



ISO 9001 ISO 14001 IS 18001
Certified Company

Kumarasamy Raja Nagar - 521457
Jaggayyapet Mandal, Krishna District,
Andhra Pradesh, India
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THE RAMCO CEMENTS LIMITED

(formerly known as Madras Cements Ltd.)

RCL/MoEF&CC/45/2017-18

08.09.2017

The Director (Non-Coal Mining),
IA Division,
Ministry of Environment, Forests and Climate Change (MoEF&CC),
Indira Paryavarn Bhavan,
Jor Bagh Road, Jor Bagh,
3rd Floor, Vayu Wing,
New Delhi - 110 003.

Respected Sir,

Sub: Submission of additional information - Request for Environmental Clearance order for Ramco Budawada Limestone Mine - Agenda No. 2.25 dated 20.09.2016 - Reg.

Ref: EAC minutes for 10th Meeting of the Reconstituted Committee of EAC for Environmental Appraisal of Mining Project (Non-Coal).

With reference to the above, we have presented our project to the honourable Expert Appraisal Committee (Non-Coal Mining) for grant of Environmental Clearance for our Ramco Budawada Limestone Mine for expansion of limestone production from 1.10 million TPA to 2.50 million TPA, as Agenda No. 2.25 dated 20.09.2016.

In the meeting, EAC deferred our proposal and requested for the following documents, in addition to the justification for seeking EC for expansion, for further decision on the matter by the committee:

1. *The mine lease area is complete forest land however no Schedule 1 species was reported in the area. Therefore list of flora and fauna of study area shall be authenticated by State Forest Department.*

The copy of Authenticated list of Flora & Fauna of the study area by the State Forest Department is submitted in Final EIA report as Annexure - 1 H. The same is enclosed herewith as Annexure - I. We have applied for latest Authenticated list of Flora & Fauna of the study area to the State Forest Department, Krishna Division, Vijayawada. The latest authenticated list will be submitted, accordingly.

2. *The conservation plan for Schedule 1 species, if any, shall be submitted.*

The Ecological survey carried out as part of EIA Studies indicated that there is no presence of Schedule - I Fauna in 10 km radius of the study area as the forests are predominantly scrub forests. Authenticated list of fauna also indicated that there are no schedule - I species within 10 km radius of the study area. Hence specific conservation plan could not be



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formulated. However, the following measures will be implemented to protect flora and fauna of the study area:

- Development of greenbelt around mining area.
- Fruit and Fodder Plantation of native species will be done at appropriate places in the buffer zone to meet the requirement of food for animals.
- Enrichment Planting: Wild fruit berries, shrubs and herbs will be planted to provide food and shelter to protect safe breeding areas.
- Plantation of suitable native species preferably indigenous species on degraded / waste land & open degraded forest.

Budget allocation is made for an amount of Rs 5 Lakh per annum for implementation of the above.

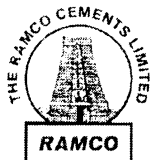
3. *The baseline data appears to be incorrect. The fresh baseline data shall be collected and re-submitted.*

Fresh baseline data is collected from the period from March, 2017 to May, 2017 and enclosed as Annexure – II. No major changes observed in the baseline data.

4. *It was noted that mine has achieved only 10% of its present production. Therefore, the request for expansion is not justified; an explanation in this regard shall be submitted.*

a) An application was made for this Mining lease in the year 2001 and we have made all our efforts for grant of lease and for obtaining the other statutory clearances to commence the mining operations. The mine was opened on 01.02.2014. The road map in chronological order for the same enclosed as Annexure – III.

b) Our mining lease area is surrounded by M/s Rashtriya Ispat Nigam Limited (RINL) mining lease area and there is no way to reach the Public Road except through Mining Lease patta lands of RINL to transport limestone to our cement plant as shown in enclosed plan (enclosed as Annexure - IV). We have been requesting the Management of RINL, State Govt., of Andhra Pradesh, Ministry of Mines, Govt., of India and Ministry of Steel, Govt., of India, regarding approach road from this mining lease to existing cement plant at Jayanthipuram through RINL lands, since 2007. M/s RINL has not granted permission to transport the limestone through their lands road. With several representations to M/s RINL and State Government of Andhra Pradesh since 2007, The Secretary (Mines), Government of Andhra Pradesh is pursuing for grant of permission from RINL, as per condition stipulated under Rule 12(s) Mineral (OAHCEM) Concession Rules, 2016. The road map in this context from 2007 to till date in chronological order is enclosed as Annexure – V for your ready reference.



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Further, we have submitted our proposal to the Secretary (Mines), Govt., of Andhra Pradesh and The CMD, M/s RINL to pay the compensation @ Rs.5.00 lakh per annum for the utilization of the above approach road (to an extent of 1.80 Ha.). We also informed that the approach road will be maintained by us periodically at our own cost.

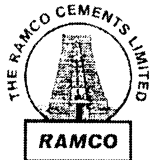
Because of the above, we are not in a position to operate the mine. We expect this will be resolved with RINL soon with the intervention of AP State Government and we shall start production from this mine soon.

Justification for seeking EC for expansion:

Reasons for seeking EC for expansion for the present mine are as follows:

- a. The present (other) operating mining leases are catering around 77 % of our total limestone requirement and the balance is the share of subject mine @ 1.10 million TPA. To increase the longevity of other operating mining leases, it is proposed to increase the capacity of subject mine and simultaneously reducing the share of other operating mines, so that all the mining leases together can operate up to a minimum of 20 years.
- b. EC obtained for 1.10 million TPA only from the subject mine initially during 2008 as the area is not fully explored due to the Final Forest Clearance is not granted. After grant of FC in 2011, the area is fully explored as per IBM norms during 2014 with 54 bore holes for a cumulative meterage of 3100 with a grid interval of 199x199 m to cover the entire area. Accordingly the reserves are established at 101.46 million MT. Hence, it is proposed to increase the capacity of the mine to 2.5 MMTPA from 1.10 MMTPA to maintain the longevity of the other working mines and in line with the available reserves of the subject mine.
- c. The quality of Limestone from the subject mine is good (High grade) while compared with our other operating mining leases. By better blending with limestone extracted from the subject mine, the raw mix design will be optimized and simultaneously, Low grade limestone from other mining leases can be utilized. This will also increase the longevity of all mining leases.

Details of present production capacities, proposed production capacities and expected life of all limestone mines are enclosed as Annexure – VI.



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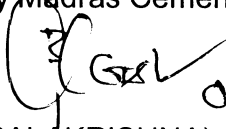
THE RAMCO CEMENTS LIMITED

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By considering all these, it is humbly requested to grant the EC order for our expansion project of Ramco Budawada Limestone Mine, at the earliest.

Thanking you,

Yours faithfully,
For The Ramco Cements Limited,
(Formerly Madras Cements Ltd)

 08/09/12

(PB GOPALAKRISHNA)
Sr. President - Manufacturing

Encl: a/a



GOVERNMENT OF ANDHRA PRADESH
FOREST DEPARTMENT

Rc No. 712/95-V6,
Dated: 29 -08-2008

Office of the Divisional Forest Officer
Krishna Division, Vijayawada.

Sri Mohammad Thayyab, S.F.S.,
Divisional Forest Officer

Sir

Sub:- Madras Cements Ltd - Authenticated list of flora & Fauna in mining lease area in core/ buffer zone of 10 Kms radius for 400 Acs. (160 ha.) of forest land in Budawada R.F area – Regarding.

Ref:-1.General Manager (Mines) Madras Cements Ltd. Lr. No. ML/BUDWD - RF/302/2008-2009, dt. 28-07-2008.

2. Forest Range Officer, Vijayawada Rc No. 189/2008, dt.29-08-2008


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Adverting to the reference 1st cited, I furnish herewith an authenticated list of flora & Fauna in mining lease area in core/ buffer zone of 10 Kms radius for 400 Acs. (160 ha.) of forest land in Budawada R.F.

Encl:- As above.

To,
The General Manager (Mines)
Madras Cements Ltd,
K.S.R. Nagar,
Jaggaiahpeta Mandal'
Krishna District,
Andhra Pradesh.


Divisional Forest Officer,
Krishna Division, Vijayawada


29/08/08


29/8/08


29/8/08

**LIST OF FLORA & FAUNA IN MINING LEASE AREA IN CORE/BUFFER ZONE OF 10 KMS RADIUS FOR
400 ACS. (160 HA.) OF FOREST LAND IN BUDAWADA R.F. AREA.**

The important local species in the core/buffer zone is listed below

Sl.No.	LOCAL NAME	BOTANICAL NAME
1	Vepa/Neem	Azadirachata Indica
2	Chinta	Tamarindus Indica
3	Rela	Cassia fistula
4	Sesham	Dalbergia Paniculate
5	Diarasana	Albizia lebbak
6	Usiri	Emblica officinalis
7	Nall Tumma	Acacia arabica
8	Thuthurbenda	Abutilon indicum
9	Pillitheegalu	Aparagus recemosus
10	Uthareni	Achyathes aspera
11	Borassus flebellifera	Thadi
12	Ravichettu	Ficus bengalensis
13	Velaga	Feronia elephantum
14	Tangedu	Cassis auriculata
15	Kanchanam	Bauhinea recemosa
16	Gurivinda	Feronia elephantum
17	Jilledu	Calotropis gigantia
18	Buruga	Bombax ambilica
	Fauna	Scientific name
		Amphibians
19	Frog	Rana hexadactyla
20	Bull Frog	Rana tigrina
		Reptiles
21	Krait	Bangaus candidus
22	Cobra	Naja naja
23	King Cobra	Naja Hanna
24	Viper	Viper russeli
25	Greentree sanke	Dendrophis sp
		Avifauana
26	Pond heron	Ardeola grayii
27	Indian Cuckoo	Megaloima merulinus
28	Rock Pigeon	Columbus livibus
29	Red Jungle Crow	Gallus gallus
30	Sparrow	Passer domesticus
31	Common kite	Mihyus migrns
32	Mayna	Acridotherus tristicus
		Mammals
33	Indian Hare	Lapus nigricolis
34	Mouse	Mus misculus
35	Jackal	Canis indicus
36	Mongoose	Herpestris edwardsinyula

The fauna is of common varieties without having any endangered species. The lease area does not have any hiding place for wild life and hence they are not spotted in the area.


29/8/08
Forest Range Officer,
Vijayawada.

COUNTER SIGNED


29/8/08
Divisional Forest Officer
Krishna Division
VIJAYAWADA

AMBIENT AIR QUALITY DATA

The Ramco Cements Limited (RCL) (formerly Madras Cements Ltd.), proposes to increase the limestone production from 1.1 to 2.5 MTPA from Ramco Budawada Limestone mine located at Survey No.: 376(P), Compartment No. 6, Budawada Reserve Forest, Jaggaiahpet Mandal, Krishna District, Andhra Pradesh.

As part of Environmental Impact Assessment study, baseline environmental monitoring was carried out for Winter season 2014 - 15, covering the months of December '14 – February '15.

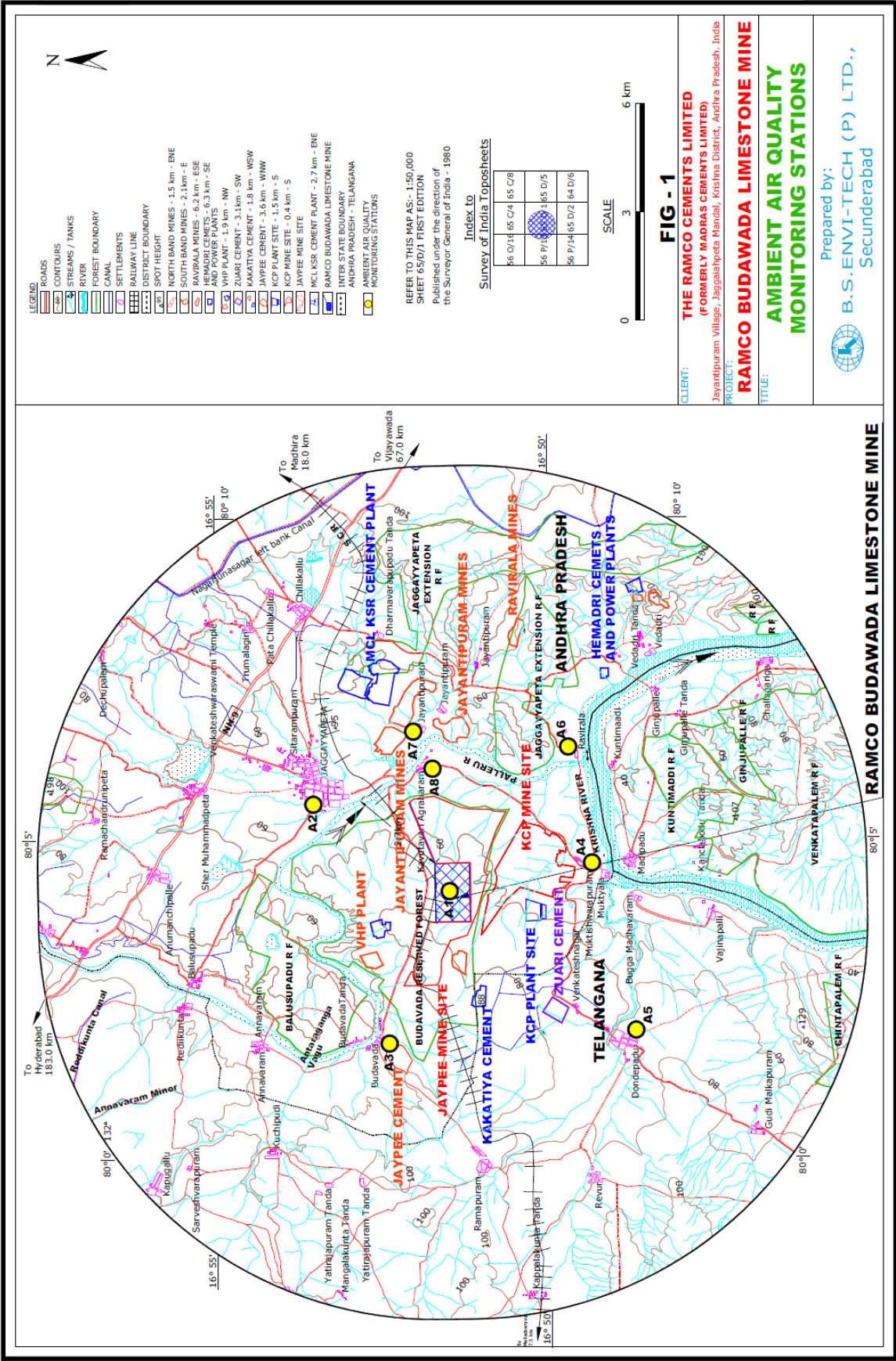
At the time of appraisal of the project by MOEF & CC, EAC desired that a fresh baseline data shall be collected and re-submitted.

Fresh baseline data was collected during Summer season, 2017 covering the Months of March to May, 2017 by M/s B S Envi-Tech (P) Ltd. Data of the same is presented in this document

Ambient air quality of the study area has been recollected at the same eight ambient air quality locations. **Fig – 1** shows the locations of the air quality stations in the study area. The following **Table – 1** gives the details of ambient air quality locations.

TABLE – 1
DETAILS OF AMBIENT AIR QUALITY MONITORING LOCATIONS

Station Code	LOCATION/ VILLAGE	With respect to MINE	
		Distance (km)	Direction
A1	Mine Site	---	---
A2	Jaggaiahpet	3.0	NE
A3	Budawada	3.5	WNW
A4	Mukteswarapuram	3.1	S
A5	Dondapadu	5.0	SW
A6	Ravirala	4.2	SE
A7	Jayanthipuram	3.6	E
A8	Kavutavari Agraharam	2.6	E



BASELINE AMBIENT AIR QUALITY CONCENTRATIONS

The summary of AAQ data is given below

TABLE - 2

Summary of Ambient Air Quality ($\mu\text{g}/\text{m}^3$) – Summer Season – 2017

Code No	Location Name	98 th Percentile values			
		PM ₁₀	PM _{2.5}	SO ₂	NO _x
A1	Mine Site	73.1	33.4	12.6	13.4
A2	Jaggiahpet	80.7	38.3	12.9	13.7
A3	Budawada	68.4	32.5	11.3	12.9
A4	Mukteswarapuram	60.2	26.9	12.4	13.0
A5	Dondapadu	72.3	29.8	12.7	13.2
A6	Ravirala	65.6	32.7	10.9	12.5
A7	Jayanthipuram	71.5	31.6	11.3	12.4
A8	Kavutavari Agraharam	77.9	34.2	10.5	11.8

Note: Free silica was found to be nil in Particulate Matter (PM₁₀)

The statistical data giving 98th percentile values, Maximum, Minimum and average values along with date wise data of PM₁₀, PM_{2.5}, SO₂, and NO_x during Summer Season '2017 is given in **Table - 3**.

TABLE – 3
SUMMARY OF AMBIENT AIR QUALITY IN THE STUDY AREA

CODE	PERCENTILE VALUES ($\mu\text{g}/\text{m}^3$)										$\mu\text{g}/\text{m}^3$		
	10	20	30	40	50	60	70	80	90	98	MAX	MIN	AVG
Respirable Particulate Matter (PM10)													
A1	57.4	59.1	60.4	62.3	63.6	64.9	66.9	69.3	72.5	73.1	73.4	56.2	64.8
A2	50.8	55.2	58.2	62.7	65.7	68.7	72.1	75.6	79.2	80.7	80.9	49.1	65.0
A3	48.9	51.9	53.5	56.6	58.1	60.0	62.8	64.9	67.5	68.4	69.3	48.0	58.7
A4	42.9	45.8	47.3	49.6	51.3	52.9	55.4	57.1	59.6	60.2	61.4	42.5	52.0
A5	52.6	55.2	57.1	59.9	61.7	63.7	66.4	68.5	71.1	72.3	73.2	51.2	62.2
A6	46.8	49.4	51.2	53.7	55.8	57.6	60.4	62.1	65.0	65.6	66.8	45.6	56.2
A7	51.5	54.6	56.7	59.3	61.2	63.2	65.9	67.7	70.6	71.5	72.5	51.3	61.8
A8	49.5	54.3	57.4	62.1	64.1	66.8	70.5	73.0	76.7	77.9	79.2	48.2	63.7
Particulate Matter (PM2.5)													
A1	25.6	26.7	27.3	28.6	29.3	30.0	31.1	31.9	33.2	33.4	33.7	25.0	29.5
A2	24.6	27.1	28.1	30.4	31.9	33.3	35.4	36.9	38.0	38.3	38.9	23.1	31.0
A3	21.7	23.3	24.3	25.9	26.7	27.9	29.3	30.4	32.0	32.5	33.0	21.3	27.1
A4	21.6	22.4	22.9	23.7	24.1	24.6	25.4	25.9	26.6	26.9	27.1	21.4	24.3
A5	20.3	22.1	23.1	24.6	25.7	26.7	28.1	28.9	29.3	29.8	30.2	20.2	25.2
A6	22.5	23.7	24.9	26.5	27.6	28.7	30.3	31.2	32.1	32.7	33.5	21.3	27.4
A7	26.5	27.3	27.8	28.5	29.0	29.5	30.2	30.7	31.5	31.6	32.0	26.2	29.1
A8	24.8	26.1	27.0	28.3	29.2	30.1	31.5	32.4	33.7	34.2	34.6	24.5	29.4
Sulfur Dioxide (SO₂)													
A1	9.6	10.2	10.5	11.0	11.3	11.5	12.0	12.2	12.5	12.6	12.7	9.4	11.1
A2	8.6	9.2	9.5	10.1	10.5	10.9	11.5	11.9	12.4	12.9	13.2	8.3	10.8
A3	8.5	9.1	9.3	9.6	9.8	10.2	10.5	10.7	11.0	11.3	11.4	8.4	9.9
A4	9.2	9.5	9.8	10.2	10.4	10.7	11.0	11.3	11.9	12.4	12.6	8.9	10.9
A5	8.2	8.9	9.2	9.8	10.2	10.5	11.2	11.6	12.2	12.7	13.2	8.1	10.7
A6	8.1	8.6	9.0	9.4	9.7	9.9	10.3	10.5	10.8	10.9	11.3	8.0	9.7
A7	8.3	8.7	9.3	9.6	9.8	10.2	10.5	10.7	11.2	11.3	12.0	8.2	10.1
A8	8.4	9.0	8.9	9.2	9.4	9.6	9.9	10.1	10.4	10.5	10.6	8.3	9.5
Oxides of Nitrogen (Nox)													
A1	10.9	11.4	11.6	11.9	12.3	12.5	12.8	13.0	13.3	13.4	14.0	10.8	12.4
A2	9.7	10.3	10.6	11.2	11.6	12.1	12.5	12.9	13.5	13.7	13.9	9.5	11.7
A3	9.9	10.4	10.7	11.1	11.5	11.8	12.2	12.5	12.8	12.9	13.2	9.7	11.5
A4	10.1	10.5	10.8	11.2	11.4	11.7	12.1	12.4	12.9	13.0	13.7	9.8	11.8
A5	9.3	9.7	9.9	10.4	10.8	11.1	11.5	12.2	13.0	13.2	13.9	9.2	11.6
A6	9.4	9.8	10.1	10.6	10.9	11.2	11.7	11.9	12.4	12.5	12.7	8.9	10.9
A7	9.3	9.6	10.4	10.7	11.0	11.3	11.6	11.8	12.3	12.4	13.2	9.0	11.2
A8	9.2	9.5	9.7	10.0	10.2	10.4	10.7	10.9	11.5	11.8	12.0	9.1	10.6

A1	Mine Site	A5	Dondapadu
A2	Jaggiahpet	A6	Ravirala
A3	Budawada	A7	Jayanthipuram
A4	Mukteswarapuram	A8	Kavutavari Agraharam

AMBIENT AIR QUALITY DATA ($\mu\text{g}/\text{m}^3$)

Client : The RAMCO Cement Ltd
Project : Budawada Limestone Mine
Season : Summer Season 2017
Period : March'17 - May'17
Station : Mine Site

Code : A-1

Date of sampling	PM₁₀	PM_{2.5}	SO₂	NO_x	CO (ppm)
March-2017					
01/03/2017	66.2	30.8	10.3	11.5	<1
02/03/2017	59.1	26.7	12.4	13.2	<1
08/03/2017	67.5	31.5	12.2	13.0	<1
09/03/2017	70.6	32.3	10.7	11.7	<1
15/03/2017	64.9	30.0	10.8	11.8	<1
16/03/2017	59.7	27.1	10.0	11.3	<1
22/03/2017	72.5	33.2	11.2	12.1	<1
23/03/2017	58.2	26.3	10.2	11.4	<1
April-2017					
03/04/2017	69.3	31.9	12.0	12.8	<1
04/04/2017	61.6	28.2	11.7	12.6	<1
10/04/2017	57.4	25.6	12.6	13.4	<1
11/04/2017	56.2	25.0	12.1	12.9	<1
17/04/2017	57.9	26.0	9.6	10.9	<1
18/04/2017	73.4	33.7	11.5	12.5	<1
24/04/2017	63.0	28.9	11.4	12.4	<1
25/04/2017	65.6	30.3	9.8	11.2	<1
May-2017					
01/05/2017	64.3	29.7	10.5	11.6	<1
02/05/2017	61.0	27.8	11.3	12.3	<1
08/05/2017	60.4	27.3	11.9	12.7	<1
09/05/2017	62.3	28.6	12.7	14.0	<1
15/05/2017	71.8	32.6	9.4	10.8	<1
16/05/2017	63.6	29.3	12.5	13.3	<1
22/05/2017	73.1	33.4	11.0	11.9	<1
23/05/2017	66.9	31.1	12.3	13.1	<1

AMBIENT AIR QUALITY DATA ($\mu\text{g}/\text{m}^3$)

Client : The RAMCO Cement Ltd.
Project : Budawada Limestone Mine
Season : Summer Season 2017
Period : March'17 - May'17
Station : Jaggaiahpet

Code : A-2

Date of sampling	PM ₁₀	PM _{2.5}	SO ₂	NO _x	CO (ppm)
March-2017					
01/03/2017	65.7	31.9	12.4	13.5	<1
02/03/2017	56.5	27.9	9.2	10.3	<1
08/03/2017	79.2	38.0	11.5	12.5	<1
09/03/2017	80.9	38.9	11.9	12.9	<1
15/03/2017	73.5	36.2	10.3	11.4	<1
16/03/2017	49.1	23.1	12.1	13.1	<1
22/03/2017	58.2	28.1	9.7	10.8	<1
23/03/2017	62.7	30.4	9.3	10.5	<1
April-2017					
03/04/2017	53.7	26.8	12.3	13.3	<1
04/04/2017	70.2	34.0	8.7	9.9	<1
10/04/2017	50.8	24.6	10.7	11.8	<1
11/04/2017	59.7	28.3	12.9	13.7	<1
17/04/2017	68.7	33.3	10.9	12.1	<1
18/04/2017	55.2	27.1	8.3	9.5	<1
24/04/2017	64.2	31.2	10.1	11.2	<1
25/04/2017	52.1	25.9	9.9	11.0	<1
May-2017					
01/05/2017	77.4	37.9	13.2	13.9	<1
02/05/2017	67.2	32.6	9.5	10.6	<1
08/05/2017	71.7	34.7	11.1	12.2	<1
09/05/2017	61.3	29.7	11.3	12.4	<1
15/05/2017	72.1	35.4	8.6	9.7	<1
16/05/2017	75.6	36.9	10.5	11.6	<1
22/05/2017	76.2	37.6	8.9	10.0	<1
23/05/2017	80.7	38.3	11.7	12.7	<1

AMBIENT AIR QUALITY DATA ($\mu\text{g}/\text{m}^3$)

Client : The RAMCO Cement Ltd.
Project : Budawada Limestone Mine
Season : Summer Season 2017
Period : March'17 - May'17
Station : Budawada

Code : A-3

Date of sampling	PM ₁₀	PM _{2.5}	SO ₂	NO _x	CO (ppm)
March-2017					
01/03/2017	55.3	25.3	10.3	11.9	<1
02/03/2017	68.4	32.5	8.7	10.2	<1
08/03/2017	52.6	23.8	8.5	9.9	<1
09/03/2017	50.2	22.6	9.5	11.0	<1
15/03/2017	59.2	27.4	9.3	10.7	<1
16/03/2017	58.1	26.7	11.4	13.2	<1
22/03/2017	69.3	33.0	9.1	10.4	<1
23/03/2017	53.5	24.3	9.8	11.5	<1
April-2017					
03/04/2017	65.6	31.0	11.3	12.9	<1
04/04/2017	62.8	29.3	10.6	12.3	<1
10/04/2017	48.0	21.3	8.4	9.7	<1
11/04/2017	64.9	30.4	10.5	12.2	<1
17/04/2017	61.9	28.9	10.8	12.6	<1
18/04/2017	56.6	25.9	9.2	10.5	<1
24/04/2017	67.5	32.0	8.6	10.1	<1
25/04/2017	48.9	21.7	11.0	12.8	<1
May-2017					
01/05/2017	57.2	26.4	9.4	10.8	<1
02/05/2017	66.5	31.5	10.2	11.8	<1
08/05/2017	51.9	23.3	10.4	12.0	<1
09/05/2017	60.0	27.9	10.9	12.7	<1
15/05/2017	63.7	29.8	9.7	11.3	<1
16/05/2017	60.9	28.4	10.7	12.5	<1
22/05/2017	54.4	24.9	9.9	11.6	<1
23/05/2017	49.5	22.3	9.6	11.1	<1

AMBIENT AIR QUALITY DATA ($\mu\text{g}/\text{m}^3$)

Client : The RAMCO Cement Ltd.
Project : Budawada Limestone Mine
Season : Summer Season 2017
Period : March'17 - May'17
Station : Mukteswarapuram

Code : A-4

Date of sampling	PM ₁₀	PM _{2.5}	SO ₂	NO _x	CO (ppm)
March-2017					
01/03/2017	46.3	22.6	9.3	10.2	<1
02/03/2017	45.8	22.4	11.6	12.7	<1
08/03/2017	61.4	27.1	9.4	10.3	<1
09/03/2017	52.1	24.3	9.8	10.8	<1
15/03/2017	47.3	22.9	10.8	11.8	<1
16/03/2017	54.6	25.1	12.6	13.7	<1
22/03/2017	47.9	23.1	11.3	12.4	<1
23/03/2017	59.6	26.6	11.0	12.1	<1
April-2017					
03/04/2017	56.2	25.8	10.6	11.6	<1
04/04/2017	57.9	26.1	11.2	12.3	<1
10/04/2017	44.6	22.1	10.9	12.0	<1
11/04/2017	52.9	24.6	12.4	13.0	<1
17/04/2017	51.3	24.1	9.5	10.5	<1
18/04/2017	57.1	25.9	10.4	11.4	<1
24/04/2017	42.5	21.4	10.2	11.2	<1
25/04/2017	53.7	24.8	9.7	10.6	<1
May-2017					
01/05/2017	50.4	23.9	11.4	12.5	<1
02/05/2017	42.9	21.6	10.1	11.0	<1
08/05/2017	55.4	25.4	11.9	12.9	<1
09/05/2017	43.1	21.9	8.9	9.8	<1
15/05/2017	58.7	26.5	9.2	10.1	<1
16/05/2017	60.2	26.9	10.3	11.3	<1
22/05/2017	48.8	23.2	10.0	10.9	<1
23/05/2017	49.6	23.7	10.7	11.7	<1

AMBIENT AIR QUALITY DATA ($\mu\text{g}/\text{m}^3$)

Client : The RAMCO Cement Ltd.
Project : Budawada Limestone Mine
Season : Summer Season 2017
Period : March'17 - May'17
Station : Dondapadu

Code : A-5

Date of sampling	PM₁₀	PM_{2.5}	SO₂	NO_x	CO (ppm)
March-2017					
03/03/2017	53.1	21.2	8.4	9.5	<1
04/03/2017	56.3	22.6	9.2	9.9	<1
10/03/2017	55.2	22.1	12.7	13.2	<1
11/03/2017	57.1	23.1	9.6	10.3	<1
17/03/2017	70.2	29.2	10.8	11.2	<1
18/03/2017	54.3	21.6	11.0	11.4	<1
24/03/2017	59.9	24.6	10.4	11.0	<1
25/03/2017	67.5	28.6	8.2	9.3	<1
April-2017					
05/04/2017	64.5	27.1	10.2	10.8	<1
06/04/2017	73.2	30.2	12.0	12.8	<1
12/04/2017	58.2	23.6	8.1	9.2	<1
13/04/2017	63.7	26.7	13.2	13.9	<1
19/04/2017	71.1	29.3	8.9	9.7	<1
20/04/2017	52.6	20.3	10.0	10.6	<1
26/04/2017	51.2	20.2	9.4	10.2	<1
27/04/2017	68.5	28.9	12.2	13.0	<1
May-2017					
03/05/2017	62.8	26.1	10.5	11.1	<1
04/05/2017	66.4	28.1	11.8	12.7	<1
10/05/2017	61.7	25.7	9.0	9.8	<1
11/05/2017	59.3	24.2	9.8	10.4	<1
18/05/2017	65.6	27.6	11.2	11.5	<1
19/05/2017	60.9	25.1	11.6	12.2	<1
24/05/2017	72.3	29.8	8.6	9.6	<1
25/05/2017	69.4	29.1	11.3	12	<1

AMBIENT AIR QUALITY DATA ($\mu\text{g}/\text{m}^3$)

Client : The RAMCO Cement Ltd.
Project : Budawada Limestone Mine
Season : Summer Season 2017
Period : March'17 - May'17
Station : Ravirala

Code : A-6

Date of sampling	PM ₁₀	PM _{2.5}	SO ₂	NO _x	CO (ppm)
March-2017					
03/03/2017	51.2	24.9	10.8	12.4	<1
04/03/2017	58.5	29.2	9.2	10.4	<1
10/03/2017	49.4	23.7	8.8	10.0	<1
11/03/2017	47.3	22.6	8.0	8.9	<1
17/03/2017	45.6	21.3	8.3	9.5	<1
18/03/2017	53.7	26.5	9.8	11.0	<1
24/03/2017	50.3	24.3	8.6	9.8	<1
25/03/2017	46.8	22.5	9.5	10.7	<1
April-2017					
05/04/2017	65.6	32.7	10.1	11.3	<1
06/04/2017	64.1	31.9	9.9	11.2	<1
12/04/2017	63.2	31.4	11.3	12.7	<1
13/04/2017	57.6	28.7	10.4	11.8	<1
19/04/2017	56.7	28.1	10.6	12.1	<1
20/04/2017	66.8	33.5	9.1	10.3	<1
26/04/2017	48.5	23.1	10.7	12.2	<1
27/04/2017	52.1	25.4	9.7	10.9	<1
May-2017					
03/05/2017	54.9	27.0	10.9	12.5	<1
04/05/2017	59.2	29.8	10.3	11.7	<1
10/05/2017	55.8	27.6	8.1	9.4	<1
11/05/2017	62.1	31.2	8.5	9.7	<1
18/05/2017	53.0	25.9	10.5	11.9	<1
19/05/2017	65.0	32.1	9.4	10.6	<1
24/05/2017	60.4	30.3	9.0	10.1	<1
25/05/2017	61.3	30.9	10.2	11.5	<1

AMBIENT AIR QUALITY DATA ($\mu\text{g}/\text{m}^3$)

Client : The RAMCO Cement Ltd.
Project : Budawada Limestone Mine
Season : Summer Season 2017
Period : March'17 - May'17
Station : Jayanthipuram

Code : A-7

Date of sampling	PM ₁₀	PM _{2.5}	SO ₂	NO _x	CO (ppm)
March-2017					
03/03/2017	70.6	31.5	10.2	11.3	<1
04/03/2017	51.5	26.5	8.3	9.3	<1
10/03/2017	55.4	27.4	9.5	10.6	<1
11/03/2017	51.3	26.2	9.4	10.5	<1
17/03/2017	66.8	30.5	9.3	10.4	<1
18/03/2017	60.3	28.7	10.3	11.4	<1
24/03/2017	71.5	31.6	12.0	13.2	<1
25/03/2017	57.4	28.0	10.7	11.8	<1
April-2017					
05/04/2017	65.9	30.2	10.4	11.5	<1
06/04/2017	52.5	26.8	8.6	9.5	<1
12/04/2017	53.8	27.1	9.6	10.7	<1
13/04/2017	64.8	30.0	10.5	11.6	<1
19/04/2017	67.7	30.7	9.2	10.3	<1
20/04/2017	58.4	28.3	11.2	12.3	<1
26/04/2017	64.0	29.7	9.0	9.6	<1
27/04/2017	59.3	28.5	8.5	9.4	<1
May-2017					
03/05/2017	69.6	31.2	10.9	12.2	<1
04/05/2017	63.2	29.5	10.8	11.9	<1
10/05/2017	61.2	29.0	10.6	11.7	<1
11/05/2017	56.7	27.8	9.8	11.0	<1
18/05/2017	54.6	27.3	9.9	11.2	<1
19/05/2017	68.7	31.0	8.2	9.0	<1
24/05/2017	62.1	29.2	11.3	12.4	<1
25/05/2017	72.5	32.0	9.7	10.8	<1

AMBIENT AIR QUALITY DATA ($\mu\text{g}/\text{m}^3$)

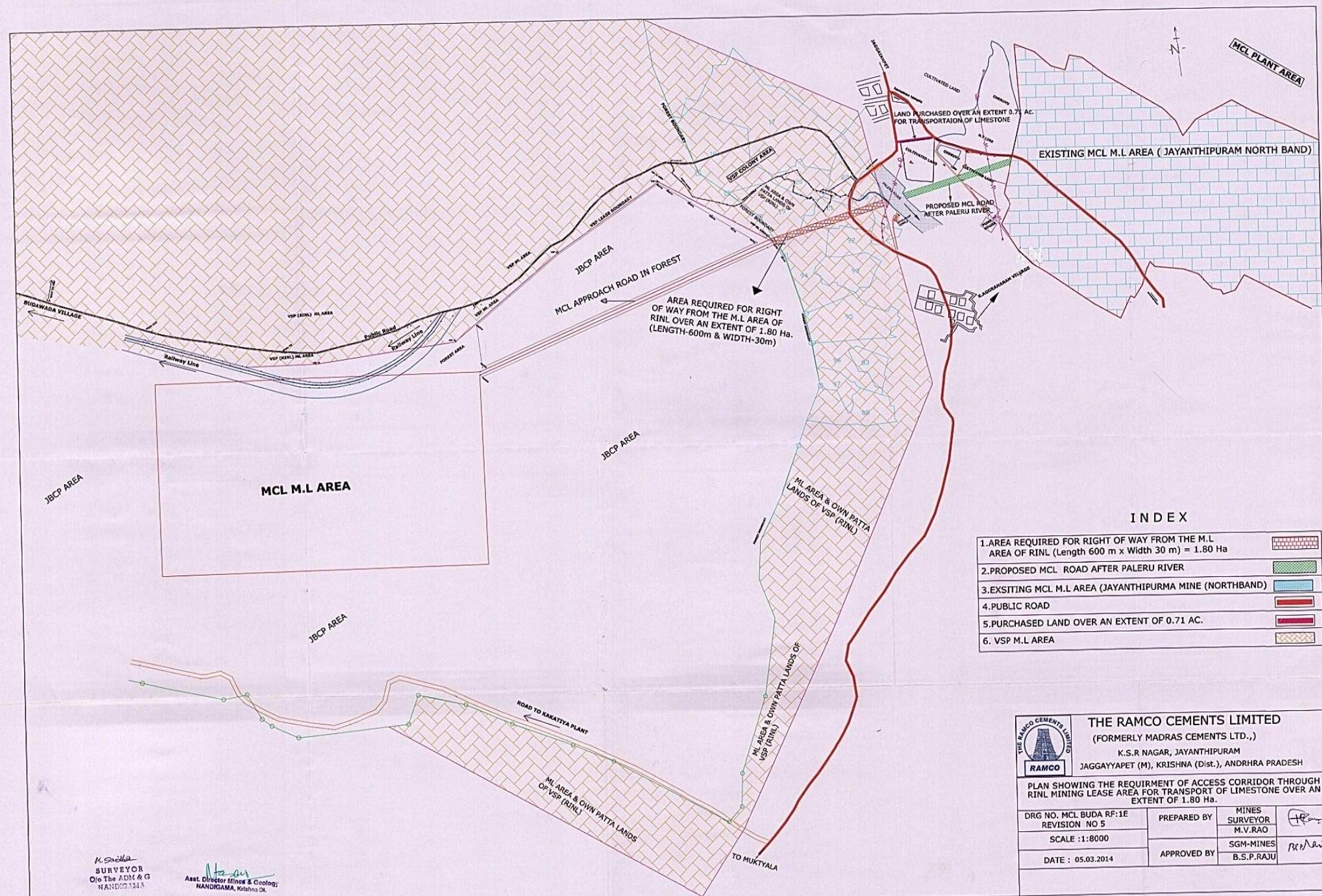
Client : The RAMCO Cement Ltd.
Project : Budawada Limestone Mine
Season : Summer Season 2017
Period : March'17 - May'17
Station : Kavutavari Agraharam

Code : A-8

Date of sampling	PM₁₀	PM_{2.5}	SO₂	NO_x	CO (ppm)
March-2017					
03/03/2017	60.5	27.9	9.4	10.2	<1
04/03/2017	51.3	25.1	8.9	9.7	<1
10/03/2017	59.0	27.4	8.8	9.6	<1
11/03/2017	77.9	34.2	8.7	9.5	<1
17/03/2017	55.9	26.5	9.3	10.1	<1
18/03/2017	62.1	28.3	9.7	10.5	<1
24/03/2017	63.6	28.8	10.1	10.9	<1
25/03/2017	76.7	33.7	8.6	9.4	<1
April-2017					
05/04/2017	52.8	25.6	10.6	12.0	<1
06/04/2017	79.2	34.6	9.6	10.4	<1
12/04/2017	48.2	24.5	10.4	11.5	<1
13/04/2017	69.2	31.0	8.4	9.2	<1
19/04/2017	70.5	31.5	9.2	10.0	<1
20/04/2017	75.5	33.3	10.5	11.8	<1
26/04/2017	65.2	29.7	9.8	10.6	<1
27/04/2017	57.4	27.0	9.1	9.9	<1
May-2017					
03/05/2017	68.0	30.6	10.2	11.0	<1
04/05/2017	64.1	29.2	9.9	10.7	<1
10/05/2017	49.5	24.8	10.0	10.8	<1
11/05/2017	71.7	31.9	8.5	9.3	<1
18/05/2017	73.0	32.4	10.3	11.1	<1
19/05/2017	54.3	26.1	8.3	9.1	<1
24/05/2017	74.2	32.8	9.5	10.3	<1
25/05/2017	66.8	30.1	9.0	9.8	<1

Road Map for Mine Opening of the Ramco Budawada Limestone Mine (Reserve Forest)

R.F Compartment No.6, Sy.No376, of Budawada (RF) (Vi), Jaggayyapet (M), Krishna District,A.P over an extent of 160 Ha.				
S.No	DESCRIPTION	Order / Letter/ Memo. No.	Date	Remarks
1	Mining lease applied	Letter No. MCL/2170/2001, Dt. 29.01.2001	29.01.2001	
2	Industries & Commerce (M.II) Dept. , Govt. of AP.	GO.Ms.No. 291	30.10.2008	
3	First Stage Forest Clearance granted by Forest dept.	F.No. 8-56/2005-FC from Govt. of INDIA, MOEF, New Delhi	31.12.2008	
4	Exection of Mining lease	No. 436/M/2001 from ADMG, Nandigama	17.03.2009	
5	Environmental Clerance Obtained for 1.1 million tonne per annuam	Lr No. J-11015/150/2008-IA.II(M), Govt. of India, MoEF, New Delhi.	10.12.2009	
6	Net Present Value and associated fees for the said forest area	Rs. 983.157 lakhs	25.02.2010	
7	Final Stage Forest Clearance granted by Forest dept.	F.No. 8-56/2005-FC from Govt. of INDIA, MOEF, New Delhi	22.12.2011	
8	GO from Environment Forest Science And Technology (FOR I), Dept. Under F(C), Act, 1980	Go.Ms.No. 26, granted by Forest dept.	31.03.2012	
9	The Agreement made between Ramco Cements & DFO, Vijayawada on 12.04.2012	Letter No. RC NO.712/2000-V6, Dt. 12.04.2012	12.04.2012	
10	The DFO, Krishna Division Vijayawada issued a demand notice for payment towards tree growth extraction	Rc No. 712/2000-V6, dt: 18.07.2012	18.07.2012	
11	An Amount of Rs. 3.11 lakh paid towards tree growth extraction and sumitted a letter to the DFO, Krishna Division Vijayawada.	MCL/MINES/Budawada/468, dt: 17.08.2012	17.08.2012	
12	Tree growth extraction completed and submitted a letter to DFO, Vijayawada.	MCL/Budawada/198, dt. 04.01.2014.	04.01.2014	
13	Date of opening of the mine on 01.02.2014	MCL/Mines/RBLM/245, dt.03.02.2014 addressed to Controller General, IBM	01.02.2014	



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1. AREA REQUIRED FOR RIGHT OF WAY FROM THE M.L AREA OF RINL (Length 600 m x Width 30 m) = 1.80 Ha	
2. PROPOSED MCL ROAD AFTER PALERU RIVER	
3. EXISTING MCL M.L AREA (JAYANTHIPURMA MINE (NORTHBAND))	
4. PUBLIC ROAD	
5. PURCHASED LAND OVER AN EXTENT OF 0.71 AC.	
6. VSP M.L AREA	



THE RAMCO CEMENTS LIMITED

(FORMERLY MADRAS CEMENTS LTD.,)

K.S.R NAGAR, JAYANTHIPURAM
JAGGAYAPET (M), KRISHNA (Dist.), ANDHRA PRADESH

PLAN SHOWING THE REQUIREMENT OF ACCESS CORRIDOR THROUGH RINL MINING LEASE AREA FOR TRANSPORT OF LIMESTONE OVER AN EXTENT OF 1.80 Ha.

DRG NO. MCL BUDA RF:1E	REVISION NO 5	PREPARED BY	MINES SURVEYOR	
SCALE : 1:8000			M.V.RAO	
DATE : 05.03.2014		APPROVED BY	SGM-MINES	
			B.S.P.RAJU	

M. Sathya
SURVEYOR
O/o The ADM & G
NANDIGAMA

Asst. Director Mines & Geology
NANDIGAMA, Krishna Dt.

Road Map for Approach Road for Ramco Budawada Limestone Mine (Reserve Forest)

R.F Compartment No.6, Sy.No376, of Budawada (RF) (Vi), Jaggayyapet (M), Krishna District,A.P over an extent of 160 Ha.				
S.No	DESCRIPTION	Order / Letter/ Memo. No.	Date	Remarks
1	Request letter to The Director (Operations) of M/s RINL for access corridor	Letter No. CO-JPM/VSP/5007, dt. 13.11.2007	13.11.2007	
2	Request letter to Dy.G.M (Mines) of M/s RINL for access corridor	Lr No. CO-JPM/VSP/2259, dt. 20.02.2008	20.02.2008	
3	Request letter to G.M (Mines) of M/s RINL for access corridor	Lr No. MCL/JPM/VSP/2009, dt. 09.07.2009	09.07.2009	
4	Request letter to G.M (Mines) of M/s RINL for access corridor	Lr No.MCL/VSP/2010-11/7586, dt. 07.12.2010	07.12.2010	
5	Request letter to G.M (Mines) of M/s RINL for access corridor	Lr No.MCL/VSP/2011/794/65, dt. 25.05.2011	25.05.2011	
6	Request letter to G.M(Mines) of M/s RINL for access corridor	Lr No.MCL/JPM/VSP/3221, dt. 08.10.2011	08.10.2011	
7	Request letter to CMD of M/s RINL for access corridor	Lr. dt. 26.12.2011	26.12.2011	
8	Request letter to A.G.M (Mines) of M/s RINL for access corridor	Lr.No. MCL/Mines/VSP/389, dt. 10.05.2012	10.05.2012	
9	Request letter to G.M (Mines) of M/s RINL for access corridor	Lr. dt. 06.07.2012	06.07.2012	
10	Request letter to G.M (Mines) of M/s RINL for access corridor.	Lr No. MCL/Mines/Budawada/477, dt. 30.08.2012	30.08.2012	
11	M/s RINL informed that they cannot consider the request for access corridor	RINL Letter No. Mines/J/10-02/13/30, dt. 16.01.2013	16.01.2013	
12	Request letter submitted to Director of Mines & Geology, Hyderabad, Govt.of A.P for access corridor to transport the limestone through M/s RINL	Lr No. MCL/Mines/Budawada/601, dt. 21.02.2013	21.02.2013	
13	Request letter submitted to Director of Mines & Geology, Hyderabad, Govt.of A.P for access corridor to transport the limestone through M/s RINL	Lr No. MCL/Mines/Budawada/233, dt. 29.01.2014	29.01.2014	
14	Request letter submitted to The Ministry of Steel, Govt., of India, Govt., of India, New Delhi for access corridor to transport the limestone through M/s RINL	Lr No. MCL/Mines/Budawada, dt. 01.02.2014	01.02.2014	
15	Request letter submitted to CMD, RINL, for access corridor to transport the limestone through M/s RINL	Lr No. MCL/Mines/Budawada, dt.03.05.2014	03.05.2014	
16	Requested DMG, Govt., of A.P for access corridor through M/s RINL lands	Letter No. MCL/Mines/Budawada/439 dt. 22.07.2014	22.07.2014	
17	DMG, Govt. of A.P conducted the meeting with RINL & TRCL on 27.09.2014	Minutes dated 27.09.2014	27.09.2014	
18	TRCL submitted the Justification to the DMG based on the minutes 27.09.2014	RCL/Mines/Budawada/534, dt.15.10.2014	15.10.2014	
19	TRCL submitted the representation once again to the DMG, Hyd for access corridor	RCL/Mines/Budawada/643, dt.17.01.2015	17.01.2015	

S.No	DESCRIPTION	Order / Letter/ Memo. No.	Date	Remarks
20	DMG directed ADMG, Nandigama to submit a report on this issue	DMG letter No. 8632/R1.3/2013, Dt. 18.06.2015	18.06.2015	
21	ADMG, Nandigama inspected the area and submitted to DMG that the access corridor can be considered as there is no other alternative way to transport the limestone	ADMG letter No. 436/M/2006, Dt. 30.06.2015	30.06.2015	
22	Submitted a representation to the Secretary mine, Govt. of A.P	Letter No. RCL/Mines/Budawada/176, dt. 17.08.2015.	17.08.2015	
23	Secretary Mines, Govt. of A.P wrote a letter to Secretary (Steel), Govt. of India to consider request of TRCL	Lr.No. 11031/M.III(2)/2013, dt. 26.10.2015	26.10.2015	
24	TRCL submitted letters to the Secretary (Mines) & Secretary (Steel), Govt. of India requesting access corridor	Letter No. RCL//Mines/2015, dt.29.12.2015	29.12.2015	
25	Submitted representation to CMD, RINL for access corridor	Letter No. TRCL/Mines/Budawada, dt. 04.01.2016	04.01.2016	
26	TRCL submitted letters to the Secretary (Mines), Govt. of A.P requesting access corridor	Lr.No. TRCL/Mines/ Bud RF/220/464, dt. 30.03.2016	30.03.2016	
27	Secretary Mines, Govt. of A.P wrote a letter CMD, RINL to consider request of TRCL	Letter No. 11031/M.III(2)/2013, dt. 04.05.2016.	04.05.2016	
28	TRCL submitted letters to the Secretary (Mines), Govt. of A.P requesting access corridor.	Lr.No. TRCL/Mines/ Bud RF/220, dt. 17.05.2016	17.05.2016	
29	Secretary Mines, Govt. of A.P wrote a letter Secretary (Mines), Govt.,of India to consider request of TRCL	Letter No. 11031/M.III(2)/2013, dt. 31.05.2016	31.05.2016	
30	TRCL submitted a request letter to Sri Y.S. Chowdary, Hon'ble Minister of State for Science & Technology and Earth Sciences, Govt. of India to advice Secretary - Steel, RINL to allow TRCL to transport Limestone through access corridor	Letter dated 17.06.2016	17.06.2016	
31	Secretary Mines, Govt. of A.P wrote a letter Secretary (Steel), Govt., of India to consider request of TRCL	Letter No. 11031/M.III(2)/2013, dt. 08.07.2016	08.07.2016	
32	Request letter submitted to Secretary (Mines), Govt. of A.P. to convene a meeting to resolve the issue	Letter No. TRCL/Mines/Bud.R.F/220/67, dated 20.07.2016	20.07.2016	
33	The Secretary(Mines), Govt. of A.P. fixed a meeting on 28.11.2016 for RINL & TRCL officials.	Letter No.11031/M.III(2)/2013, dt.14.11.2016	14.11.2016	
34	Attended the meeting and submitted the representation to Secretary (Mines), Govt. of A.P regarding access corridor permission from M/s RINL lands	Letter No. TRCL/Mines/Bud RF/220/289, dt. 28.11.2016	28.11.2016	
35	TRCL submitted the representation to Secretary (Mines), Govt., of A.P regarding access corridor permission from M/s RINL lands and explained the Agreement between M/s RINL & TRCL for supply of slag from RINL	Lr.No. TRCL/RINL/2016, dt. 29.11.2016	29.11.2016	
36	TRCL submitted the representation to Chief Minister, Govt. of A.P regarding access corridor permission from M/s RINL lands.	Letter no.TRCL/Mines/Bud RF/220, dt.31.12.2016	31.12.2016	
37	TRCL submitted the representation to Secretary (Mines), Govt. of A.P regarding access corridor permission from M/s RINL lands and explained the Agreement between M/s RINL & TRCL for supply of slag from RINL	Letter No. TRCL/DMG/2016-17, dt. 31.01.2017	31.01.2017	

S.No	DESCRIPTION	Order / Letter/ Memo. No.	Date	Remarks
38	TRCL submitted the representation once again to Secretary (Mines), Govt. of A.P regarding access corridor permission from M/s RINL lands and explained the Agreement between M/s RINL & TRCL for supply of slag from RINL	Letter No. TRCL/Mines/Bud RF/220, dt. 15.03.2017	15.03.2017	
39	Minutes of meeting held on 28.11.2016 received from Secretary (Mines), Govt. of A.P.	Lr No. 11031/M.III(2)/2013, Dt. 22.03.2017	22.03.2017	
40	TRCL submitted lr to Secretary (Mines), Govt. of A.P regarding access corridor permission and informed the proposal of Rs. 5 lakh per annum as compensation for utilization of access corridor.	Lr.No. TRCL/Mines/Bud RF/220/42, dt. 25.04.2017	25.04.2017	
41	Secretary (Mines), Govt. of A.P wrote a letter to CMD, M/s RINL. It state that one month time given for representing the case to Ministry of Steel, Govt. of India and to communicate the decision to Govt. of A.P	Lr No. 11031/M.III(2)/2013, Dt. 30.05.2017	30.05.2017	
42	Secretary (Mines), Govt. of A.P wrote a letter to CMD, M/s RINL and informed the TRCL proposal Rs. 5 lakh per annum as compensation for utilization of access corridor	Lr No. 11031/M.III(2)/2013, Dt. 04.07.2017	04.07.2017	
43	TRCL submitted lr to CMD, M/s RINL regarding access corridor permission and informed the proposal of Rs. 5 lakh per annum as compensation for utilization of access corridor	Lr.No. TRCL/Mines/Budawada/220/179 , Dt.10.07.2017	10.07.2017	
44	TRCL submitted lr to Secretary (Mines), Govt. of A.P regarding access corridor permission and requested issue the directions to M/s RINL for early decision enabling us to transport the limestone production from the mining lease to cement factory.	Lr.No. TRCL/Mines/Bud RF/220, Dt.19.07.2017	19.07.2017	
45	Secretary (Mines), Govt. of A.P wrote a letter to CMD, M/s RINL regarding expiry or one month time given for them to representing the case to Ministry of Steel, Govt. of India and to communicate the decision to Govt. of A.P	Lr .No. 11031/M.III(2)/2013, Dt. 23.08.2017	23.08.2017	

08.09.2017

JUSTIFICATION FOR EXPANSION OF RAMCO BUDAWADA LIMESTONE MINE FROM 1.10 million TPA TO 2.5 million TPA

Details of JPM Group of Mines of The Ramco Cements Limited, KSR Nagar, Jaggayyapet

Mine	Reserves as on 31.03.2017	% of total Reserves	Without expansion of Budawada Limestone Mine			With expansion of Budawada Limestone Mine		
			Existing EC Capacity	% of total EC Capacity	Life of Mine as on date (Years)	Proposed Production	% of Production Proposed as on date	Life of Mine, proposed (Years)
Jayanthipuram Limestone Mine (North Band)	25.011	15.82	2.00	41.67	12.51	1.00	20.83	25.01
Jayanthipuram Limestone Mine (South Band)	17.416	11.01	0.50	10.42	34.83	0.50	10.42	34.83
Ravirala Limestone Mine	14.233	9.00	1.20	25.00	11.86	0.80	16.67	17.79
Ramco Budawada Limestone Mine	101.459	64.17	1.10	22.92	92.24	2.50	52.08	40.58
Total	158.12	100.0	4.80	100.00		4.80	100.00	

Total Capacity of Plant (Clinker)	MTPA	3.165
Total Limestone Requirement of Plant	MTPA	4.6
Total available mineable reserves	Million Tonne	158.12
Life of the Plant	Years	34.5

Note : During present EC proposal for 1.10 million TPA for Budawada Limestone Mine, the area is not fully explored as the Final Forest Clearance is not granted. After grant of FC, the area is fully explored as per IBM norms during 2014 with 54 bore holes for a cumulative meterage of 3100 with a grid interval of 199x199 m to cover the entire area. Accordingly the reserves are established as 101.46 million MT, it is proposed to increase the capacity of the mine to 2.5 MTPA from 1.10 MTPA to maintain the longevity of the other working mines inline