



return fire

Otway Fire Operations Plan for 2009-2012 is released

alcoa anglesea

environment report

october

2009



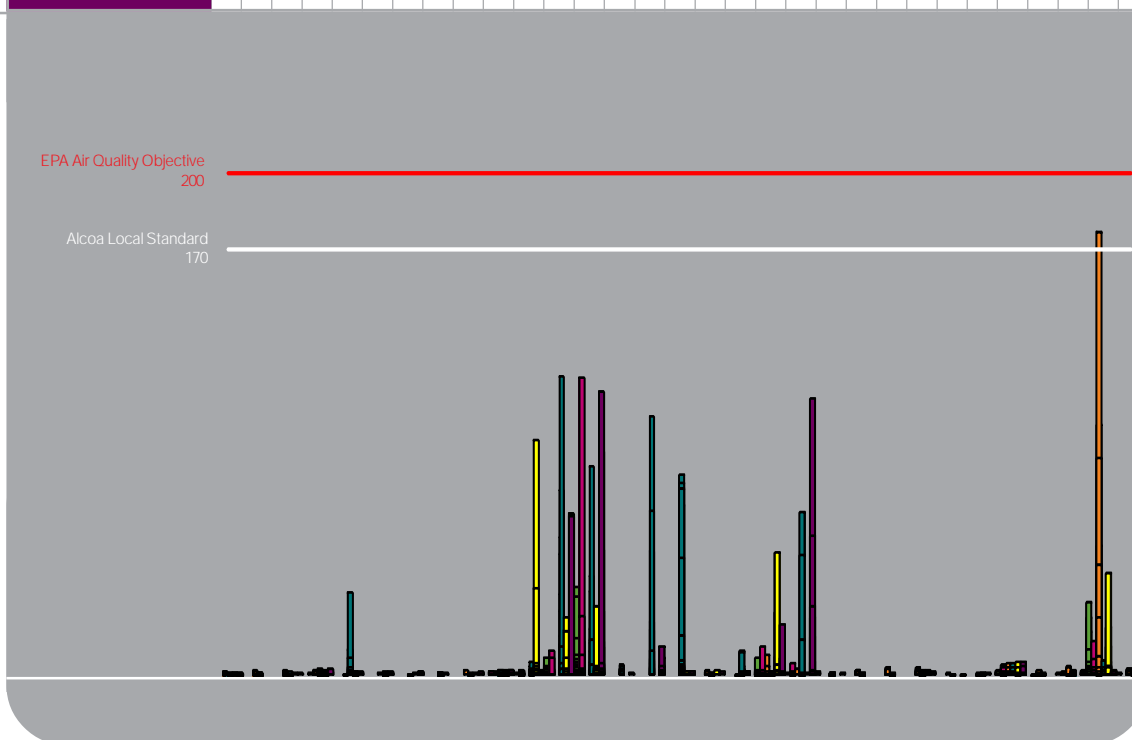
australia's aluminium

air

Air Monitoring	Average	Maximum
Stack Monitors		
Opacity g/m ³ 10-minute average	0.043	0.144
Stack SO ₂ kg/min 1-hour average Licence limit 100kg/min	71.03	80.52

Ambient Monitors	Average	Maximum
SO ₂ 1 hour ppb		
Community Centre	1	35
Primary School	1	119
Mt Ingoldsby	2	177
Scout Camp	3	119
Camp Wilkin	1	94
Camp Road	1	113

Ambient Monitors																															
SO ₂ Maximum 1 hour averages (ppb)																															
Date	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Community Centre	0	0	0	0	0	0	0	0	0	0	1	7	35	0	0	0	0	0	7	1	1	0	0	0	0	0	2	0	1	29	1
Primary School	0	0	0	1	0	0	0	0	0	1	1	9	119	0	0	0	0	0	11	4	0	0	0	0	0	4	0	1	13	0	
Mt Ingoldsby	1	1	2	2	0	-	-	-	2	1	-	-	-	0	0	1	2	0	8	2	0	2	3	3	0	1	4	2	4	177	2
Scout Camp	0	0	1	2	33	0	0	0	0	2	5	119	83	4	103	80	1	9	1	65	1	0	0	2	0	0	4	1	2	5	1
Camp Wilkin	1	0	1	2	1	1	1	1	1	2	94	23	27	0	0	1	2	1	49	1	0	0	0	2	0	1	5	0	0	40	0
Camp Road	1	0	1	2	1	1	-	0	1	2	2	64	113	1	11	1	1	0	20	110	1	1	0	1	0	0	5	0	2	2	1



water



Water Storage

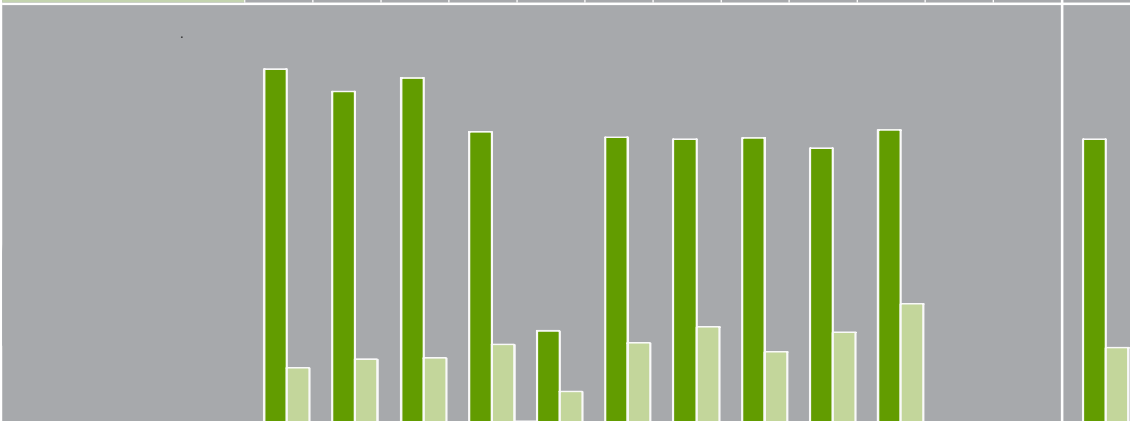
Barwon Water storage levels for the Geelong system at 35% capacity. Stage 4 restrictions apply with a Daylight Savings exemption to permit limited residential garden watering.

Water Discharge	October	Total
ML		
Ashponds (SP1)	158	1310
Mine (SP4)	0	0

Water Monitoring 19/10/2009	SP1 Ashpond		SP4 Mine		SP3 Final	
	EPA limit	Lab Result	EPA limit	Lab Result	EPA limit	Lab Result
pH	4-10	7.6	3-9	no	5-9	7.1
Susp. Solids	100	< 4	100	discharge	30	< 4
Colour	50	4	50	at	50	5
Aluminium	10	0.23	10	time	5.5	0.21
Iron	10	0.13	20	of	4.0	0.029
Zinc	0.4	0.019	2.0	sampling	0.30	0.010

WATER WATER USAGE PER MONTH (ML)

Date	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
Town Water	2.5	1.0	1.5	1.5	2.9	1.6	0.6	1.1	1.4	0.7			14.8
Bore Water	288	270	281	237	76	233	231	232	224	239			2311
Mine Water	46	53	54	65	27	66	79	59	75	98			622



Prescribed burning



While every effort is made to prevent fires from starting, Victoria will always experience bushfires from either natural or human causes. These bushfires can threaten human life, property, assets and, at times, the environment. One way of protecting assets and also limiting the spread and severity of bushfires is by strategically reducing the 'fuel' in our parks and forests. Fuel reduction burns are fires of low intensity used to remove the fine, more flammable fuel. By doing this, a bushfire that either burns into a fuel reduced area, or starts in one will have a lower flame height, reduced intensity and will spread at a slower rate, making fire fighting easier.

The term 'prescribed burning' refers to the use of fire to achieve planned burn land and resource management objectives:

- > fuel management: protecting life and property from uncontrolled wildfire through development and implementation of strategies for fire prevention and suppression;
- > flora and fauna management: active use of controlled fire to alter habitat structure and plant and animal community composition to achieve biodiversity conservation outcomes.

The Department of Sustainability and Environment and Parks Victoria have just released the Otway Fire Operations Plan for 2009/10 to 2011/12.

The Anglesea Heath Consultative Committee, of which Alcoa Anglesea is a member, provided comments on the draft plan, and some of these comments were incorporated into the final version. The plan nominates four burns for the Anglesea area in 2009/10. These include:

- > Anglesea ovals (41 ha)
- > Gum Flats Road (735 ha)
- > Messmate Track (239 ha)
- > Pipeline Track (75 ha)

Conducting prescribed burns is not without risk. However, the risks associated with fuel reduction burning under controlled conditions are far outweighed by the increased risk of bushfire if no fuel reduction has occurred.

The Otway Fire Operations Plan can be viewed at www.dse.vic.gov.au.

Within the community there exists a range of views regarding the role of fire. These range from the belief that there should be no interference to natural fire patterns through to the belief that fire should be used freely as a management tool because it is a natural part of the forest ecology. Regardless of viewpoint, fire was, is and will remain part of ecological Australia.

PLANT OF THE ANGLESEA HEATH

COMMON FLAT PEA (*Platylobium obtusangulum*)

Platylobium...from the Greek, *platy*, broad and flat, and *lob*, lobes referring to the broad, flat lobe shaped seed pods
obtusangulum... from Greek, *obtusus*, meaning blunt, dull or obtuse and *angulum*, crooked or angular, referring to the shape of the leaves.

- Size: 0.6 - 1m H x 1m W
- Form: wiry, upright or scrambling shrub
- Habitat: Dry and valley sclerophyll forests, sclerophyll and redgum woodlands, tea-tree heath and grassy low open forest.
- Foliage: leaves are triangular or arrow shaped to 30 mm long with 1 - 3 sharp points
- Flowers: yellow and red pea flowers on short stalks
September - December

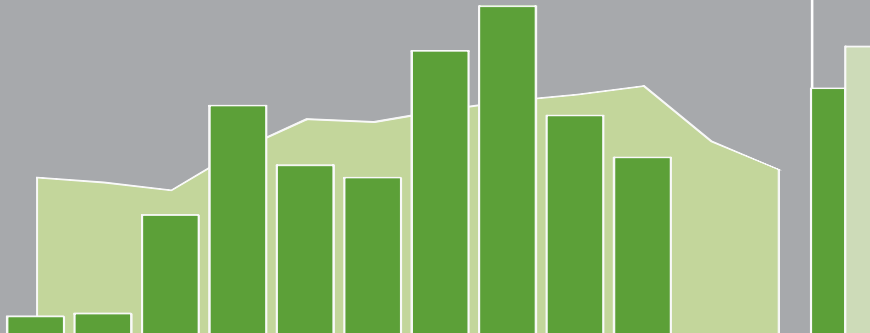
PLATYLOBIUM OBTUSANGULUM



LAND

RAINFALL (mm)

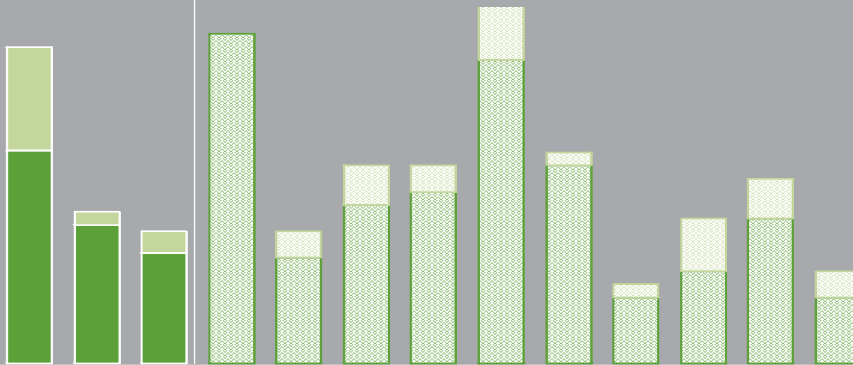
Month	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
2009 Rainfall	5.0	5.8	33.4	63.8	47.2	43.8	79.2	91.6	61.0	49.4			480.2
1968-2008 Average	43.9	42.5	40.4	51.6	60.2	59.5	62.6	65.2	67.0	69.4			562.3



WATER

TOWN WATER USE (ML)

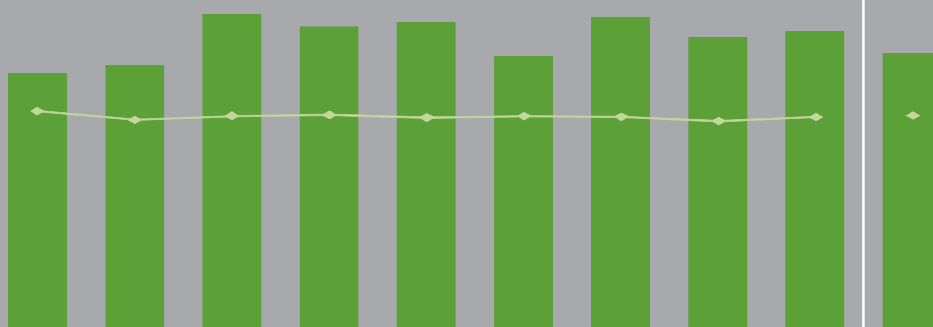
	2000	2008	2009	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Process	23.9	15.5	12.4	2.5	0.8	1.2	1.3	2.3	1.5	0.5	0.7	1.1	0.5		
Amenity	11.6	1.5	2.4	0.0	0.2	0.3	0.2	0.6	0.1	0.1	0.4	0.3	0.2		



AIR

GREENHOUSE GAS (GHG) TOTAL (Mt) & GHG EMISSION EFFICIENCY (t/MWh)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
GHG Mt	1.23	1.27	1.50	1.45	1.47	1.31	1.49	1.40	1.42	1.32
◆ GHG t/MWh	1.24	1.19	1.21	1.21	1.20	1.21	1.20	1.18	1.20	1.21



environmental improvement

Environmental Management Targets	October	2009 Total	Forecast	2009 Target
Reportable Environmental Incidents	0	1	1	0
Env Near Miss vs Env Incident Run Rate (ratio)	4	2.1	2.1	2.5
Monthly EHS ASAT Audit Completion (%)	100	93	93	90

Air Emission Targets	October	2009 Total	Forecast	2009 Target
Ambient SO ₂ (no. readings > 200ppb)	0	2	2	0
Stack SO ₂ (no. hrs > 100kg/min)	0	0	0	0
SO ₂ Load Reductions (lost MWh)	1620	31675	38009	N/A
GHG Efficiency (t CO ₂ e/MWh)	1.16	1.21	1.21	1.20
Opacity (10 min av > 0.25g/m ³ normal operation)	0	0	0	0

Water Targets	October	2009 Total	Forecast	2009 Target
Town Water (ML)	0.7	14.9	17.9	14.2
Bore Water (ML)	239	2311	2773	4000

Waste Targets	October	2009 Total	Forecast	2009 Target
Waste to Landfill (t)	0.0	11.64	14.0	8.0
Solid Prescribed Waste to Landfill (t)	0.0	0.0	0.0	0.0

Mine Rehabilitation Targets	2009 Total	2009 Target
2009 Area to Clear (ha)	0.245	0.0
2009 Area to Rehabilitate (ha)	0.658	0.0

OUR ENVIRONMENT AND OUR EMPLOYEE

Hi Lisa, I understand you are the Chairperson of the Anglesea Heath Consultative Committee. What was your role in regard to the Otway Fire Operations Plan?

I attended the draft Fire Operations Plan community consultation meeting to hear how the plan would be implemented, and I also co-ordinated the response to DSE on behalf of the Anglesea Heath Consultative Committee. We had some changes that we wanted to make to the plan. DSE listened to our reasoning for these changes, and some were included in the plan.

Tell me a little about the Anglesea Heath Consultative Committee.

The committee is made up of representatives from Alcoa, Parks Victoria, ANGAIR, Deakin University, and Surf Coast Shire. The committee works to conserve the Anglesea Heath and deals with any issues that arise which affect the Heath.

...LISA MILLS

