



# Warrell Creek to Nambucca Heads – Pacific Highway Upgrade Project

## ENVIRONMENT PROTECTION AUTHORITY MONTHLY REPORT

■ February 2015

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Pacifico Project Number: WC2NH



A team consisting of RMS and Pacifico (ACCIONA Ferrovial JV) to upgrade the Pacific Highway at Warrell Creek to Nambucca Heads

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# 1. Introduction

Environmental Protection Licence (EPL) 20533 was issued to ACCIONA Infrastructure for the Warrell Creek to Nambucca Heads Pacific Highway Upgrade project on the 16<sup>th</sup> December 2014. Condition R1.8 of the EPL requires the licensee to provide the EPA with a monthly report containing the following information:

- a) details of all non-compliances with the conditions of this licence and measures taken, or proposed, to prevent a recurrence of such a non-compliance; and
- b) details of all discharges from the sediment basins where the water quality results exceed the limits prescribed by Condition L2.4 including the results of rainfall measurements to demonstrate compliance with Condition M4.1; and

The report referred to in this condition must be received by the EPA within 10 working days of the end of each month.

This document has been prepared to fulfil the requirements of Condition R1.8.

## 1.1 Description of Works

The project's construction activities during February 2015 were limited to the following:

- Demolition of existing structures;
- Vegetation clearing for installation of fencing;
- Installation of permanent boundary fencing;
- Vegetation clearing for access tracks;
- Vegetation clearing for sediment basins and other sediment controls;
- Excavation for sediment basins and other sediment controls;
- Threatened plant species translocation;
- Site compound establishment;
- Installation of Frog Fencing at Upper Warrell Creek;
- Geotechnical Investigations; and
- Site Survey

The works scheduled for next month include:

- Clearing and Grubbing;
- Installation of erosion and sediment controls;
- Installation of permanent boundary fencing;
- Commencement of earthworks;
- Commencement of culvert installation;
- Site compound establishment (Northern Compound);
- Geotechnical Investigations;
- Demolition of existing structures;
- Installation of temporary waterway crossings; and
- Site Survey.

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## 1.2 Consultation Activities

The project's consultation activities during February 2015 included various community letterbox drop notifications and the following:

Groups	Date	Key Topics
Environmental Review Group	17/02/15	Construction Progress, Design Update, Upcoming works, EWMS discussion, Environmental Update, Monitoring update.

### At House Noise Treatments

The At House noise treatment program is currently being managed by RMS and is not part of the ACCIONA (Pacífico) Scope of Works and Technical Criteria.

### **Upcoming community and stakeholder activities for March 2015**

- Changed traffic arrangements at Nursery Road – notification including map.
- Media release regarding upcoming speed zone, line marking and intersection changes to be provided at static display locations.
- Media release regarding upgrading of the intersection of the Pacific Highway and Old Coast Road.
- Consultation with residents regarding construction access, installation of boundary flagging, fencing, eroded controls and clearing, weed spraying, survey.
- Notification and consultation with residents regarding relocation of utilities outside the project boundary.
- Feedback on proposed Mattick Road bus turnaround closes 16 March 2015. Feedback to be incorporated into a report.

## 2. Weather

### 2.1 Discussion

The automatic recording weather station at the main site compound records rainfall totals daily at 9AM. The daily summaries for rainfall received in February at the Albert Drive compound are shown below in Table 2.1. The total rainfall received for the month is as follows: -

Month	Total monthly rainfall (Site office)
01/02/15 – 28/02/15	368.6mm

The site experienced a total of 17 rain days throughout the month of February 2015.

During February, rainfall received on site was higher than the February monthly average of 172.2mm. A summary of weather conditions recorded over the month for Smoky Cape by the Bureau of Meteorology is detailed below in Table 2.2.

Table 2.1 – Rainfall recorded at Albert Drive compound automated weather station

Date	Time	TOTAL Rain Gauge
1/02/2015	9:00:00	0
2/02/2015	9:00:00	153.4
3/02/2015	9:00:00	31.6
4/02/2015	9:00:00	0.8
5/02/2015	9:00:00	4
6/02/2015	9:00:00	0.2
7/02/2015	9:00:00	0
8/02/2015	9:00:00	0
9/02/2015	9:00:00	0
10/02/2015	9:00:00	1.2
11/02/2015	9:00:00	9.6
12/02/2015	9:00:00	1.8
13/02/2015	9:00:00	0
14/02/2015	9:00:00	0
15/02/2015	9:00:00	0
16/02/2015	9:00:00	0.4
17/02/2015	9:00:00	0
18/02/2015	9:00:00	3.4
19/02/2015	9:00:00	15

20/02/2015	9:00:00	12.2
21/02/2015	9:00:00	41.2
22/02/2015	9:00:00	38.2
23/02/2015	9:00:00	24.8
24/02/2015	9:00:00	7.6
25/02/2015	9:00:00	3
26/02/2015	9:00:00	0
27/02/2015	9:00:00	0
28/02/2015	9:00:00	20.2

Table 2.2: Weather conditions recorded in February 2015 at Smoky Cape by the Bureau of Meteorology.

Observations from Smoky Cape Lighthouse.

Observations from Smoky Cape Lighthouse.

Date	Day	Temps		Rain	Evap	Sun	Max wind gust		9 am					3 pm							
		Min	Max				Dir	Spd	Time	Temp	RH	Cld	Dir	Spd	MSLP	Temp	RH	Cld	Dir	Spd	MSLP
		°C	°C																		
1	Su	19.8	29.9	15.8					23.0	84	1	WSW	9		28.4		2	ESE	11		
2	Mo	18.9	27.8	34.0					20.5	95	6	SW	9		27.2	69	7	S	11		
3	Tu	18.0	21.3	27.0					18.3	96	8	SW	9		20.9	78	7	SSW	17		
4	We	16.8	27.8	7.0					19.9	72	1	SW	13		26.5	59	7	E	13		
5	Th	17.5	25.6	17.0					18.0	96	7	SSW	9		23.2	75	7	S	15		
6	Fr	17.5	26.9	2.2					21.0	66	3	SW	11		25.9	54	2	SSE	13		
7	Sa	19.4	29.6	0					20.0	72	7	SW	13		29.0	59	6	SE	7		
8	Su	19.5	29.1	0					24.1	67	1	N	7		29.0	61	2	NE	9		
9	Mo	22.0	30.6	0					24.1	85	1	SW	7		29.3	68	5	S	11		
10	Tu	21.8	30.1	0					26.1	72	5	SE	11		26.9	77	4	ESE	9		
11	We	19.5	29.3	12.0					21.0	93	6	SSW	7		28.9	64	3	ENE	11		
12	Th	20.1	29.4	3.8					23.8	78	3	SW	7		29.1	66	3	NE	15		
13	Fr	20.0	29.3	4.2					23.0	83	2	SW	7		28.7	62	5	NNE	17		
14	Sa	19.2	28.9	0.8					22.4	83	4	SSW	7		27.9	61	6	NNE	15		
15	Su	21.0	27.7	0.2					22.2	81	6	N	11		27.4	62	4	NNE	22		
16	Mo	21.8	29.2	0					25.0	63	3	NNE	15		29.0	54	1	NNE	11		
17	Tu	21.6	29.8	0					24.9	63	2	NNE	9		29.3	56	3	NNE	9		
18	We	19.0	29.7	1.8					22.2	87	5	SW	7		29.5	53	1	NNE	13		
19	Th	20.3	27.3	7.0					21.0	93	7	ENE	11		26.3	68	7	ENE	15		
20	Fr	20.0	22.5	16.8					20.7	98	8	SW	7		21.8	95	8	NE	19		
21	Sa	19.5		30.4					21.3	99	8	ESE	19		21.6	97	8	ESE	26		
22	Su		27.3												25.8	87	6	SE	9		
23	Mo	20.0	28.7	46.2					24.0	91	7	ENE	9								
24	Tu	20.5	28.0	11.2					21.2	98	8	NE	4		27.0	77	8	NE	7		
25	We	20.1	28.2	1.8					21.2	96	6	SW	9								
26	Th	20.8	28.6	0					22.3	90	1	NE	4		26.5	73	7	NE	15		
27	Fr	20.6	29.5	0					21.0	98		SW	7		29.2	69	2	ENE	11		
28	Sa	21.0	29.1	0					23.4	88	3	SW	11		28.7	68	6	NE	28		
<b>Statistics for February 2015</b>																					
Mean		19.9	28.2						22.1	84	4		9		27.0	68	4		13		
Lowest		16.8	21.3	0					18.0	63	1	NE	4		20.9	53	1	#	7		
Highest		22.0	30.6	46.2					26.1	99	8	ESE	19		29.5	97	8	NE	28		
Total				239.2																	

### 3. Surface Water Monitoring

The Surface Water Monitoring Program is still being undertaken by RMS. A set of sample results was collected by ACCIONA (Pacífico) on the 23<sup>rd</sup> February after rainfall. Field tests and laboratory samples were taken. The laboratory sample results are still

pending from Australian Laboratory Services. The field test results are available in Appendix A.

## 4. Sediment Basin Water Monitoring

One sediment basin water release occurred in February on the 10th February from B46.4 (Albert Drive Compound Sediment Basin). The sediment basin water release was compliant with the EPL release criteria. The water release test results are as follows:

Basin ID: B46.4

Date: 10.02.15

pH: 7.73

Turbidity (ntu): 2.5

Total Suspended Solids (TSS) mg/L: 4

Visible Oil and Grease: nil

Quantity released: 700kL

## 5. Noise Monitoring

Monthly routine construction noise monitoring was undertaken on the 26<sup>th</sup> February at four locations near to the construction works. It was determined that the construction noise was inaudible from each location. Noise monitoring results are indicative of background noise levels. The Noise monitoring results are available in Appendix A.

## 6. Vibration Monitoring

No vibration monitoring was conducted in February 2015.

## 7. Dust Monitoring

Dust gauges were placed at nearby sensitive receivers on the 08/01/15 – 06/02/15. Dust gauge results are available in Appendix A. The dust results received are indicative of background air quality.

## 8. Groundwater Monitoring

ACCIONA (Pacífico) have not yet taken over the Groundwater Monitoring Program from RMS. RMS collected groundwater monitoring data during February 2015.



## 9. Acoustic Investigations

No out of hours activities have been undertaken in February 2015.

## 10. Complaints

### 9.1 Summary of Complaints for the month

The following is a brief summary of one complaint received in February 2015.

A complaint was received on 14 February 2015 regarding loss in property value as a result of the highway upgrade project, concerns about how dust would be monitored during construction, the removal of houses on Old Coast Road, when a response to complaints and concerns about the proposed batch plant would be addressed and the progress of noise mitigation works.

#### *Response*

The complainant was advised that, under the Just Terms Compensation Act, Roads and Maritime Services only acquires (compensates for) land that is needed to build the upgrade project. As no acquisition of the property was required for the Warrell Creek to Nambucca Heads Pacific Highway upgrade, there was no provision under the Act to compensate for any loss in property value. In regards to dust monitoring, the complainant was advised that dust deposition gauges had been installed along the length of the project and that, under the Environmental Protection Licence issued for the project, they would provide monthly records of the dust being generated by construction work. In regards to the removal of houses, the complainant was advised that it had been carried out by workers accredited in house removal work, with WorkCover licences for removing asbestos in accordance with Australian and international standards and the requirements of NSW WorkCover (2011) *How to safely remove Asbestos Code of Practice*. In regards to the proposed batch plant, the complainant was advised that the assessment of the proposal was underway and that separate correspondence addressing all issues raised in each submission regarding the proposal would be sent to the individual respondent once finalised. In regards to the at-house noise mitigation, the complainant was advised that a representative of Roads and Maritime would contact them shortly to provide them with an update. The complainant acknowledged the advice.

## 11. Non-Compliance

### 10.1 Summary of Non-compliances

No non-compliances with the EPL conditions were recorded in February 2015.

## Appendix A – Monitoring Results

Table 1 - Surface Water Sampling Results – After rainfall

Ecosystem									
Sample ID	Units	SW01 (WCU)	SW02 (WCD)	SW03 (SCU)	SW04 (SCD)	SW05 (LWCU)	SW06 (LWCD)	SW10 (NRU)	SW11 (NRD)
Date of Sampling		23-Feb-15	23-Feb-15	23-Feb-15	23-Feb-15	23-Feb-15	23-Feb-15	23-Feb-15	23-Feb-15
Weather		Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet
<i>Field Physical data</i>									
Temperature	C	23.57	23.2	22.96	23.42	24.85	23.94	25.54	25.37
pH	pH	6.54	6.41	6.62	6.44	6.48	6.3	7.08	7.05
pHmV	pHmV	19	26	15	25	23	33	-12	-11
ORPmV	ORPmV	243	266	196	192	237	225	178	178
Conductivity	µs/cm	0.106	0.103	0.141	0.145	0.154	0.141	0.875	0.773
Turbidity	NTU	23.6	27.9	9	15.1	16.7	12	24.1	27.2
Dissolved Oxygen	mg/L	5.58	3.52	6.04	5.24	2.81	2.94	7.46	5.99
TDS		0.069	0.067	0.091	0.097	0.1	0.091	0.56	0.495

WCU = Upper Warrell Creek Upstream

WCD = Uppwer Warrell Creek Downstream

SCU = Stony Creek Upstream

SCD = Stony Creek Downstream

LWCU = Lower Warrell Creek Upstream

LWCD = Lower Warrell Creek Downstream

NRU = Nambucca River Upstream

NRD = Nambucca River Downstream

Table 2 - Noise Monitoring Results - Background

Date	Time	Location	Site ID	Laeq	LAFMAX	LAFMIN	LAF05	LAF10	LAF50	LAF90	Principal sources/ operations
26/02/2015	10:28	Cockburns Lane	1	51.1	62.6	42.7	54.8	53.4	50.3	47.4	BG: Sawmill, Traffic
26/02/2015	11:16	Letitia Close	2	49.5	78.5	30.7	47.9	45	38.3	34.7	BG: Birds, Traffic, Crickets
26/02/2015	11:51	Bald Hill Rd	3	54.6	80.3	37.2	51/7	47.1	41.9	39.4	BG: Lawn mower, traffic, residence, birds
26/02/2015	12:18	Albert Drive - O'Dells Rd	4	56.2	81.5	40.8	54.6	52.6	48.3	45	BG: Traffic, birds, dog

Table 3 - Dust monitoring results - Background

DDG ID		DDG1	DDG2	DDG3	DDG4	DDG5	DDG6	DDG7	DDG A1	DDG A2	
Jan-15	Date of Sampling	6-Feb-15	6-Feb-15	6-Feb-15	6-Feb-15	6-Feb-15	6-Feb-15	6-Feb-15	6-Feb-15	6-Feb-15	
	Total Soluble Matter	g/m <sup>2</sup> .month mg	2.9 50	2.7 45	1.7 30	1.8 30	1.4 24	1.5 25	0.6 10	- -	- -
	Total Insoluble Matter	g/m <sup>2</sup> .month mg	0.6 11	1.8 30	1.6 27	0.7 12	0.5 8	1.1 19	0.6 10	- -	- -
	Total Solids	g/m <sup>2</sup> .month mg	2.5 61	4.5 75	3.3 57	2.5 42	1.9 32	2.6 44	1.2 20	- -	- -
	Arsenic	mg/L	NA	NA	NA	NA	NA	NA	NA	<0.001	<0.001
	Comments	Overtopped	Overtopped	Overtopped	Overtopped	Overtopped	Overtopped	Overtopped	Overtopped	Overtopped	Overtopped