

# महाराष्ट्र प्रदूषण नियंत्रण मंडळ

110824FI0292

☎ : २४०१०४३७/ २४०२०७८१/ २४०१४७०१  
फॅक्स : २४०१४०६८  
visit us at : <http://mpcb.mah.nic.in>  
email : [mpcbson@bom.nic.in](mailto:mpcbson@bom.nic.in)



कल्पतरु पॉइंट, २/ ३/ ४ था माळा,  
सिनेट प्लॅनेट समोर, सायन सर्कल,  
सायन (पूर्व), मुंबई - ४०० ०२२.

क्र. मप्रनि / ससं (हप्रनि) / ब - ५५३२

दिनांक : २०.०८.२०११.

प्रति,

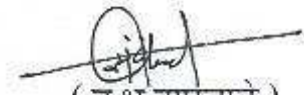
१. ससं (जप्रनि) / (हप्रनि) / (पाम्स) / प्रधान वैज्ञानिक अधिकारी, म.प्र.नि.मंडळ, मुंबई.
२. प्रादेशिक अधिकारी-मुख्यालय, म.प्र.नि.मंडळ, मुंबई.
३. प्रादेशिक अधिकारी, म.प्र.नि.मंडळ,  
मुंबई/ ठाणे/ कल्याण/ नवी मुंबई/ रायगड/ पुणे/ कोल्हापूर/ औरंगाबाद/ नाशिक/ अमरावती/ नागपूर/  
चंद्रपूर.

विषय : सन २०११-१२ या वर्षातील वाळु/रिती लिलावासाठी Environment Impact  
Assesment Study करण्यासाठी TOR मंजूर करण्याबाबत.....

संदर्भ : पर्यावरण विभाग, मंत्रालय, मुंबई यांचे पत्र क्र. इएनव्ही-२०११/ प्र.क्र.१७८/ का-३,  
दि.३०.०७.२०११.

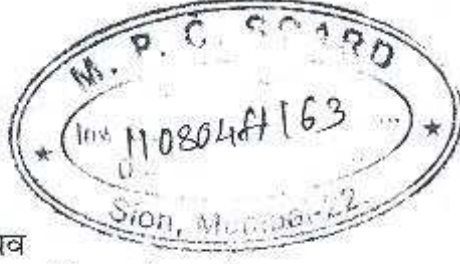
उपरोक्त विषयाबाबत संदर्भाकीत पत्रान्वये पर्यावरण विभागाकडून ५ हेक्टर आणि त्यापेक्षा जास्त क्षेत्रासाठी खनिज पात्रातील / नदी पात्रातील गटातील वाळुचे उत्खनन करण्यासाठी पर्यावरण अनुमती आवश्यक असून त्यापूर्वी पर्यावरण अभ्यास (EAS) किंवा पर्यावरण आघात मुल्यांकन (EIA) करण्यासाठी Terms of Reference ची प्रत मुख्यालयास प्राप्त झाली असून त्याची प्रत आपल्या माहिती व पुढील कार्यवाहीसाठी जोडण्यात आली आहे.

सोबत : वरीलप्रमाणे.

  
( व.भ.वाघजाळे )  
सहाय्यक सचिव (तांत्रिक)

महाराष्ट्र शासन

क्रमांक : इएनव्ही-२०११/प्र.क्र.१७८/का-३  
पर्यावरण विभाग,  
मंत्रालय, १५ वा मजला,  
नवीन प्रशासन भवन, मादाम कामा भाग,  
मुंबई - ४०० ०३२  
दिनांक : ३० जुलै, २०११.



प्रति,  
प्रधान सचिव  
महसूल व वन विभाग (का-ख),  
मंत्रालय, मुंबई.

F.O. (S.M.P.)  
Pispeaks send to R.O. / HOD

विषय :- सन २०११-१२ या वर्षातील वाळू/रेती लिलावासाठी  
Environment Impact Assesment Study करण्यासाठी TOR  
मंजूर करण्याबाबत.

महोदय,

उपरोक्त विषयाबाबत ५ हेक्टर आणि त्यापेक्षा जास्त क्षेत्रासाठी खनिज पात्रातील /  
नदीपात्रातील गटातील वाळूचे उत्खनन करण्यासाठी पर्यावरण अनुमती आवश्यक असून त्यापूर्वी  
पर्यावरण अभ्यास (EAS) किंवा पर्यावरण आघात मुल्यांकन (EIA) करण्यासाठी Terms of  
Referance अंतिम करण्याबाबत आपल्या विभागाने या विभागास कळविण्यात आले होते.

उक्त बाब लक्षात घेता, या विभागाने पर्यावरण विषयक वाळू / रेती लिलावा अगोदर  
पर्यावरणाचा अभ्यास करण्यासाठी Terms of Refernce अंतिम करण्यात आले असून त्याप्रमाणे  
यापुढे कार्यवाही करण्यात यावी. (सोबत Terms of Refernce for EIA of sand Mining ची प्रत  
जोडली आहे.

आपला,

( दे. के. मानकर )

अवर सचिव, महाराष्ट्र शासन

सोबत:- वरील प्रमाणे.

प्रत,

अध्यक्ष, महाराष्ट्र प्रदुषण नियंत्रण मंडळ, मुंबई

सदस्य सचिव, महाराष्ट्र प्रदुषण नियंत्रण मंडळ, मुंबई यांनी त्यांच्या अधिपत्याखालील प्रादेशिक कार्यालयांना  
कळविण्यात यावे.

मुख्य कार्यकारी अभियंता, महाराष्ट्र मेरी टाईम बोर्ड, मुंबई,

सर्व जिल्हाधिकारी कार्यालय (मुंबई व मुंबई उपनगर जिल्हा वगळून)

सर्व विभागीय आयुक्त,

मा. मंत्री (पर्यावरण) यांचे खाजगी सचिव, मंत्रालय, मुंबई

निवडनस्ती/का-३.

---

## TERMS OF REFERENCE FOR EIA OF SAND MINING

---

The Terms of Reference (TORs) for conducting environmental impact assessment (EIA) of sand mining sector for marine coastline and river banks in the State of Maharashtra are given below:

- (i) Assessment of existing sand mining patches along marine coastline and river banks in the State of Maharashtra to arrive at a critical decision regarding continuing or prohibiting sand mining at those sand mining sites. This study will have to be conducted categorically at each site and should address the following pointers:
  - (a) Determine impact on the basis of evidence of ecosystem damage and environmental degradation as well as through questioner survey to judge opinion of stakeholder (e.g. study of social impact and disruption of livelihood of fisherman). If the existing sand mining areas were to continue operation in future, it will be critical to arrive at any decision on the basis of estimates of optimum rate at which sand can be mined from a given location in the marine coastline and river banks so that the water body will not get damaged irreversibly and the sand abstraction can be continued from that spot in a sustainable manner.
  - (b) Establishment of baseline data of sub-bottom profile along the center of a given sand abstraction plot at every 100 m with cross profile at every 10 m on either side stretching from center to the ends will prove to be helpful in developing long-term management strategy. The profile will determine the depth of sand layer. In absence of such information "sustainable mining" cannot be achieved.
  - (c) Sand morphology and properties of sand from existing abstraction areas *vis-à-vis* desirable morphology and properties of sand needed for various construction activities.

- (d) Selection of sand mining and transportation technology (within water body and on land with connectivity through road network).
- (e) Air and noise impact during sand mining activities.
- (f) Recommended size of the "study area" for sampling and impact assessment:  
In case of river, a stretch of 1 km upstream and 3 km downstream from point of sand abstraction and in case of costal area the region covered by a circle having 3 km radius from point of sand abstraction.
- (ii) Preparation of the **Map A** for entire coast of Maharashtra in which CRZ zoning and hazard line demarcation should be made in 1:4000 scale.
- (iii) Preparation of the **Map B** which identifies (in consultation with Maharashtra Maritime Board) critical regions within water-ways where dredging is unavoidable in order to support navigational functions.
- (iv) Preparation of the **Map C** which identifies (in consultation with Maharashtra Maritime Board) critical regions within water bodies surrounding ports and harbours along the coast of Maharashtra State where dredging is unavoidable in order to support functions of ports and harbours.
- (v) Preparation of the **Map D** which identifies feasible locations (along marine coastline and river banks in the State of Maharashtra) for sand abstraction along with clearly specifying the year-round time table and the corresponding amount of allowable limit of abstracted sand. It is important to incorporate the lessons learnt from the assessment performed and presented in TOR (i) and the associated concerns grouped in bullets (a) to (f) as listed above.
- (vi) Articulation and justification of management plan for transportation and disposal of dredged materials in the areas demarcated in Maps A, B and C (mentioned above).

The studies and surveys described in TORs (ii) to (vi) will have to be

conducted by taking a systemic view of marine coastline and river banks in the State of Maharashtra. These studies should address the relevant systemic concerns as well as the following pointers:

- [1] Sand morphology and properties of sand from potential abstraction areas *vis-à-vis* desirable morphology and properties of sand needed for various construction activities.
- [2] Estimating the optimum rate at which sand can be mined from a given location in the marine coastline and river banks so that the water body will not get damaged irreversibly and the sand abstraction can be continued from that spot in a "sustainable manner".
- [3] Establishment of baseline data of sub-bottom profile along the center of a given sand abstraction plot at every 100 m with cross profile at every 10 m on either side stretching from center to the ends will prove to be helpful in developing long-term management strategy. The profile will determine the depth of sand layer. Mining should be limited to the depth of sand and there should be heavy penalty for excess mining.
- [4] At least 12-month observations should be used in various ecological settings in order to determine appropriate period for sand mining and period for avoiding dredging.
- [5] Determination of the optimum frequency and depth of dredging, the degree of water quality disturbance (turbidity) during dredging activities, the expected changes in channel width and depth and thus flood stages upstream and downstream of the dredged site, and the relative change in sediment and associated contaminant (if any) re-suspension during storm events with and without dredging.