

No. RW/NH-33044/30/2001-S&R(R)

Dated the 30th July, 2003

To

The Secretaries of States/Union Territories Public Works Department (dealing with National Highways, All Chief Engineers of States/Union Territories (dealing with National Highways), The Chairman National Highways Authority of India, The Director General (Border Roads).

Subject: Use of Flyash in road/flyover embankment construction-Amendment to Clause 305 of the Ministry's Specifications for Road and Bridge Works Fourth Revision) 2001.

Ministry vide letter of even no dated 29.11.2001 has requested to use the flyash in road/flyover embankment construction especially in the areas where flyash is available in plenty following guidelines of IRC: SP:58-2001 "Guidelines for Use of Flyash in Road Embankments".

2. In view of the Government decision taken at the high level Committee of the Secretaries under the Chairmanship of Cabinet Secretary on the Flyash Mission that use of flyash compulsorily in road/flyover embankment construction the para 1 of the sub-Clause 305.2.1.1 of the Ministry's Specifications for Road and Bridge Works (Fourth Revision) 2001 stands amended as below.

"The Materials used in embankments, sub-grades, earthen shoulders and miscellaneous backfills shall be soil, moorum, gravel, fly/pond ash, a mixture of these or any other material approved by the Engineer. Such materials shall be free of logs, stumps, roots, rubbish or any other ingredient likely to deteriorate or affect the stability of the embankment/subgrade. The use of fly/pond ash as fill material shall be mandatory in road/flyover embankment construction in the areas where fly/pond ash is available in adequate quantities within economically viable ~~lead~~ strictly following the guidelines of IRC: SP-58-2001 unless on technical reasons duly approved by the Chief Engineer/Engineer-in-Chief".

3. In para 1 of the sub-clause 305.2.2.2 of the Ministry's specifications, following may be added in compliance to the environmental requirements.

"If borrowing of soil is unavoidable, care shall be taken not to create any low lying area; if any borrow pit is created, the same shall be filled up with pond/fly-ash covered with 0.5m thick soil layer wherever technically feasible. This shall be an integral part of the project."

4. Further, para 1 of the sub-clause 305.4.7 shall stands modified as below.

"In the case of high embankments, the contractor shall normally use fly/pond ash in conformity with para 305.2.1.1 above or the material from the specified borrow area".

5. All other provisions of Clause 305 of the Ministry's Specifications 2001 shall remain unaltered.

6. A List of Thermal Power Plants (TPPs) generating fly pond ash along with the India Map depicting the location of TPPs in different States is enclosed for ready reference.

7. In view of the above necessary modifications to the tender document are requested to be carried out wherever warranted.

8. The contents of this circular may please be brought to the notice of all concerned in your Organisation/ Department for strict compliance.

9. It is requested that quarterly 'Action Taken Report' on use of fly/pond ash in road/flyover embankment construction on NH/other centrally sponsored works in your State/Organisation may please be reported to the Ministry addressed to Shri S.S. Nahar, SE(R) (S&R), Room No. 340, Transport Bhavan, 1, Parliament Street, New Delhi-110 001.

(Enclosure to Ministry's letter No. RW/NH-33044/30/2001-S&R(R) dated the 30th July, 2003)

LIST OF THERMAL POWER STATIONS AND QUANTITY OF ASH AVAILABLE

S.No.	State	Station	Quantity of Fly-ash available in ash pond as on 31.03.2003 (Million tonne)
1.	Andhra Pradesh	Vijayawada Rayalaseema Kothagudem Kothagudem V Ramagundem 'B' Nellore Ramagundem (NTPC) Simhadri (Vishakapatnam) Manuguru (HWP) Vishakapatnam (RINL)	20.16 6.915047 33.72 5.83 n.a. n.a. 46.5 1.27 2.8 5.84
2.	Assam	Nagaon Cachar	0 0
3.	Bihar	Kahalgaon Barauni Muzafarpur	11.14 0.03 0.5
4.	Chhattisgarh	Korba (NTPC) Korba (Eest) Korba (Wast) Korba (Balco) Bhilai (Sail) Bhilai (BESCL) Jindal	3.73 11.1 20.151 4.5 n.a. n.a. n.a.
5.	Gujarat	Gandhinagar Ukai Wanakbori Sikka Kachhch Sabarmati (AEC) Surat (GIPC)	6.8 6.505125 2 2.253617 2 0.84 0.5962
6.	Haryana	Panipat Faridabad	116 4.7
7.	Jharkhand	Tenughat Patratu Bokaro (B) Chandrapura Jojabera Bokaro (BPSCL)	0.6 2 n.a. 1.665 0.1 n.a.
8	Karnataka	Raichur	15

9.	Madhya Pradesh	Amarkantak Satpura Sanjay Gandhi Vindychal	4.2 n.a. 6.25 13.78
10.	Maharashtra	Chandrapur Koradi Khaperkheda Bhusawal Nashik Parli Paras Dahanu Trombay	47 13.62 15 15.058 1.079008 10 2.2 26.85 0
11.	Orissa	IB Thermal Kaniha (NTPC) Talcher (NTPC) Rourkela (SAIL) Rourkela (NSPCL) Talcher (Nalco) Damanjodi Hirakud (India I)	6.870913 8.5 4.9 n.a. 0.151 16.19 2.8 n.a.
12.	Punjab	Ropar Bhatinda Lehra Mohabat	24 16.26 3.072
13.	Rajasthan	Suratgarh Kota	3.358 11.34
14.	Tamilnadu	Tuticorin Mettur North Chennai Ennore Neyveli I Neyveli II	152 20.81 n.a. 0.8 0.56946 9.2
15.	Uttar Pradesh	Dadri Rihand (NTPC) Tanda (NTPC) Unchahar Singrauli Panki Harduaganj Parichha Obra Anpara Hindalco Phulpur	1.083 n.a. 4.15 7.4 34.6 4 4 23.65 n.a. n.a. 1.25

16.	West Bengal	Budge Budge	
		Titagarh	
		Southern	
		Durgapur (DPL)	1.52
		Durgapur (NSPCL)	0
		Durgapur (DVC)	
		Mejia (DVC)	2.809
		Kolaghat	0.18
		Bakreswar	n.a.
		Bandel	1.1856
17.	Delhi	Santaldih	n.a.
		Chinakuri	
		Farakka	18.8
		Rajghat	0.483
		Indraprastha	0.5
		Badarpur	20