Annex – II

LAFARGE

To:
Asst.General Manager(O&M)
Tata Power Company Ltd,
Jojobera Power Plant,
Jamshedpur:- 831016.

JJR/QAD/056
Dt:-23/06/01

Attn:- Mr.S.Baijal, AGM(O&M)

Reg:- Fly ash quality of Unit-I

Dear Sir,

We have been collecting Fly ash sample from your plant on regular basis since13/06/2001 for testing its Loss on ignition content in our Laboratory. This is one of the parameters which gives us an idea with regard to its quality within a short time of its analysis. From the analysis report (as under), it appears that the quality of Unit-I fly ash deteriorates badly. This has also been communicated several times to you and CCR personnel.

As you are aware, the higher LOI content leads to increased coarser portion of the particles in Fly ash as a result it can't be used for manufacturing PP Cement even at a ratio of 15%. Initially we were getting the quality of unit –I fly ash same as it is now available from Unit-II. Since Unit-II connection is not in the line of conveying system to us , hence it is difficult to discard the ash from Unit-I since we do not have any alternate arrangement.

In view of the above we request to please look in to this matter on top priority basis. Awaiting you necessary action for its improvement at the earliest.

With regards

%LOI

Date	Unit-I	Unit-II
13/6	4.6	2.1
14/6	4.5	2.0
15/6	4.4	1.9
16/6	4.8	2.4
17/6	4.8	1.7
18/6	4.5	1.5
19/6	7.0	2.0
20/6	4.6	2.2
21/6	5.7	1.2
22/6	6.4	1.1

Yours faithfully,
f. Lafarge India Ltd.

(K C PIPLAI)
Sr. Manager (QA)

LAFARGE

JOJOBERA CEMENT PLANT						
Weekly Fly Ash- YEAR 2001						
W.No.	% LOI	Blaine (m2/kg)	Lime Reactivity (MPa)			
			I	II	III	Avg.
1	3.0	278	5.15	5.1	5.05	5.10
2	2.2	294	5.3	5.35	5.35	5.33
4	2.3	285	5.81	5.86	5.97	5.88
5	2.1	292	5.91	5.97	5.97	5.95
6	2.2	278	5.51	5.66	5.66	5.61
8	2.5	285	5.81	5.81	5.91	5.84
9	2.0	276	5.2	5.15	5.1	5.15
10	1.7	289	4.89	4.89	4.84	4.87
11	2.8	295	4.49	4.49	4.59	4.52
12	2.9	285	5.1	5.05	5.1	5.08
13	2.5	292	4.95	4.95	4.89	4.93
14	2.4	275	5.1	5.1	5.05	5.08
15	2.6	282	5.15	5.2	5.15	5.17
16	2.8	294	4.44	4.33	4.33	4.37
17	2.5	289	4.18	4.18	4.13	4.16
18	2.7	278	3.98	4.04	4.08	4.03
19	2.4	287	4.48	4.62	4.56	4.55
20	2.6	292	4.49	4.54	4.59	4.54
21	2.9	279	4.28	4.33	4.44	4.35
22	2.7	287	4.38	4.33	4.38	4.36
23	2.5	291	4.18	4.23	4.28	4.23
24	2.1	285	4.54	4.64	4.69	4.62
25	2.4	292	4.18	4.28	4.28	4.25
26	2.6	290	4.13	4.23	4.23	4.20
27	2.8	272	4.89	4.95	5.05	4.96
28	2.5	284	5.15	5.1	5.05	5.10
29	2.2	292	4.84	4.89	4.95	4.89
32	2.4	286	4.18	4.28	4.28	4.25
33	2.9	291	4.49	4.54	4.59	4.54
34	4.4	296	4.23	4.28	4.28	4.26
35	3.9	279	5.1	4.95	5.05	5.03
36	4.5	275	4.28	4.38	4.38	4.35
37	4.8	285	4.44	4.49	4.49	4.47
38	4.0	272	4.23	4.28	4.28	4.26
39	4.8	281	4.13	4.33	4.38	4.28
40	4.5	286	4.44	4.49	4.44	4.46
41	4.9	290	4.28	4.38	4.28	4.31
42	4.2	288	4.13	4.18	4.18	4.16
43	4.5	289	4.08	4.03	4.08	4.06
44	4.0	296	4.18	4.23	4.33	4.25
45	4.6	294	4.49	4.59	4.59	4.56
47	2.0	275	4.28	4.38	4.28	4.31
48	1.5	265	4.44	4.33	4.33	4.37
49	1.4	278	4.54	4.54	4.59	4.56
50	1.9	285	4.64	4.69	4.69	4.67
51	1.6	279	4.13	4.18	4.23	4.18
52	1.8	292	4.54	4.64	4.64	4.61
avg.	2.9	285	4.6	4.7	4.7	4.7
sd.	0.9957	7.3963	0.5023	0.4911	0.4955	0.4946

LAFARGE

To:
Asst.General Manager(O&M)
Tata Power Company Ltd,
Jojobera Power Plant,
Jamshedpur:- 831016.

JJR/QAD/056
Dt:-19/06/01

Attn:- Mr.S.Baijal, AGM(O&M)

Reg:- Fly ash quality of Unit-I

Dear Sir,

We have been facing quality problems of Fly ash of unit-I being received by us since 10th of this month. From the analysis, it has been found that the LOI content of the fly ash is high and ranges from 4-5% as against ~2% which we were normally getting prior to this period. The above problem has been communicated to you in the last week. However we don't find any improvement in this regard.

Today we have collected fly ash sample from Unit-II and found that the LOI content is 1.2%, which is desired by us. As it is not being connected to us hence we can't discard Unit-I fly ash. Please note that higher LOI content leads to increased coarser fraction and deteriorates cement quality.

In view of the above, we once again request you to maintain the LOI content below 2% as earlier.

Thanking you,

Yours faithfully
f. Lafarge India Ltd.

(K C PIPLAI)
Sr. Manager(QA)

Weekly Fly Ash

WEEK No	TESTING DATE	CHEMICAL ANALYSIS: % $SiO_2 + Al_2O_3 + Fe_2O_3$	% SiO_2	% MgO	% SO_3	% Na_2O	% L.O.I.	BLAINE M^2/Kg	PHY: LIME REACTIVITY MPa No I	No II	No III	Avg.
1	2.1.2001	91.2	53.0	2.1	0.3	0.22	3.0	278	5.15	5.10	5.05	5.10
2	15/2001	92.1	54.1	2.3	0.2	0.18	2.2	294	5.20	5.35	5.35	5.33
3	22.1.2001	—	—	—	—	—	—	—	—	—	—	—
4	29.1.2001	91.8	52.14	2.2	0.3	0.20	2.3	285	6.21	5.86	5.97	5.98
5	5.2.2001	90.6	51.64	2.4	0.3	0.21	2.1	292	5.91	5.97	5.97	5.95
6	12.2.2001	89.7	50.94	2.5	0.4	0.19	2.2	278	5.51	5.66	5.66	5.61
7	19.2.2001	—	—	—	—	—	—	—	—	—	—	—
8	26.2.2001	91.6	52.14	2.5	0.4	0.22	2.5	285	5.81	5.81	5.91	5.84
9	5.3.2001	92.6	49.20	2.4	0.3	0.20	2.0	276	5.20	5.15	5.10	5.15
10	12.3.2001	90.4	51.14	2.2	0.2	0.17	1.7	289	4.89	4.89	4.84	4.87
11	19.3.2001	88.2	55.2	1.6	0.4	0.30	2.8	295	4.49	4.49	4.59	4.52
12	26.3.2001	90.9	56.24	2.6	0.3	0.19	2.9	285	5.10	5.05	5.10	5.08
13	2.4.2001	91.2	57.2	2.6	0.4	0.26	2.5	292	4.95	4.95	4.89	4.93
14	9.4.2001	89.6	54.6	2.3	0.2	0.21	2.4	275	5.10	5.10	5.05	5.08
15	16.4.2001	91.8	57.5	2.1	0.3	0.25	2.6	282	5.15	5.20	5.15	5.17
16	23.4.2001	90.2	56.4	2.4	0.4	0.20	2.8	294	4.14	4.33	4.33	4.37
17	30.4.2001	91.1	55.4	2.2	0.3	0.24	2.5	284	4.18	4.18	4.13	4.16
18	7.5.2001	89.2	56.5	2.3	0.3	0.21	2.7	298	3.98	4.04	4.08	4.03
19	14.5.2001	91.5	57.2	2.4	0.2	0.19	2.4	287	4.48	4.62	4.56	4.55
20	21.5.2001	90.2	54.6	2.5	0.3	0.20	2.6	292	4.49	4.54	4.59	4.54
21	28.5.2001	88.9	55.9	2.1	0.2	0.24	2.9	279	4.28	4.33	4.41	4.35
22	4.6.2001	92.6	52.0	2.0	0.4	0.21	2.7	287	4.32	4.33	4.32	4.36
23	11.6.2001	90.8	52.4	2.7	0.3	0.24	2.5	291	4.18	4.23	4.28	4.23
24	18.6.2001	91.5	53.8	2.9	0.3	0.20	2.1	295	4.54	4.64	4.69	4.62
25	25.6.2001	89.2	51.2	2.8	0.4	0.22	2.4	292	4.18	4.28	4.28	4.25
26	2.7.2001	88.6	50.8	2.6	0.3	0.21	2.6	295	4.13	4.23	4.23	4.20
27	9.7.2001	90.6	52.4	2.7	0.3	0.20	2.8	272	4.84	4.95	5.05	4.96
28	16.7.2001	87.4	51.2	2.2	0.2	0.19	2.5	284	5.15	5.10	5.05	5.10
29	23.7.2001	91.86	53.4	2.1	0.3	0.23	2.2	292	4.84	4.89	4.95	4.89
30	30.7.2001	—	—	—	—	—	—	—	—	—	—	—
31	6.8.2001	—	—	—	—	—	—	—	—	—	—	—

WEEK No	PHYSICAL TESTS: COMPRESSIVE STRENGTH IN MPa — ORDINARY PORLAND CEMENT No. I	No. II	No. III	Avg.	OPC with Fly Ash No. I	No. II	No. III	Avg.	AUTOCLAVE EXPANSION in %	CUBE BREAKING DATES: LIME REACTIVITY	COMPRESSIVE STRENGTH
1	40.0	39.6	40.4	40.0	37.5	37.5	37.1	37.4	0.05	18/1	5/2/2001
2	42.0	42.0	42.0	42.0	41.2	40.8	41.6	41.2	0.09	25/1	12/2/2001
3	—	—	—	—	—	—	—	—	—	—	—
4	39.6	40.0	40.0	39.9	38.3	39.0	38.3	38.5	0.08	8/2	26/2/2001
5	33.9	33.4	33.9	33.7	32.4	31.8	31.8	31.9	0.06	15/2	5/3/2001
6	36.7	37.1	37.5	37.1	34.7	35.1	35.5	35.1	0.07	22/2	12/3/2001
7	—	—	—	—	—	—	—	—	—	1/3	19/3/2001
8	34.3	34.3	34.7	34.4	30.2	29.8	30.6	30.2	0.09	8/3	26/3/2001
9	34.3	33.4	33.9	34.0	33.1	32.7	33.5	33.1	0.10	15/3	2/4/2001
10	31.4	32.2	32.7	32.1	31.8	32.2	31.8	31.9	0.11	22/3	9/4/2001
11	35.9	36.7	35.9	36.2	34.3	33.5	34.3	34.0	0.14	29/3	16/4/2001
12	37.1	37.5	37.9	37.5	37.1	36.9	36.3	36.7	0.08	5/4	23/4/2001
13	36.3	36.7	35.9	36.3	35.1	35.1	35.1	35.1	0.12	12/4	30/4/2001
14	39.9	39.9	39.5	39.8	38.3	38.7	37.9	38.3	0.09	19/4	7/5/2001
15	36.3	36.7	36.3	36.4	35.5	35.5	35.5	35.5	0.13	26/4	14/5/2001
16	28.6	29.2	28.8	28.9	28.4	28.8	28.0	28.4	0.06	3/5	21/5/2001
17	28.0	28.8	28.4	28.4	28.6	28.2	27.8	28.2	0.12	10/5	28/5/2001
18	32.7	32.3	32.7	32.6	30.2	30.6	30.2	30.3	0.14	17/5	4/6/2001
19	30.6	31.0	31.0	30.9	29.4	29.8	30.2	29.8	0.13	24/5	11/6/2001
20	34.3	33.5	33.9	33.9	31.4	31.6	31.4	31.3	0.07	31/5	18/6/2001
21	30.2	30.6	31.0	30.6	29.4	29.6	29.4	29.5	0.11	7/6	25/6/2001
22	33.1	33.9	33.4	33.6	31.0	31.1	30.6	30.9	0.10	14/6	2/7/2001
23	31.8	31.0	31.0	31.3	28.6	29.0	29.0	28.9	0.12	21/6	9/7/2001
24	33.5	32.7	32.7	33.0	29.8	30.6	29.8	30.1	0.09	28/6	16/7/2001
25	35.5	35.1	35.9	35.5	32.2	32.2	32.7	32.4	0.13	5/7	23/7/2001
26	37.1	36.7	36.3	36.7	35.5	35.1	35.1	35.2	0.08	12/7	30/7/2001
27	32.7	33.1	33.5	33.1	30.6	31.4	31.4	31.1	0.07	19/7	6/8/2001
28	31.4	31.4	31.4	31.4	30.2	29.8	30.2	30.1	0.09	26/7/2001	13/8/2001
29	33.5	33.5	33.1	33.4	31.0	31.4	31.0	31.1	0.06	2/8	20/8/2001
30	—	—	—	—	—	—	—	—	—	9/8	27/8/2001
31	—	—	—	—	—	—	—	—	—	16/8/2001	3/9/2001

Sr. Manager (QA)
LAFARGE INDIA PVT. LTD.
JOJOBERA CEMENT PLANT

WEEK No	TESTING DATE	CHEMICAL ANALYSIS % $SiO_2 + Al_2O_3 + Fe_2O_3$	% SiO_2	% MgO	% SO_3	% Na_2O	% L.O.I.	BLAINE M^2/Kg	PHYSICAL TESTS — LIME REACTIVITY MPa No I	No. II	No. III	Avg.	COMPRESSIVE STRENGTH IN MPa — ORDINARY PORTLAND CEMENT No. I	No. II	No. III	Avg.	O P C. with Fly Ash No. I	No. II	No. III	Avg.	AUTOCLAVE EXPANSION in %	CUBE BREAKING DATE — LIME REACTIVITY	COMPRESSIVE STRENGTH
32	13·8·2001	90·46	52·14	2·6	0·2	0·22	2·4	286	4·18	4·28	4·26	4·25	33·5	33·5	33·5	33·5	32·2	31·8	31·4	31·8	0·09	23/8	10/9
33	20·8·2001	89·24	50·16	2·8	0·3	0·18	2·9	291	4·49	4·54	4·59	4·54	31·8	32·2	32·2	32·1	30·2	30·6	30·2	30·3	0·10	30/8	17/
34	27·8·2001	92·14	54·10	3·0	0·34	0·21	4·4	296	4·23	4·28	4·28	4·26	32·7	33·1	33·5	33·1	31·0	31·4	31·0	31·1	0·11	6/9	24/9
35	3·9·2001	88·64	51·62	2·4	0·5	0·28	3·9	279	5·10	4·95	5·05	5·03	31·0	31·8	31·8	31·5	28·6	28·6	28·0	28·7	0·12	13/9	1/
36	10·9·2001	90·46	52·16	2·7	0·2	0·19	4·5	275	4·28	4·38	4·28	4·35	32·7	33·1	32·7	32·8	30·6	31·0	30·6	30·7	0·07	20/9	8/
37	17·9·2001	87·56	53·2	2·9	0·4	0·22	4·8	285	4·44	4·49	4·49	4·47	34·3	34·3	34·7	34·5	32·7	32·2	32·7	32·5	0·08	27/9	15/
38	24·9·2001	91·64	50·14	9·2	0·3	0·16	4·0	272	4·23	4·28	4·28	4·23	33·1	33·9	33·9	33·6	31·0	31·0	31·4	31·1	0·08	4/10	22/10
39	1·10·2001	90·74	51·81	2·8	0·4	0·19	4·8	281	4·13	4·33	4·38	4·28	33·5	32·7	33·5	33·2	31·0	31·4	31·0	31·1	0·09	11/10	29/10
40	8·10·2001	89·75	49·64	2·5	0·5	0·18	4·5	286	4·44	4·49	4·44	4·46	32·7	33·5	33·5	33·2	30·6	30·2	30·8	30·3	0·08	18/10	5/11
41	15·10·2001	91·64	50·82	2·6	0·6	0·20	4·9	290	4·28	4·38	4·28	4·31	33·5	33·9	33·1	33·5	30·6	31·0	30·6	30·7	0·07	25/10	12/11
42	22·10·2001	92·12	52·64	2·9	0·7	0·14	4·2	288	4·13	4·18	4·18	4·16	35·1	35·9	35·9	35·6	32·7	32·2	33·1	32·7	0·08	01/11	19/11
43	29/10/2001	92·75	53·24	3·0	0·8	0·16	4·5	289	4·08	4·03	4·08	4·07	32·7	33·5	33·5	33·2	30·6	30·6	31·4	30·9	0·09	8/11	26/11
44	5·11·2001	91·64	51·84	3·1	0·6	0·15	4·0	296	4·18	4·23	4·33	4·25	33·9	34·3	34·7	34·3	31·8	31·8	31·8	31·8	0·06	15/11	3/12
45	12·11·2001	93·04	54·18	2·8	0·7	0·19	4·6	294	4·49	4·59	4·59	4·56	33·1	33·5	33·5	33·4	30·6	30·6	31·0	30·7	0·09	22/11	10/1
46	19·11·2001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	29/11	17/12
47	26·11·2001	92·54	52·94	3·0	0·5	0·14	2·0	275	4·28	4·38	4·28	4·31	32·7	31·7	32·7	32·7	33·5	33·5	33·5	33·5	0·08	6/12	24/1
48	3·12·2001	91·64	53·12	3·2	0·6	0·18	1·5	265	4·44	4·33	4·33	4·37	32·2	31·2	32·7	32·4	33·9	33·9	33·5	33·8	0·07	13/12	31/1
49	10·12·2001	95·24	56·16	3·1	0·4	0·16	1·4	278	4·54	4·54	4·59	4·56	33·5	33·9	33·5	33·6	31·8	32·2	30·4	31·8	0·09	20/12	7/1
50	17·12·2001	94·12	52·96	3·0	0·5	0·21	1·9	285	4·64	4·69	4·69	4·67	36·7	36·7	37·1	36·8	34·7	34·3	33·9	34·3	0·13	27/12	14/1
51	24·12·2001	93·74	53·64	3·2	0·4	0·18	1·6	279	4·13	4·18	4·23	4·18	33·5	33·1	33·1	33·2	30·6	31·0	30·6	30·7	0·07	3/1/2002	21/1
52	1·1·2002	92·94	56·84	2·8	0·6	0·20	1·8	292	4·54	4·64	4·64	4·61	33·5	32·7	32·7	32·0	30·2	30·2	30·6	30·3	0·14	10/1/2002	28/1

JJR/QAD/056
29th Dec, 2001

Asst.General Manager (O&M),
Jojobera Power Plant,
Jamshedpur

Kind attn: Mr. S. Baijal

Sub: Colour of fly ash

Dear Sir,

We have been receiving FA from Unit-I with consistent colour. We also received Unit-II FA for some days in the recent past with different colour. This colour difference of FA from both the units result to different colour of our end product which have been reflected badly in the batch of our 50kg cement bag. Apart from this, in the market our users are reluctant to purchase two colour of cement due to their perception of adulteration. The matter has been discussed several times with you to avoid such colour difference of FA from both the units and maintain similar colour, either of Unit-I or of Unit-II (FA of Unit-I is black & Unit-II is grey in colour). Sometimes our feed back helped to improve upon the colour of Unit-I as a result we get similar colour for both the units but this does not happen on constant basis as a result after 3-4 days it comes to its original colour. At present we are getting FA from Unit-I having no colour problem in our end product but when we will be going to get FA from all the three units, we may face the colour problem.

We therefore request you to take necessary action to minimize the colour difference of FA from all the three units so that our end product will have the same colour.

Thanking you,

Yours faithfully,
f. LAFARGE INDIA LIMITED

(K C PIPLAI)
Sr Manager(QA)