

ment Schedule for FOI: Emails 16/09/2011

Name:

Establishment and
Re: operations of Energy
Services

Document Number	Page Number	Description of Document	Date of Document	Status: Full Release, Partial or Exempt	Reason for Exemption:	Details
1	1-3	Email Mitchell Fire	16/09/2011	Partial Release	Section 37 (1)(a) Section 41(1)	Names, Positions, Telephone numbers, Facsimile Numbers, email addresses
2	4-6	Email - 110916.Mitchell.02	16/09/2011	Partial Release	Section 37 (1)(a)	Names, Positions, Telephone numbers, Facsimile Numbers, email addresses
3	7-8	Email - Special fire weather forecast for Hazmat Fire at Mitchell, ACT	16/09/2011	Partial Release	Section 37 (1)(a)	Names, Positions, Telephone numbers, Facsimile Numbers, email addresses
4	9-11	Email - FW: Spot Fire Weather Forecast 18	16/09/2011	Partial Release	Section 37 (1)(a)	Names, Positions, Telephone numbers, Facsimile Numbers, email addresses
Total Documents						
4						

Full = 0
Partial 37 = 4
Partial 41 = 1

From: _____
Sent: Friday, 16 September 2011 7:37 AM
To: _____
Subject: Fwd: FW: Spot Fire Weather Forecast 18 [SEC=UNCLASSIFIED]
Attachments: IDN31800.pdf

I didn't see your name on the email.
 It looks like the wind is changing direction considerably.

>>> State Operations <_____> 9/16/2011 7:29 am >>>

-----Original Message-----

From: Comms Operational User [_____]]
Sent: Friday, September 16, 2011 7:27 AM
To: State Operations
Subject: BOM: Spot Fire Weather Forecast 18 [SEC=UNCLASSIFIED]

This is an automatically generated email from the NSW Regional Office, Bureau of Meteorology, Australia.

Please contact _____ if you have any queries about this email.

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This email message is intended only for the addressee(s) and contains information which may be confidential. If you are not the intended recipient, please notify the sender and delete this email and any copies or links to this email completely and immediately from your system. Views expressed in this message are those of the individual sender, and are not necessarily the views of the NSW Rural Fire Service.

This message, and any files transmitted with it, is intended only for the addressee named and may contain confidential and/or legally professional privileged material. If you are not the intended recipient, please delete it and notify the sender immediately. Any retransmission, dissemination, reliance on or other use of this communication by people other than the intended recipient is prohibited. Views expressed in the message are those of the individual sender, and are not necessarily the views of Fire and Rescue NSW.

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IDN31800
Australian Government Bureau of Meteorology
New South Wales

Spot Fire Weather Forecast for Mitchell, ACT

Issued at 7:26 am EST on Friday 16 September 2011.

Incident Type: Hazmat Incident	Website Form No: 018
Spot Forecast Location: ACT	Request No: 1
Latitude/Longitude: -35.21000 149.11000	Fax Number: 1
Elevation (ASL): 500	Contact Ph:
Fuel Type: Other	Contact Name:

Weather Forecast starting 0800 hours Friday 16 September 2011

Mostly sunny. Westerly winds becoming gusty at times. At 7am the inversion height was at approximately 500m. This inversion is expected to break down between 8am and 10am allowing westerly winds to strengthen at the surface.

12 Hour Forecast										
Drought factor: 6.0				Curing value (%): 66						
Local Time	Temp (C)	Dewpt (C)	RH (%)	10m Wind (km/h)			1000m AGL Wind (km/h)		FFDI	GFDI
				Dir	Speed	Gust	Dir	Speed		
0800	07	4	81	WNW	15	25	W	60	1	0
1100	16	6	51	WNW	25	45	W	60	4	1
1400	21	7	40	WNW	35	50	W	65	9	2
1700	19	7	46	W	35	55	W	65	7	2
2000	15	6	55	W	20	30	W	65	3	1
2300										
0200										
0500										
0800										
1100										
1400										

AGL - Above Ground Level, RH - Relative Humidity, Dir - Direction, Dewpt - Dew Point

WEATHER OBSERVATIONS for / /							Time:	Name:
Temp/RH Instrument:			Wind Instrument:			Height of wind observation:		
Local Time	Temp (C)	Dewpt (C)	RH (%)	Wind (km/h)			Weather	Location
				Dir	Speed	Gust		

- * If forecast differs significantly from observed conditions, or for further information, contact the fire weather forecasters on
- * For firefighter and public safety make regular on-site weather observations. Please fax this form to fire weather forecaster on to assist in forecast verification.

From: |
Sent: Friday, 16 September 2011 6:57 AM
To: . - -
Cc:
Subject: special fire weather forecast for Hazmat Fire at Mitchell, ACT
Attachments: Special_Fire_Weather_Forecast_Request.110916.pdf
Importance: High

Dear Madam / Sir,

Please find attached Special Fire Weather Forecast for the Hazmat/Fire at Mitchell, ACT.
Please include _____ in all correspondence.

Cheerz,

Specialised Operations - Hazmat / CBR
Amarina Avenue Greenacre NSW 2190
phone:
fax:
email: _____



**NSW Rural Fire Service
Bureau of Meteorology**



6.09.01 Special Fire Weather Forecast Request

WILDFIRE **HAZARD REDUCTION**

(please tick the appropriate type)

Section 44

(tick if applicable)

Requested by (Name): _____ Date: 16-09-2011 Time: 06:45

Organisation./Location: Fire & Rescue NSW

Phone No: _____ Fax No. _____ Mobile No: _____

Email Address _____

If **HAZARD REDUCTION**, date/time of ignition(s): _____ Date: n/a Time: n/a

FIRE LOCATION

Name of Fire: Mitchell, ACT Elevation Range: 0 (Google Maps) m

Distance bearing from **readily identifiable** town (essential): 300 metres

Topography/Aspect: industrial area

Grid Reference: _____ (include map name and scale)

Latitude/Longitude: 35 12'34.45" S & 149 08'11.53" E (Degrees/Minutes/Seconds format)

Drought Factor (if known): _____ Grassland Curing (if known): _____ %

WEATHER OBSERVATIONS NEAR FIREGROUND

Date: 16-09-2011 Time: 06:30 (take observations upwind of fire if possible)

Location relative to Fireground: approximately 6 km

Topography/Aspect: open industrial area Elevation: 0 m m

Temperature: 0.0 °C Trend: jumpy Type of Instrument: _____

Humidity: 89 % Trend: jumpy Type of Instrument: _____

Wind speed: 4 km/h Gusts to: 11 km/h

Wind Direction: ENE Wind Trend: swinging

Wind measured (give instrument) or estimated: _____ BoM website _____

Cloud Cover: clear (in 1/8's) Cloud Height: Low Middle High

General Weather: inversion at 500 metres

All Requests to be sent to RFS State Operations. Always notify State Operations by phone (All Hours) when lodging Request.

State Operations Centre

Email: _____ Fax: _____ Phone: (_____) _____

Bureau of Meteorology Fire Weather Desk Phone: (_____) _____

From:
Sent: Friday, 16 September 2011 5:32 AM
To:
Cc:
Subject: 110916.Mitchell.02
Attachments: 110916.Mitchell.02.doc; ChemBulletin.Phosgene.pdf; WS_CMS.pdf

I have attached an updated plume of the situation with the 500 metre inversion. It made no difference to the model. However, I included the IDLH value threat line in yellow. It is approximately a 500 metre zone.

Also, I have attached:

- my phosgene chem bulletin (leftover from Marangaroo) as a quick reference guide;
- the CMS SIMS Work Sheet.

Yes, Intermediate Hazmat Stations ought to have phosgene chips. However, the chip can do 10 measurements only, thus they may run out and need more chips...

Hope the coffee is reasonable.
Paul

New South Wales Fire Brigades
Specialised Operations - Hazmat / CBR
Amarina Avenue Greenacre NSW 2190
phone:
fax:
email:



NEW SOUTH WALES FIRE BRIGADES

Specialised Operations – HMRU / CBR

Scientific Advisor

PHOSGENE = Agent CG = Carbonyl Chloride = Carbon Oxychloride

- Family** organo-chloride choking agent (war gas)
- **Formula** COCl₂ (note that there is NO phosphorus in phosgene)
 - **CAS №** 75-44-5
 - **Colour** colourless gas
 - **Odour** resembling freshly mown hay or mouldy hay; sweet
 - **Threshold** 0.5 ppm (2.02 mg/m³)

Transport

- usually shipped as a liquefied compressed gas ADG class/division 2.3; UN 1076

Detection

- **Chemical** Colourimetric Tubes
- **PID** Fitted with 11.7 eV UV lamp (CF_{11.7} = 8.5)

Density

- **vapour** 3.40 @ ??°C
- **liquid** 1.40 @ 20°C

Vapour Pressure

- **mmHg** 1215 mmHg @ 20°C

Flammability

non-flammable; non-combustible

Stability

stable when stored pure and dry; decomposes in environment

Toxicity

- **TWA-TLV** 0.1 ppm = 0.4 mg-min/m³
- **IDLH** 2.0 ppm = 8.1 mg-min/m³

Symptoms

rhinitis	(breathing difficulty)	nasea
conjunctivitis	coughing / choking	pulmonary oedema
lacrimation	foaming sputem	death...

Decontamination

Probably not required due to gaseous nature of substance, but:

- copious amounts of tepid water or soap & tepid water (if available)
- soda ash for a spill in liquid form (not yet evaporated)
- dilute ammonia solution for plant and equipment (as an alternate choice)


Industrial Uses

- used in mining and in manufacturing of urethanes, TDI, insecticides, herbicides



GAS DETECTOR CHIP MEASUREMENT SYSTEM



	<p>Description</p> <p>The Chip Measurement System (CMS) is a portable gas detector used to measure the concentration of known gases and vapours in ppm.</p>
	<p>Specification</p> <ul style="list-style-type: none"> Is currently in-service as per calibration sticker Successfully completes all stages of operation when used with training chip or expired chip Battery status shows three or more 'icons'

Corresponding SIMS Calendar Key for Inspection and Testing:

CHECK	FREQUENCY	INSPECTION REQUIREMENT TASK LIST
CHECK 1	Daily	N/A
CHECK 2	1 st Day Shift	N/A
CHECK 3	Weekly Mon/Tu	N/A
CHECK 4	Fortnightly	Check kit inventory including chip expiry dates; Run detector
CHECK 5	Monthly	N/A
CHECK 6	Quarterly	N/A
CHECK 7	Biannually	N/A
CHECK 8	Annually	N/A
OTHER	Other	18 monthly: Send to TSC for Service/SED; Update WILE database

Note: Refer to NSWFB Recommended Practice for operation and service.

For All Enquiries:

Contact the Hazardous Materials Response Unit Technical Service Centre from Monday to Friday during normal business hours for enquiries, advice, service and exchange.

<p>Inventory of Case:</p> <ul style="list-style-type: none"> 1 x CMS Unit 1 x Black Pelican® 1500 Carry Case 1 x Leather Carry Case w/ Strap 1 x Remote Pump 1 x Float with Hose & Adaptor 1 x 4 x 0.8 mm Flat-head Screwdriver 1 x 3 mm Hex (Allen) Key 1 x Hydrophobic Filter 1 x Telescopic Wand w/ Hose & Adaptor 1 x Recommended Practice (optional) 4 x AA Spare Alkaline Batteries (optional) Heavy Hazmat carry all chips; Intermediate Hazmat carry those chips listed in blue 	<p>Chemical Chips:</p> <table style="width: 100%; border: none;"> <tr><td>Acetone</td><td>Acetone</td></tr> <tr><td>Acetic Acid</td><td>Ammonia</td></tr> <tr><td>1,3-Butadiene</td><td>Benzene</td></tr> <tr><td>Carbon Dioxide</td><td>Chlorine</td></tr> <tr><td>Hydrogen Sulphide</td><td>Hydrochloric Acid</td></tr> <tr><td>Mercaptan</td><td>Hydrocyanic Acid</td></tr> <tr><td>Methanol</td><td>Nitrous Fumes (N_xO_x)</td></tr> <tr><td>Nitrogen Dioxide</td><td>Perchloroethylene</td></tr> <tr><td>o-Xylene</td><td>Petroleum Hydrocarbs</td></tr> <tr><td>Ozone</td><td>Phosgene</td></tr> <tr><td>Propane</td><td>Phosphine</td></tr> <tr><td>Vinyl Chloride</td><td>Sulphur Dioxide</td></tr> <tr><td></td><td>Toluene</td></tr> <tr><td></td><td>Trichloroethylene</td></tr> </table>	Acetone	Acetone	Acetic Acid	Ammonia	1,3-Butadiene	Benzene	Carbon Dioxide	Chlorine	Hydrogen Sulphide	Hydrochloric Acid	Mercaptan	Hydrocyanic Acid	Methanol	Nitrous Fumes (N _x O _x)	Nitrogen Dioxide	Perchloroethylene	o-Xylene	Petroleum Hydrocarbs	Ozone	Phosgene	Propane	Phosphine	Vinyl Chloride	Sulphur Dioxide		Toluene		Trichloroethylene
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Vinyl Chloride	Sulphur Dioxide																												
	Toluene																												
	Trichloroethylene																												

From:
Sent: Friday, 16 September 2011 5:07 AM
To:
Cc:
Subject: Mitchell fire
Attachments: 110916.Mitchell.doc; 110916.Mitchell.alo

I have attached a threat zone in MS Word and the aloha document which you may or may not be able to open.

I have used phogene as the released agent at a rate of:
- 100 kg produced over a 1 hour period;
- this should be worst case scenario;
- assumed no inversion (*);
- assumed partial cloud cover (*);

The plume shows a 100 m corridor by less than 1.5 km long as the threat zone.

(* we should speak to BoM about having this info on website and/or available to us.
Hope it is a help
Cheerz,

New South Wales Fire Brigades
Specialised Operations - Hazmat / CBR
Amarina Avenue Greenacre NSW 2190
phone:
fax:
email:

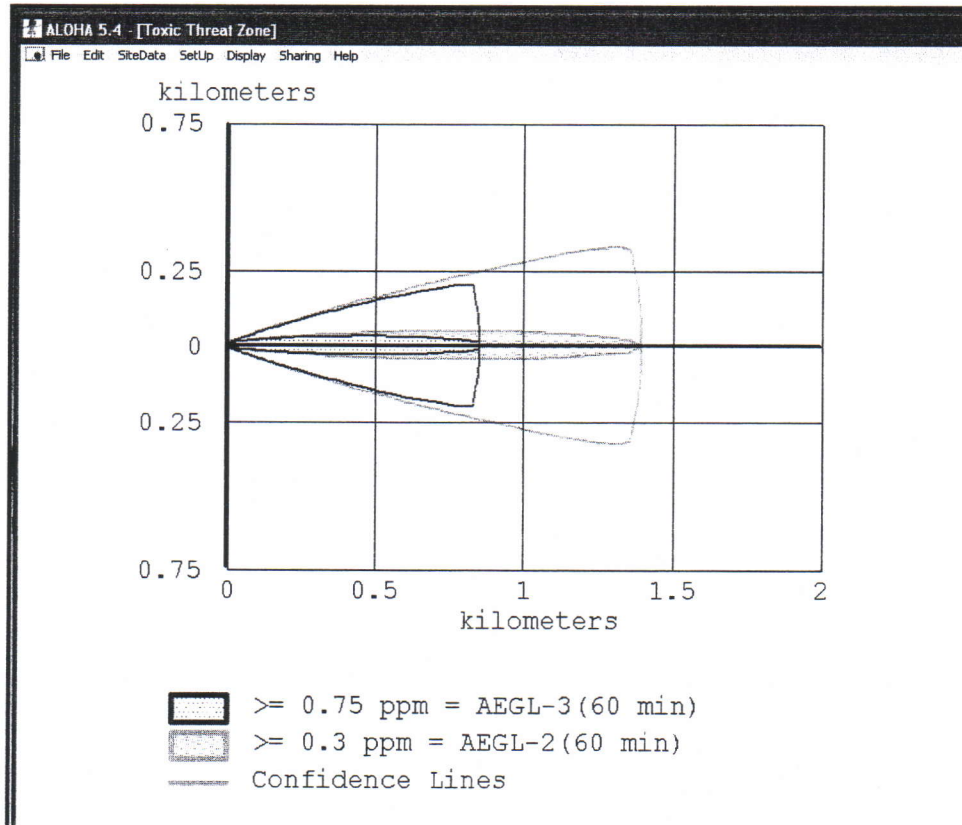
110916.Mitchell at Dacre Street

4200 x 44 gallon drums sodium under oil + PCB x 400 kg

Lat Long
35°12' 34" south x 149°08 11" east
-35.209604° south x 149.136564° east = for BoM if requested

GMT + 10 hours

Date/Time EST	Tmp °C	App Tmp °C	Dew Point °C	Rel Hum %	Delta-T °C	Wind				Press QNH hPa	Press MSL hPa	Rain since 9 am mm	
						Dir	Spd km/h	Gust km/h	Spd kts				Gust kts
16/04:30am	0.8	-2.9	-0.3	92	0.4	SSE	9	11	5	6	1017.7	-	-
16/04:00am	1.1	-2.3	-0.8	87	0.7	SSE	7	11	4	6	1017.9	-	-
16/03:36am	1.0	-2.4	-0.3	91	0.5	SE	7	9	4	5	1017.9	-	-
16/03:30am	1.8	-1.5	0.0	88	0.7	SE	7	9	4	5	1017.8	-	-
16/03:00am	2.1	-1.7	-0.5	83	1.0	SE	9	11	5	6	1017.8	1018.0	0.0
16/02:30am	3.2	0.0	-0.2	78	1.3	S	6	7	3	4	1018.3	-	0.0
16/02:00am	4.0	2.0	0.2	76	1.5	CALM	0	0	0	0	1018.6	-	0.0
16/01:30am	3.8	0.7	0.0	76	1.5	N	6	7	3	4	1019.1	-	0.0
16/01:00am	6.0	2.3	0.0	65	2.4	N	9	13	5	7	1019.3	-	0.0
16/12:30am	6.8	3.4	-0.5	59	2.9	N	7	9	4	5	1019.4	-	0.0
16/12:00am	4.8	2.0	-0.3	69	2.0	NNW	4	9	2	5	1019.4	1019.6	0.0



110916.Mitchell at Dacre Street

4200 x 44 gallon drums sodium under oil + PCB x 400 kg

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Date/Time EST	Tmp °C	App Tmp °C	Dew Point °C	Rel Hum %	Delta-T °C	Wind					Press QNH hPa	Press MSL hPa	Rain since 9 am mm
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16/04:30am	0.8	-2.9	-0.3	92	0.4	SSE	9	11	5	6	1017.7	-	-
16/04:00am	1.1	-2.3	-0.8	87	0.7	SSE	7	11	4	6	1017.9	-	-
16/03:36am	1.0	-2.4	-0.3	91	0.5	SE	7	9	4	5	1017.9	-	-
16/03:30am	1.8	-1.5	0.0	88	0.7	SE	7	9	4	5	1017.8	-	-
16/03:00am	2.1	-1.7	-0.5	83	1.0	SE	9	11	5	6	1017.8	1018.0	0.0
16/02:30am	3.2	0.0	-0.2	78	1.3	S	6	7	3	4	1018.3	-	0.0
16/02:00am	4.0	2.0	0.2	76	1.5	CALM	0	0	0	0	1018.6	-	0.0
16/01:30am	3.8	0.7	0.0	76	1.5	N	6	7	3	4	1019.1	-	0.0
16/01:00am	6.0	2.3	0.0	65	2.4	N	9	13	5	7	1019.3	-	0.0
16/12:30am	6.8	3.4	-0.5	59	2.9	N	7	9	4	5	1019.4	-	0.0
16/12:00am	4.8	2.0	-0.3	69	2.0	NNW	4	9	2	5	1019.4	1019.6	0.0

