

GOVERNMENT OF INDIA
MINISTRY OF ROAD TRANSPORT & HIGHWAYS

Transport Bhavan,
No.1, Parliament Street
New Delhi-110 001

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

Dated, the 30th July, 2003

To

1. The Secretaries of States/union Territories, Public Works Department(Dealing with National Highways
2. All Chief Engineers of States/Union Territories(Dealing with National Highways)
3. The Chairman, National Highway Authority of India,G-5 &G-6, Sector-10, Dwarka,
New Delhi- 110 045
4. The Director General(Border Roads), Seema Sadak Bhawan, Ring Road, Delhi Cantt., New Delhi-110 010

Sub: 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.

Sir,

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

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

8. 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.

Yours faithfully

(S.S. NAHAR)
Superintending Engineer
for DG(RD)&SS
PH: 23739079

Encl: as above

Copy alongwith the enclosures to :

Secretary, Ministry of Environment & Forests, Paryavaran Bhavan, CGO Complex, Lodhi Road, New Delhi. (Kind Att. Sh. R.AnandaKumar, Advisor) This is in continuation of Ministry's D.O No. RW/NH-35072/4/2001-S&R dated 2nd July, 2003 from Secretary (RT & H) . List showing the utilisation of fly ash during 2002-2003 and target for 2003 -2004 by NHAI is also enclosed at Annex.'A'

(2) GM(Ash Utilisation),Env't. at SPV-A), National Thermal Power Corporation Ltd., R&D Center Building, Third Floor , Sector-24, NOIDA-201 301(U.P.). This is with a reference to your letter dated 28-05-2003 .

(3) PS to Hon'ble MOS(RT&H)

(4) Secretary, Ministry of Environment & Forests, Paryavaran Bhavan, CGO Complex, Lodhi Road, New Delhi. (Kind Att. Sh. R.AnandaKumar, Advisor) This is in continuation of Ministry's D.O No. RW/NH-35072/4/2001-S&R dated 2nd July, 2003 from Secretary (RT & H) . List showing the utilisation of fly ash during 2002-2003 and target for 2003 -2004 by NHAI is also enclosed at Annex.'A'

(1) All Technical Officers in Head Quarter

(2) All ROs/ELOs

(3) Secretary IRC, Jam Nagar House, Shahjahan Road, New Delhi.

(4) Director NITHE, Noida (U.P)

(S.S. NAHAR)
Superintending Engineer
for DG(RD)&SS

GOVERNMENT OF INDIA
MINISTRY OF ROAD TRANSPORT & HIGHWAYS

Transport Bhavan,
No.1, Parliament Street
New Delhi-110 001

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

Dated, the 4th December, 2003

To

1. The Secretaries of States/Union Territories, Public Works Department(Dealing with National Highways
2. All Chief Engineers of States/Union Territories(Dealing with National Highways)
3. The Chairman, National Highway Authority of India,G-5 &G-6, Sector-10, Dwarka, New Delhi- 110 045
4. The Director General(Border Roads), Seema Sadak Bhawan, Ring Road, Delhi Cantt., New Delhi-110 010

Sub: 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.

Sir,

In continuation to the Ministry's letter of even no. dated 30th July, 2003 forwarding thereby the amendments to the Clause 305 "Embankment Construction" of the Ministry's specifications for Road and Bridge Works (Fourth Revision), 2001 alongwith a list of Thermal Power Plants generating Fly/Pond Ash in different States, it is stated that Ministry of Environment & Forests, Government of India vide notification No. S.O. 979(E) dated 27th August, 2003 published in the Gazette of India, Part-II- Section 3-Sub-section(ii)has made use of Fly/Pond ash compulsory in road embankment construction.

Sub paragraph(g) of paragraph 2 of the notification at page 10 makes the following amendments:

'No agency, person or organization shall, within a radius of 100 kilometres of a thermal power plant undertake construction or approve design for construction of roads or flyover embankments in contravention of the guidelines/specifications issued by the India Road Congress(IRC) as contained in IRC specification No. SP:58 of 2001. Any deviation from this direction can only be agreed to on technical reasons if the same is approved by Chief Engineer(Design) or Engineer-in-Chief of the concerned agency or organization or on production of a certificate of "Pond ash not available" from the thermal power plant(s) (TPPs) located within 100 kilometres of the site of construction. This certificate shall be provided by the TPP within two working days from the date of making a request for ash'.

2. Further vide Sub paragraph(2B) of paragraph 5 at page 13 of the notification, all agencies undertaking construction of roads or fly over bridges including Ministry of Road Transport & Highways(MoRT&H), National Highways Authority of India(NHAI), Central Public Works Department(CPWD), State Public Works Departments and other State Government Agencies, shall within three months from the 1st day of September, 2003-

- a. make provisions in their tender documents, schedules of approved materials and rates as well as technical documents, including those relating to soil borrow area or pit as per sub-paragraph(7) of paragraph 1; and

- b. make necessary specifications/guidelines for road or fly over embankments that are not covered by the specifications laid down by the Indian Road Congress(IRC).

3. In compliance to above, in second part of Para 2 of the Ministry's letter of even number dated 30th July, 2003 referred above, the words 'economically viable lead' stand substituted as 'a radius of one hundred kilometres of a thermal power plant'.

4. It is, therefore, requested that the requisite amendments may please be carried out at the appropriate places and complied strictly .

5. 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 forwarded 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.

Yours faithfully

(G.SHARAN)

Chief Engineer(Roads) S&R

for Director General(Road Development)&Special Secretary

Encl: as above

Copy alongwith the enclosures to :

(1) All Technical Officers in Head Quarter

(2) All ROs/ELOs

(3) Secretary IRC, Jam Nagar House, Shahjahan Road, New Delhi.

(4) Director NITHE, Noida (U.P)

(5) Adviser, Ministry of Environment and Forests, HSM Division, Paryavaran Bhavan, CGO Complex, Lodi Road, New Delhi - 110 003. This has a reference to your letter No.16-1/99-HSMD dated 17th September, 2003

(G.SHARAN)

Chief Engineer(Roads) S&R

for Director General(Road Development)&Special Secretary