



get green
celebrating national tree day

alcoa anglesea

environment report

2008

july



australia's aluminium

air

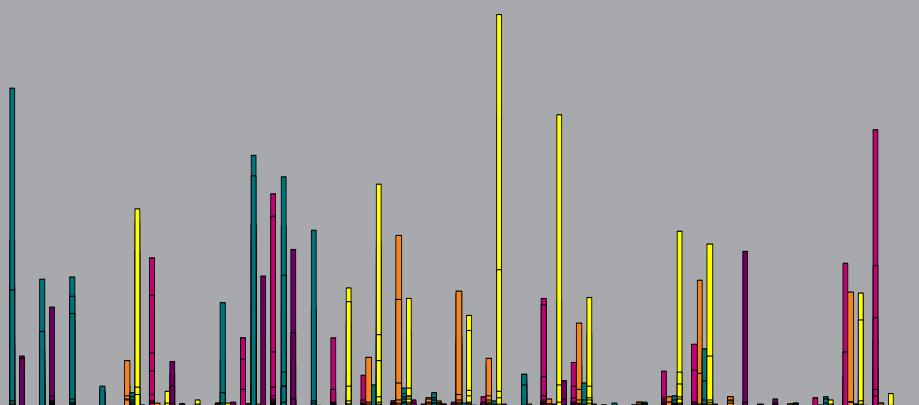
Air Monitoring	Average	Maximum
Stack Monitors		
Opacity g/m ³ 10-minute average	0.076	0.255
Stack SO ₂ kg/min 1-hour average Licence limit 100kg/min	68.86	82.78

Ambient Monitors	Average	Maximum
SO ₂ 1 hour ppb		
Community Centre	-	-
Primary School	2	110
Mt Ingoldsby	1	68
Scout Camp	4	127
Camp Wilkin	4	156
Camp Road	1	63

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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Primary School	-	-	0	0	0	59	1	0	28	85	1	28	13	2	1	2	4	1	43	18	1	1	1	15	25	0	1	1	1	57	110
Mt Ingoldsby	0	0	0	1	19	2	0	2	1	1	0	0	20	68	4	46	19	1	4	33	0	2	4	50	4	1	1	1	46	2	0
Scout Camp	67	127	52	0	8	1	0	42	100	92	70	1	3	9	6	2	3	13	1	8	10	0	2	5	3	23	0	0	4	3	1
Camp Wilkin	-	-	0	0	79	6	3	2	1	0	1	47	89	43	3	36	156	1	116	44	0	0	1	70	65	1	0	0	1	45	5
Camp Road	20	40	0	0	1	18	0	2	52	63	0	0	0	3	1	1	1	0	10	1	0	0	0	1	62	3	0	0	1	0	11

EPA Air Quality Objective
200

Alcoa Local Standard
170



water



Water Storage

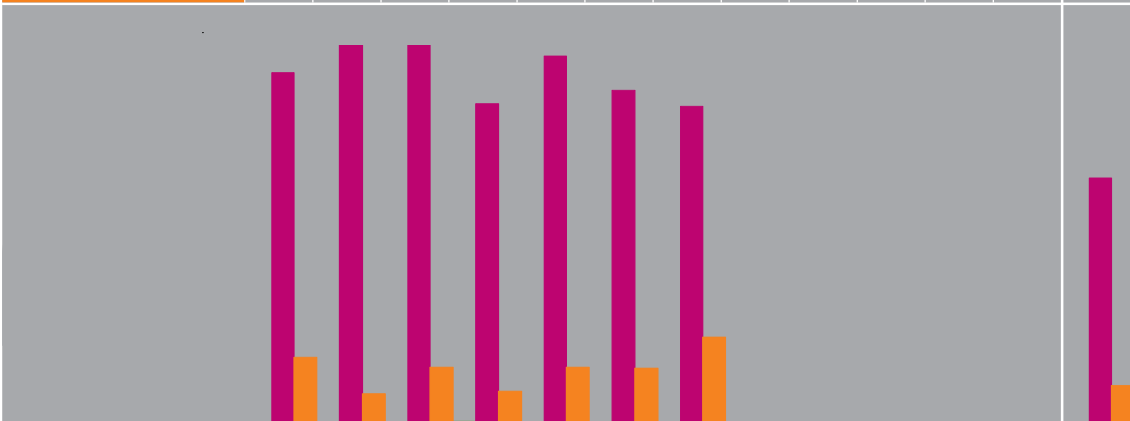
Barwon Water storage levels for the Geelong system at 29.1% capacity. Stage 4 winter water restrictions with an exemption to permit limited residential garden watering are in force.

Water Discharge	July	Total
ML		
Ashponds (SP1)	144	983
Mine (SP4)	0	0.12

Water Monitoring 23/07/2008	SP1 Ashpond		SP4 Mine		SP3 Final	
	EPA limit	Lab Result	EPA limit	Lab Result	EPA limit	Lab Result
pH	4-10	8.5	3-9	no	5-9	7.5
Susp. Solids	100	8	100	discharge	30	< 4
Colour	50	4	50	at	50	5
Aluminium	10.00	0.31	10	time	5.50	0.06
Iron	10.00	0.46	20	of	4.00	0.04
Zinc	0.40	0.01	2.0	sampling	0.30	< 0.01

WATER WATER USAGE PER MONTH (ML)

Date	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
Town Water	1.4	0.9	0.9	2.2	1.0	0.9	1.7						9.0
Bore Water	279	304	305	254	292	265	252						1951
Mine Water	53	24	45	26	45	44	69						306



national tree day



National Tree Day is Australia's biggest community tree-planting event and a day for all Australians to help out by planting native trees and shrubs at a Tree Day site in their local area.

Since Tree Day started in 1996 more than 1.5 million volunteers have planted over 11.5 million native trees and shrubs! And we can add another 400 to that impressive total!

Usually held on the last Sunday of July Anglesea got in early for National Tree Day this year, holding it's planting day on July 15.

Braving the winter chill, seven keen employees donned beanies and scarves and planted around 400 native shrubs on Alcoa's freehold land at Fraser Avenue in Anglesea. Coast wattle, an unwelcome local weed, was also removed.

Fraser Avenue is a parcel of land owned by Alcoa between Coalmine Road and the Anglesea township. It is well utilised by the local community for passive recreation such as walking.

The planting undertaken by Alcoa Anglesea employees will rehabilitate an informal trail and re-direct pedestrian traffic to an adjacent walking track. Part of the Surf Coast walk alignment, the adjacent track provides for a better walking experience on a maintainable surface. Directional signage will be installed along the track in the coming weeks.

Thank you to the hard working tree planters of Nick Brockman, Grace McKenzie, Nicci Marris, David Brown, Maryann Thorp, Cameron Ingles and Elise Jeffery and thanks to Dave Ryan for delivering the hard earned morning tea.

PLANT OF THE ANGLESEA HEATH

MESSMATE (*Eucalyptus obliqua*)

Eucalyptus...from Greek, *eu*, well and *calyptos*, covered referring to the cap which covers the developing flowers

obliqua... from *obliq* meaning oblique, greater in length than in width, in reference to the shape of the leaves

Size: 4-70m H x 6-35m W
Habitat: widespread in wet, damp, valley and dry sclerophyll forests, sclerophyll woodland and grassy low open forest
Form: tall upright tree with a dense canopy
Bark: rough, stringy, fibrous bark that extends to the smallest branches
Foliage: shiny oblique leaves
Flowers: club-shaped buds, in clusters of 7-15, followed by profuse white to cream flowers

December to March
Did you know? *Eucalyptus obliqua* was the first eucalypt species described - specimens were collected in 1777 during Captain Cook's 3rd expedition, then described in 1788 by French botanist L'Heritier

MESSMATE



LAND

RAINFALL (mm)

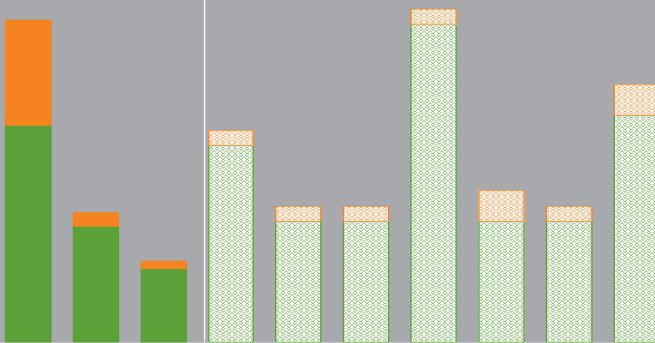
Month	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
2008 Rainfall	19.8	35.8	15.2	17.3	32.5	43.8	75.8						240.2
1968-2007 Average	44.5	42.7	41.1	52.5	61.0	59.9	62.2						363.8



WATER

TOWN WATER USE (ML)

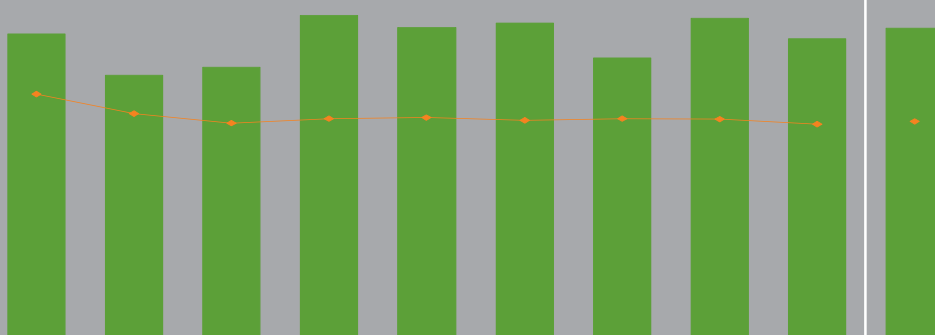
	2000	2007	2008	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Process	23.9	12.8	8.1	1.3	0.8	0.8	2.1	0.8	0.8	1.5					
Amenity	11.6	1.5	0.9	0.1	0.1	0.1	0.1	0.2	0.1	0.2					



AIR

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

	1990	2000	2001	2002	2003	2004	2005	2006	2007	2008
GHG Mt	1.42	1.23	1.27	1.50	1.45	1.47	1.31	1.49	1.40	1.44
GHG t/MWh	1.34	1.24	1.19	1.21	1.21	1.20	1.21	1.20	1.18	1.19



environmental improvement

Environmental Management Targets	July	2008 YTD	Forecast	2008 Target
Reportable Environmental Incidents	0	0	0	0
Monthly EHS ASAT Audit Completion (%)	100	100	100	90
Air Emission Targets	July	2008 YTD	Forecast	2008 Target
Ambient SO ₂ (no. readings > 200ppb)	0	0	0	0
Stack SO ₂ (no. hrs > 100kg/min)	0	0	0	0
SO ₂ Load Reductions (lost MWh)	803	9719	16661	N/A
GHG Efficiency (t CO ₂ e/MWh)	1.21	1.19	1.19	1.20
Opacity (10 min av > 0.25g/m ³ normal operation)	0	0	0	0
Water Targets	July	2008 YTD	Forecast	2008 Target
Town Water (ML)	1.7	9.0	15.4	14.2
Bore Water (ML)	252	1951	3345	2370
Waste Targets	July	2008 YTD	Forecast	2008 Target
Waste to Landfill (t)	4.5	4.5	7.7	8.0
Solid Prescribed Waste to Landfill (t)	0.0	0.0	0.0	0.0
Mine Rehabilitation Targets	July	2008 YTD	Forecast	2008 Target
2008 Area to Clear (ha)		0.0		0.0
2008 Area to Rehabilitate (ha)		0.0		0.0
2007 Mine Rehabilitation Species Richness (%)		N/A		100

OUR ENVIRONMENT AND OUR EMPLOYEE

Cameron, how did you enjoy the tree planting to celebrate National Tree Day?

It was great to get out and get our hands dirty planting some trees – particularly when you know it will benefit our freehold land and the local environment. Can't say we saw much sunshine. It was pretty chilly to start but we soon warmed up.

What would you say to others to get them out and about tree planting?

Have a go – it was really good to try something different from the jobs I do every day. It was also great to work alongside others from Anglesea that I usually don't have a lot to do with.

How do you consider the environment in your every day work?

Although I don't think of it every minute of the day, it is hard to ignore the environment - we work in an area surrounded by some pretty spectacular heathland. You see it driving to work, at work and going home again.

...CAMERON INGLES

