TRANSMISSION CORPORATION OF TELANGANA LIMITED

(CE – Civil) Circular. No. 2

Dt: 01.10.2018.

Sub: New Sand Mining Policy-2014 for the State of Telangana–Usage of Manufactured Sand – Instructions to use Manufactured Sand (Rock Sand) and Natural Sand in the ratio 50:50 in all the mixes of cement concrete and in items of work where sand is used in works of all Engineering Departments-Adopting G.O.Ms.No.37, Dt.29.05.2018 for works in TSTRANSCO–Instructions–Issued-Reg.

Ref: 1) Letter No.87/P(Sand)/2014, Dt: 31.05.2018 from Director of Mines & Geology, Government of Telangana.

- 2) G.O.Ms.No.37, Dt:29.05.2018 from Ind. & Comm. (M.I) Dept.
- 3) Transmission Corporation of Andhra Pradesh Limited Proceedings No.CE/Civil/F-Crushed stone sand/D.No.84/2012, Dt:22.05.2012.

The Government of Telangana is committed to encourage use of Manufactured Sand as an alternative to River Sand in order to conserve the environment on one hand and to overcome the problem of growing shortage of Natural Sand on the other hand. Accordingly the Government have issued orders for regulation of sand mining to meet the requirement of bulk consumers duly reducing the burden on Natural Resources and to make the sustainable ecosystem.

Further the utility and demand for Manufactured Sand has increased considerably over a period of time due to certification by reputed Scientific Organizations such as National Council for Cement and Building material (NCCBM), National Academy of Construction (NAC), BICARD, a Scientific Research and Certification Lab at Department of Civil Engineering, JNTU, Hyderabad. Thus the Technical viability of Manufactured Sand has been established without doubt.

Accordingly, a note was circulated to the Board, along with instructions communicated by The Director of Mines & Geology Government of Telangana, vide ref. 1st cited, stating the orders issued by the Government in G.O.Ms.No.37, Dt:29.05.2018, vide ref 2nd cited, directing all the Engineering Works Departments to use Manufactured Sand(Rock Sand) and Natural Sand in the ratio 50:50.

TS TRANSCO after careful consideration accorded approval to use Manufactured Sand (Rock Sand) confirming to <u>IS 383-1970</u>, <u>Zone-II</u> as fine aggregate as per the instructions given below:

 Allow use of Manufactured Sand (Rock sand) confirming to <u>IS 383-1970</u>, <u>Zone-II</u> as Fine aggregate and blend Manufactured Sand (Rock sand) and Natural (River) Sand in the ratio 50:50 for all the mixes of Cement Concrete works, Masonry works (RR,CR & Brick masonry) etc., except in Plastering works.

- Design mix for concrete has to be necessarily carried out where Manufactured Sand (Rock sand) is being used for assuring quality (minimum grade of M20).
- Plasticizers/ Admixtures may be added to the concrete as per standards/ specifications.
- The field Engineers shall ensure, casting of concrete cubes with Manufactured Sand (Rock sand) available locally, get them tested in Reputed Engineering College Labs and to use the same in works, only if results are found satisfactory.
- Also Periodic testing of Manufactured Sand(Rock sand) shall be carried out to ensure quality.
- The rate payable for Fine Aggregate with Manufactured Sand (Rock sand) and Natural (River) Sand will be calculated as supplemental item and payment will be made on Agreement rate/Supplemental rate whichever is less.

The approval accorded to use Manufactured Sand in works doesn't absolve the responsibility of field Engineers in regards to quality of concrete and the Executive Engineers/Civil/ Electrical executing the works are hereby instructed to follow the above guidelines scrupulously.

The above guidelines supersede the previous guidelines issued vide Proceedings No. CE/Civil/ F-Crushed stone sand/D.No.84/2012, Dt: 22.05.2012.

These orders are issued with the concurrence of full board vide No.1914, Dt:19/09/2018 of Chairman Managing Director/TSTRANSCO.

CHIEF ENGINEER/CIVIL TSTRANSCO/ VS/Hyderabad

To:

The Chief Engineer/ 400KV/ VS/ Hyderabad.

The Chief Engineer/ Construction/ VS/ Hyderabad.

The Chief Engineer/ Transmission/ VS/ Hyderabad.

The Zonal Chief Engineers/ TSTRANSCO/ Metro/ Rural/ Warangal/ Karimnagar.

PS to Chairman & Managing Director/ TSTRANSCO/ VS/ Hyderabad.

PS to JMD (Finance, Comml., & HRD)/ TSTRANSCO/ VS/ Hyderabad.

PA to Director (Projects)/ TSTRANSCO/ VS/ Hyderabad.

PA to Director (Transmission)/ TSTRANSCO/ VS/ Hyderabad.

PA to Director (Lift Irrigation Schemes)/ TSTRANSCO/ VS/ Hyderabad.

PA to Director (Grid Operation)/ TSTRANSCO/ VS/ Hyderabad.

The Executive Director (Finance)/ TSTRANSCO/ VS/ Hyderabad.

The Executive Director(LIS)/ TSTRANSCO/ VS/ Hyderabad.

All Superintending Engineers/ Civil/ TSTRANSCO.

All Superintending Engineer/ OMC's/ 400KV/ LIS/ TSTRANSCO

All Executive Engineers/ Civil/ TSTRANSCO.

All Executive Engineer/ Electrical/ TSTRANSCO.

The Executive Engineer/ Civil/ Quality Control/ TSTRANSCO/ VS/ Hyderabad – He is directed to supervise the collection and testing procedure wherever possible, collect the test reports of concrete cubes casted with Manufactured Sand at other places for future study and reference.