced correctly when the system automatically converts text to voice. The phonetic spelling was inadvertently also inserted into the text messages when they were issued.

On preliminary advice, it also appears there were a large number of fixed landline services identified in the target area of the second warning that were not contacted. This was a result of insufficient time being allocated to allow the emergency alert system to dial all the numbers in the target area. The timing allocated is operator defined, and future use of emergency alert will consider ensuring more time is allowed for a campaign to be completed. The challenge associated with this is that the dialling of landline and mobile numbers in a large area could take many hours to complete successfully. This obviously has an impact on the capacity to issue alerts in a timely manner.

Despite this, these factors should not detract from the initial success of emergency alert. The wording and issue of any future alerts using the emergency alert system will be critically examined as part of the ESA's after-action review for this incident.

Further information was also provided to the community through the use of social media such as Twitter, which saw a substantial growth in the number of followers of

the ESA Twitter account during the event. Twitter was also used to keep news media updated on the response to the incident.

Regular updates were provided through the ESA website, which also saw a considerable increase in usage. Local radio, television and newspapers were also engaged to partner the emergency services to provide accurate and timely messages to the community. I want to

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thank everyone in the local media, particularly local radio, for their unstinting efforts in keeping the community informed throughout this incident.

Over the next few weeks, operational debriefs will be conducted amongst Fire Brigade, ESA, EPA and other personnel involved. The Fire Brigade will collate all operational information and provide a post-incident analysis to the government.

This fire was a complex operation, which exposed members of the ACT Fire Brigade to considerable risk. The efforts of these firefighters to continue a sustained operation for the time period involved is worthy of praise from the entire ACT community and I commend the ACT Fire Brigade for their efforts. Firefighters were assisted in their efforts by many other ACT government agencies and by ACT Policing. Many of the people who participated in the response went above and beyond their normal duties to ensure, as much as possible, the safety of the ACT community and to limit the impact of the fire.

A carefully managed and planned response to the environmental impact of the fire was quickly put in place by the Environment and Sustainable Development Directorate, particularly through the ACT EPA, to determine the extent and concentration of any toxic material and plan a response accordingly. And all of these staff should also receive praise for their efforts under very difficult circumstances. I thank them for their efforts.

Special mention should also be made of the support received from the New South Wales EPA who provided assistance with monitoring and gave overnight priority to analyse samples to support the ACT response. Fire and Rescue New South Wales also provided assistance to the ACT Fire Brigade responders at Mitchell and provided other appliances on standby to provide fire cover for the remainder of the city while the fire was being fought. Aviation Rescue and Fire Fighting supplied a firefighting crew and vehicles, and this was also greatly appreciated.

This incident has been a dangerous and a disturbing one. But it has also amply demonstrated the strengths and capabilities of the structures adopted by the government for the coordination of an emergency management incident.

In conclusion, I want to assure the Assembly and the broader community that the government will respond to the findings of the independent investigations into this incident and make whatever changes are necessary to its policies, regulations or practices to ensure we can continue to provide a safe and healthy environment for the community.



MLA

ATTORNEY GENERAL
 MINISTER FOR POLICE AND EMERGENCY SERVICES
 MINISTER FOR THE ENVIRONMENT AND SUSTAINABLE DEVELOPMENT
 MINISTER FOR TERRITORY AND MUNICIPAL SERVICES

MEMBER FOR MOLONGLO

COPY

Answer to Question Taken on Notice

Ms [redacted] asked the Minister for Police and Emergency Services, during Question Time, on 20 September 2011:

Can you provide the Assembly with a list of people that the ESA consulted in regard to the management of the fire on the morning of 16 September 2011?

Mr [redacted] – the answer to the Member's question is as follows:

The following agencies were consulted and attended the scene of the Mitchell hazardous fire on the morning of 16 September 2011:

- ACT Policing;
- Territory and Municipal Services Directorate – ACT Roads;
- Environment Protection Authority;
- Fire and Rescue NSW– HAZMAT;
- Aviation Rescue and Firefighting Services;
- ESA Mapping Duty Officer;
- Worksafe ACT; and
- Energy Services Environmental Management.

The following agencies participated in the Emergency Control Centre (ECC) which was activated at approximately 1:20am on Friday 16 September 2011. The ECC – located at the ESA Headquarters at Fairbairn facilitated a Whole of Government response to the fire:

- ACT ESA – including: ACT Fire Brigade, ACT Ambulance Service, ACT State Emergency Service, ESA Risk and Planning and ESA Media and Community Education;
- ACT Policing;
- JACS Directorate;
- Security and Emergency Management Branch;
- TAMS Directorate – including Roads, ACTION Buses and ACT Government Veterinarian;

Approved for circulation to the Member



MLA

6.10.11

Minister for Police and Emergency Services

Date:.....

- ACT Health;
- Environment and Sustainable Development Directorate — including
- Environment Protection Authority;
- Community Services (Recovery); and
- Education and Training Directorate.

The Security and Emergency Management Senior Officials Group was convened.



**Use of Emergency Alert during the
Mitchell Hazardous Material Fire
16 September 2011**

1. Background

Emergency Alert is a nationally coordinated telephony based warning system designed to send messages to the landline and mobile telephones of residents in a defined geographic area. The ACT is a partner in Emergency Alert and has established a capacity to use the system operationally in the ACT. Emergency Alert is not an "opt in" or "opt out" system, as it is based on the national telephone database of all Australian telephone providers.

Emergency Alert is operational, allowing messages to be sent to landline and mobile telephones in a defined geographic area determined by the billing addresses that occur in that area.

It will not provide messages to mobile phones within the target area that have billing addresses outside that area. Likewise, it will send messages to mobile phones outside the target area if their billing address is inside that area.

For the hazardous material fire at Mitchell, two Emergency Alert campaigns were run, and messages were issued. The commencement of messaging was at 0138 and 0319 on the morning of 16 September 2011 for the first and second campaign respectively.

This was the first operational use of the system in the ACT. Previous uses have been for testing only.

2. First use of Emergency Alert – 16 September 2011 – 0138 hours

2.1 The Messages

The first Emergency Alert was issued at 0138 hours on Friday 16 September 2011.

- o The first voice message advised:

Emergency. Emergency. The ACT Fire Brigade is responding to a Chemical incident in Mitchell. Residents are advised to evacuate the suburb immediately including the racecourse and EPIC. Further information is available via Canberra Connect, or go to www.esa.act.gov.au.

- o The first text message advised

Emergency. Emergency. The ACT Fire Brigade is responding to a Chemical incident in Mitchell. Residents are advised to evacuate the suburb immediately.

Spelling errors in the original text message are corrected above.

There has been criticism levelled at the ACT Government regarding the messages issued due to the spelling errors in both messages issued via SMS. It is regrettable that this led to uncertainty regarding the origin and authenticity of the messages for some recipients.

Specifically, the following spelling errors were contained in the text message:

Insadents for incidents.

Resadents for residents.

The Emergency Alert System issues warnings via voice recording and SMS based on predefined templates for a particular emergency.

The template of the voice message requires words to be spelt phonetically by the originating agency to ensure that words will be pronounced correctly when automatically converted from text to voice by the system. However, this is not a requirement for warnings issued via SMS. This distinction was not taken into consideration at the time the Emergency Alerts were issued with the result that phonetic spellings were inadvertently copied into SMS messages.

2.2 Target Area

The Target Area was to registered billing addresses for mobile and landline telephones within the suburb of Mitchell including Exhibition Park (EPIC) and the Canberra Racecourse. The data provided in this report is based on information provided by the system manager on 17 September 2011.

Within this area:

22,598 landline services were identified.¹

2,693 mobile services were identified.

A campaign duration of 30 minutes was nominated.

¹ The number of fixed landline phones for the first alert message was much greater than mobile services. In residential areas, there are generally a significantly higher proportion of mobile telephones to fixed landlines.

Analysis of the Geocoded National Address File (GNAF) which is administered by the Public Sector Mapping Agency identified 1421 individual address points in the first target area, which is significantly less than the 22,598 landline services identified. This reflects the target area was largely commercial and industrial, and may include telephone exchanges. The ESA will raise with the system managers issues associated with the high proportion of landline services identified compared with the actual number of address points to potentially reduce the time required to send messages by the system.

2.3 Call Statistics

Of the 22,598 voice messages to fixed landline services identified in the target area:

5,851 (25%) of calls were answered.

2,375 (10%) of lines were identified as busy.

3,652 (16%) were not answered.

9,836 (44%) were invalid calls. ²

884 (4%) were fax lines.

NB: 22,598 (100%) of numbers were dialled.

Of the 2,693 mobile services identified in the target area³:

1,696 (63%) of text messages were delivered.⁴

895 (33%) of text messages expired.

58 (2%) text messages were undelivered.

² Numbers incorrectly identified due to customer's records not being updated.

³ These figures are based on the campaign summary report provided by the systems manager and it is noted for the mobile services the "delivered", "expired" and "undelivered" messages do not equal the total services identified. This discrepancy will be raised with the system managers.

⁴ The system does not identify whether "delivered" text messages were opened and read by the recipients. Likewise, the system does not identify whether these mobiles that received the messages were inside or outside the target area at the time of delivery.

3. Second use of Emergency Alert 16 September 2011 – 0319 hours

3.1 The Messages

The second Emergency Alert was issued at 0319 hours on Friday 16 September 2011.

- o The second voice message advised:

The ACT Fire Brigade is responding to a chemical incident in Mitchell. Residents of Franklin, Crace, Harrison, Watson, Downer, Kaleen, Lyneham, Hackett are advised to shelter indoors, immediately. If you are indoors, close all windows, doors, vents and turn off air conditioning. Further information is available via Canberra Connect, or go www.esa.act.gov.au.

- o The second text message advised

The ACT Fire Brigade responding to chemical incident in Mitchell. Residents of Franklin, Crace, Harrison, Watson, Downer, Kaleen, Lyneham, Hackett stay indoors.

Again, spelling errors in the original text are corrected above.

There has been criticism levelled at the ACT Government regarding the messages issued due to the spelling errors in both messages issued via SMS. It is regrettable that this led to uncertainty regarding the origin and authenticity of the messages for some recipients.

Specifically, the following spelling errors were contained in the text message:

Insadents for incidents.

Resadents for residents.

The Emergency Alert System issues warnings via voice recording and SMS based on predefined templates for a particular emergency.

The template of the voice message requires words to be spelt phonetically by the originating agency to ensure that words will be pronounced correctly when automatically converted from text to voice by the system. However, this is not a requirement for warnings issued via SMS. This distinction was not taken into consideration at the time the Emergency Alerts were issued with the result that phonetic spellings were inadvertently copied into SMS messages.

3.2 Target Area

The Target Area was to registered billing addresses for mobile and landline telephones within the suburbs of Franklin, Crace, Harrison, Watson, Downer, Kaleen, Lyneham, Hackett and Mitchell.

Within this area:

86,801 landline services were identified.⁵

83,774 Mobile services were identified.

A campaign duration of 30 minutes was nominated.

⁵The number of fixed landline phones for the second alert message was similar to mobile services. As previously noted, in residential areas there are generally a significantly higher proportion of mobiles to fixed landlines. It is noted that the second campaign also included the area of Mitchell, which as shown in the first campaign, has a large number of fixed landlines relative to mobile phones.

Analysis of the Geocoded National Address File (GNAF) identified 37,017 individual address points in the second target area, which is significantly less than the 86,801 landline services identified. The ESA will raise with the system managers issues associated with the high proportion of landline services identified compared with the actual number of address points to potentially reduce the time required to send messages by the system.

3.3 Call Statistics

Of the 86,801 voice messages to fixed landline services identified in the target area:

13,784 (16%) of calls were answered.

2,690 (3%) were invalid calls.⁶

69,229 (80%) were not dialled.

1,098 (1%) were fax lines.

Of the 83,774 mobile services identified in the target area⁷:

52,700 (63%) of text messages were delivered.⁸

26,740 (32%) of text messages expired.

3,049 (4%) of text messages were undelivered.

⁶ See note 2 above.

⁷ See note 3 Above

⁸ See note 4 above.

4. Analysis

In preparing the campaigns, there was an expectation that the alerts issued for the target area would be delivered within 30 minutes due to the nature and urgency of the incident. The system captured the identified areas and accepted the allocated campaign time nominated by the ESA. It was not until the results of the two campaigns were provided that it was identified that a significant number of phone messages and SMS messages were not delivered as the time specified for the system to dial all of the numbers with billing addresses in the target area proved to be too short. These are identified as "text messages expired" or "not dialled" fixed landline calls above.

While the system does identify the necessary time duration to complete a campaign, the system does not provide a warning to the operator that the proposed campaign is too short.

These matters were discussed with the managers of the system. With the size of the second campaign, it was estimated it could have taken 6-7 hours to complete – this would have finished sending messages around 9:00 - 10:00 am, well after the "shelter in place" advice had been lifted.

The system managers advised on a number of options that may assist in disseminating these advices:

- a. Prioritise SMS messages by sending these prior to commencing fixed landline messaging;
- b. Split the target areas into a number of separate campaigns, although this may not assist where the system is accessing a single telephone exchange to deliver the messages.

These issues did not arise in previous testing over relatively smaller areas. Testing undertaken on 7 June 2011 covered Dunlop and targeted 1573 fixed landlines and over 5000 mobile services. This test resulted in approximately 88% of landlines being answered and text messages sent to approximately 67% of mobile phones within 45 minutes.

5. Summary and recommended actions

Notwithstanding limitations arising from a discrepancy between the identified target area and the nominated campaign time, the Emergency Alert successfully provided warning messages to a significant number of people in the community that were acted upon.

Also, it is important to note that Emergency Alert is a single component of a comprehensive series of tools for alerting the community. The ESA's systems for alerting the community to emergencies via the media and via the ESA website homepage were successful. This was demonstrated through local media resuming local broadcasting early on Friday morning. For example, ABC local media commenced broadcasting at approximately 2:00 am, compared with their normal commencement of local broadcasting at 5:30 am. In addition, the ESA with the assistance of ACT Policing used person-to-person notification in the early stages of the incident to warn those people who were staying at EPIC when the incident occurred.

The wording and issue of any future alerts using the Emergency Alert System will be critically examined as part of the ACT Fire Brigade After Action Review for this incident. Pending outcomes of the review the ESA will undertake the following measures in relation to the future use of the system:

- 1. Additional training on the use of the Emergency Alert system to identified ESA staff;
- 2. Review of the internal procedures relating to the operation of the system, including quality assurance and authorisation processes;

3. Recognition that in future campaigns, the use of multiple and smaller campaigns may be more appropriate where a large number of voice and text messages are required to be delivered; and
4. The Emergency Services Commissioner will provide written feedback to the systems managers about the ACT's experience of this operational activation of the system, including to suggest potential improvements in the operator's interface, such as the provision of a "Red Flag" warning for circumstances where the size of the campaign exceeds the time nominated for delivery of the message.

It is also recommended that:

5. The ACT raise issues associated with the ACT's operational use of the system in appropriate emergency management fora (including the National Emergency Management Committee and the Standing Council on Police and Emergency Management) at the next convenient opportunity.