



who's watching who?
peregrines are back and live online

alcoa anglesea

environment report

august

2007



australia's aluminium

air

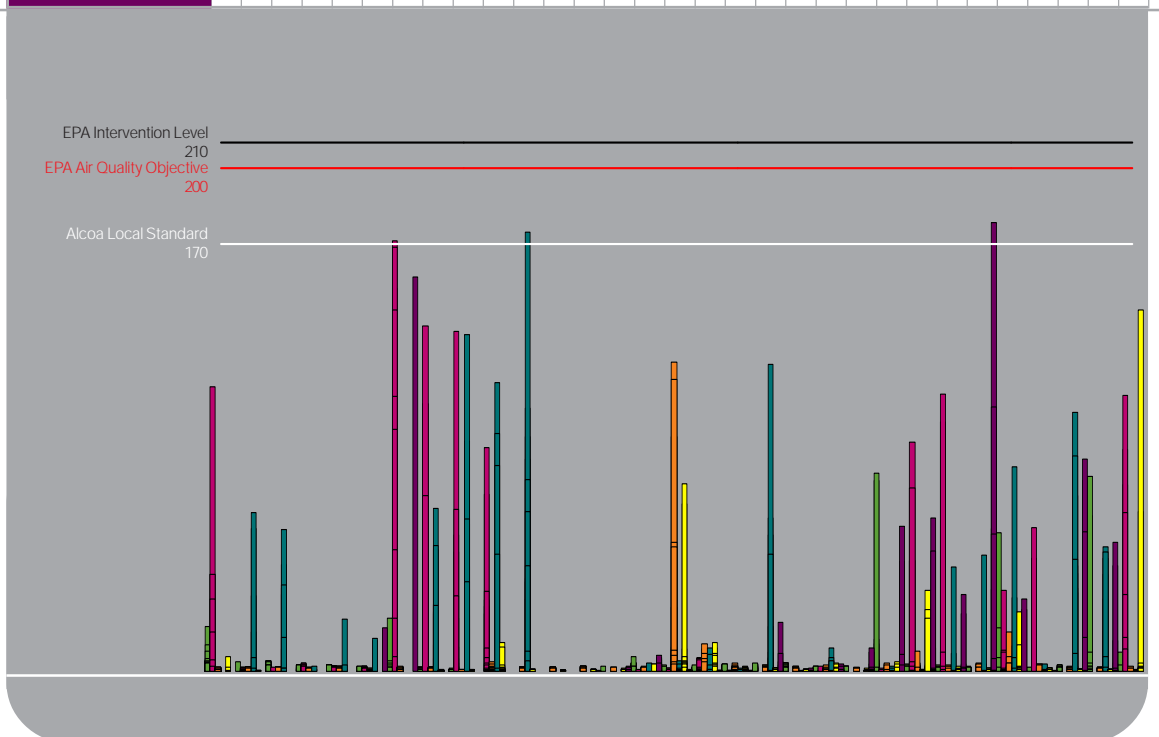
Air Monitoring	Average	Maximum
Stack Monitors		
Opacity g/m ³ 10-minute average	0.058	0.332
Stack SO ₂ kg/min 1-hour average Licence limit 100kg/min	64.62	83.46

Ambient Monitors	Average	Maximum
SO ₂ 1 hour ppb		
Community Centre	3	79
Primary School	6	171
Mt Ingoldsby	2	123
Scout Camp	14	175
Camp Wilkin	2	144
Camp Road	4	178

Ambient Monitors

SO₂ 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	18	4	4	3	3	2	21	2	1	-	-	-	-	2	6	3	3	3	3	3	2	2	79	3	2	2	55	2	3	78	8
Primary School	113	2	2	3	2	2	171	137	135	89	0	0	0	1	1	6	1	0	0	2	0	1	91	110	0	32	57	0	0	110	4
Mt Ingoldsby	2	2	2	2	2	1	2	2	1	4	2	2	2	3	123	11	3	3	2	3	2	4	8	2	3	16	3	2	2	2	1
Scout Camp	0	63	56	2	21	13	0	65	134	115	175	0	0	4	3	9	0	122	1	10	0	2	1	41	46	81	3	103	49	1	156
Camp Wilkin	6	0	0	0	0	0	0	1	1	12	1	1	1	3	74	11	2	1	1	4	1	4	32	1	1	24	1	1	1	144	2
Camp Road	-	-	-	-	-	-	-	157	-	-	-	-	-	0	2	7	1	1	0	20	0	3	9	58	61	30	178	29	0	84	51



water



Water Storage

Barwon Water storage levels for the Geelong system at 28.6% capacity. Stage 4 restrictions apply.

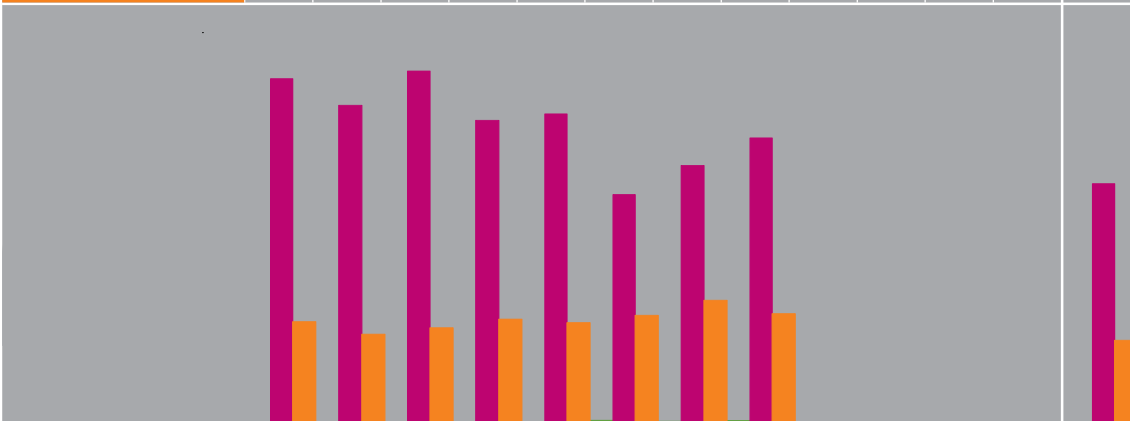
Water Discharge ML	August	Total
Ashponds (SP1)	129	1104
Mine (SP4)	0	0

Water Monitoring 21/08/2007	SP1 Ashpond		SP4* Mine		SP3 Final	
	EPA limit	Lab Result	EPA limit	Lab Result	EPA limit	Lab Result
pH	4-10	7.9	3-9	3.3	5-9	6.9
Susp. Solids	100	3	100	< 2	30	< 2
Colour	50	4	50	4	50	4
Aluminium	10.00	0.20	10.0	1.0	5.500	0.072
Iron	10.00	0.65	20.0	6.6	4.000	0.089
Zinc	0.400	0.027	2.000	0.062	0.300	0.024

* Although there was no formal discharge, a broken pipe did see a leakage of mine water at SP4 thus a full set of analysis was completed.

WATER WATER USAGE PER MONTH (ML)

Date	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
Town Water	0.7	0.7	0.9	1.1	0.9	2.3	1.7	1.9					10.2
Bore Water	274	253	280	241	246	182	205	227					1908
Mine Water	81	71	76	83	80	86	98	87					662



peregrine falcons



Spring is here and the neighbourhood won't be the same.....the Peregrine Falcons are back in town once again returning to their purpose-built nest box on the water tower at Alcoa Anglesea. And this year we get a birds eye view of all the action with the webcam live and online.

Last year in a Victorian first, Alcoa Anglesea installed a webcam on the nestbox, broadcasting the images of the Peregrine Falcon pair at Anglesea over the internet. After the fledgling Uno departed in December last year, the camera was switched off as the falcons dispersed to their non-breeding territories. The webcam at www.alcoa.com/falcons is now back online for another season providing us images of day-to-day life in the Peregrine Falcon nest from the arrival of the first egg until the last fledgling departs.

There's been plenty of action so far with almost daily updates placed on the website capturing the arrival of the pair's four eggs.

With the arrival of the fourth egg the incubation period begins. A familiar sight for the next 33-35 days will be Sheila, the female adult, in the nest box with her four eggs tucked neatly underneath as the eggs are rarely left uncovered during this time.

A quick calendar check and it looks like an expected hatching date between the 29th of September and the 1st of October. However we're not ones to count our eggs before they hatch. Despite laying four eggs last year, only one egg successfully hatched. Whilst there is no explanation for why this happened, the presence of unhatched eggs at other nests across the state suggested the cause was wider spread and may be the consequence of drought conditions. Only time will tell whether this year proves more successful.

In the meantime, stay tuned to the website for further exciting developments and observe the goings on from the safety of your office computer.

ANIMALS OF THE ANGLESEA HEATH

AUSTRALIAN KING PARROT (*Alisterus scapularis*)

Size:	43 cm
Description:	the head, breast and underside of the male are red, the females are similar to the males except that they have a completely green head and breast, both have a green back, green wings and a long green tail.
Distribution:	along the east coast and ranges of Australia from Cooktown, Queensland to Port Campbell, Victoria.
Habitat:	usually found in rainforest or wet sclerophyll forest and appears to be increasing in abundance in well-treed suburbs
Food:	forages in trees for seeds and fruit on the flip side, it's distinctive red/green feathers found in the nest box suggests it is a popular prey item for the Peregrine Falcon
Voice:	loud high pitched whistle with a rolling 'carrack' call in flight

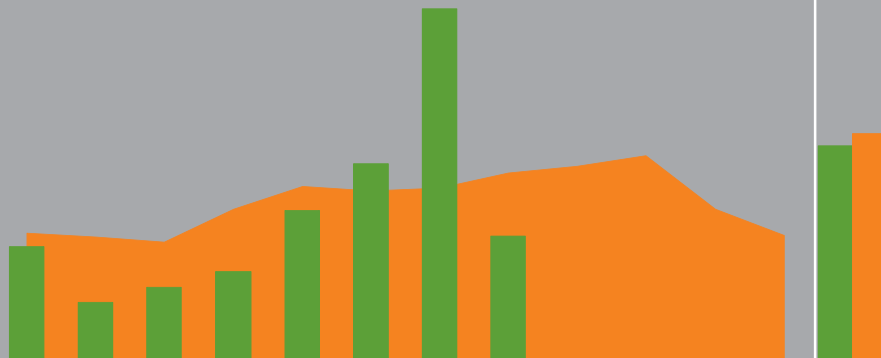
AUSTRALIAN KING PARROT



LAND

RAINFALL (mm)

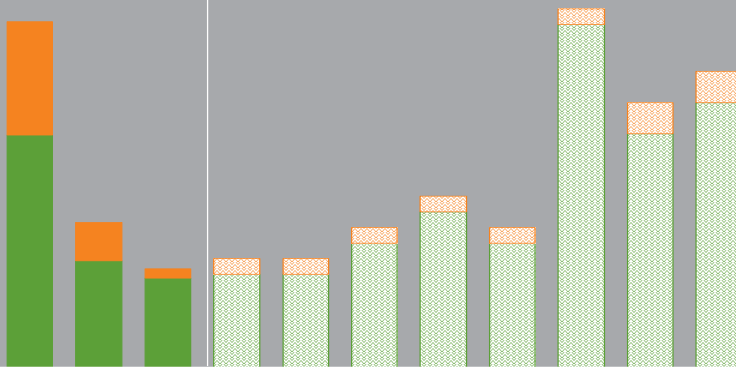
Month	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
2007 Rainfall	40.0	20.2	25.6	31.0	52.8	69.2	124.0	43.6					406.4
1968-2006 Average	44.6	43.3	41.5	53.1	61.2	59.6	60.6	65.8					429.7



WATER

TOWN WATER USE (ML)

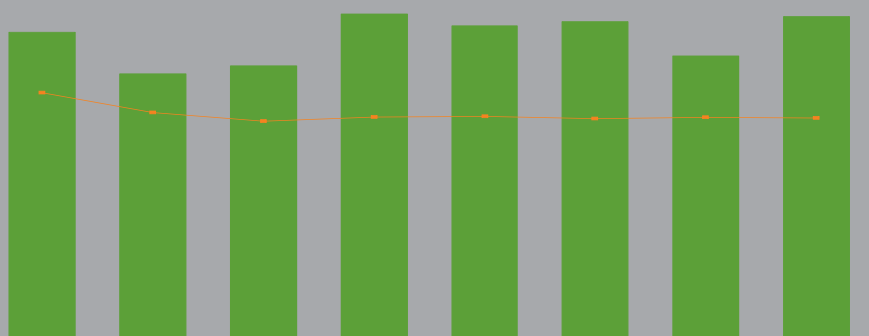
	2000	2006	2007	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Process	23.9	11.0	9.2	0.6	0.6	0.8	1.0	0.8	2.2	1.5	1.7				
Amenity	11.6	3.8	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2				



AIR

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

	1990	2000	2001	2002	2003	2004	2005	2006	2007
GHG Mt	1.42	1.23	1.27	1.50	1.45	1.47	1.31	1.49	1.38
◆ GHG. t/MWh	1.34	1.24	1.19	1.21	1.21	1.20	1.21	1.20	1.18



environmental improvement

Environmental Management Targets	August	2007 Total	Forecast	2007 Target
Reportable Environmental Incidents	0	0	0	0
Monthly EHS ASAT Audit Completion (%)	100	100	100	90
Air Emission Targets	August	2007 Total	Forecast	2007 Target
Ambient SO ₂ (no. readings > 210ppb)	0	2	3	0
Ambient SO ₂ (no. readings > 200ppb)	0	4	6	0
Stack SO ₂ (no. hrs > 100kg/min)	0	0	0	0
SO ₂ Load Reductions (lost MWh)	3193	11104	16657	N/A
GHG Efficiency (t CO ₂ e/MWh)	1.18	1.18	1.18	1.20
Opacity (10 min av > 0.25g/m ³ normal operation)	0	0	0	0
Water Targets	August	2007 Total	Forecast	2007 Target
Town Water (ML)	1.9	10.2	15.3	14.2
Bore Water (ML)	227	1909	2864	2667
Waste Targets	August	2007 Total	Forecast	2007 Target
Waste to Landfill (t)	0.0	0.0	0.0	9.0
Solid Prescribed Waste to Landfill (t)	0.0	0.0	0.0	0.0
Mine Rehabilitation Targets	2007 Total		2007 Target	
2007 Area Cleared (ha)	2.9		3.5	
2007 Area Rehabilitated (ha)	5.0		> 3.5	
2005 Mine Rehabilitation Species Richness (%)	103		100	

OUR ENVIRONMENT AND OUR EMPLOYEES..

Lee, your job seems to take you up onto the floors of the Power Station a bit, what are you doing up there?

The electrical group has equipment to service and maintain on all floors of the power station. Air blowers, oil burners, lighting, water cannons, thermocouples & critical valve controls, to name a few.

We hear you have had some interesting encounters with the site's Peregrine Falcons in the few years.

What's gone on? Recently after responding to a breakdown on the 7th floor hoist I decided to use the stairs instead of the elevator (for personal fitness reasons). As I was accessing the first step my feathered friend decided on a very swift territorial swoop, this took me by surprise. Similar happened last season whilst repairing lights on the 5th floor.

Do you have any advice for others? These birds move at very high speeds and because of plant background noise, hearing protection PPE and plant structure they can easily surprise. If your work takes you to the upper levels of the boiler keep a keen eye out for the the falcons as I'm sure that they keep a close check on us. Three point contact whilst accessing stairs is very important. Keep tools and materials in a managed fashion that reduces any risk of them falling down the structure.

...LEE SLAVEN

