



Government of Maharashtra

District Survey Report of Minor Minerals
In Palghar District

by

Mining Branch,

Office of District Collector and District Magistrate , Palghar

District Survey Report is prepared in accordance with Para7 (iii) of S.O. 141 (E) dated 15th January 2016
of Ministry of Environment , Forest and Climate Change

and Sustainable Sand Mining Management Guidelines 2016 by Ministry of Environment , Forest and
Climate Change

Preface

In exercise of powers conferred by section 15 of the Mines and Minerals (Development and Regulation) Act, 1957 (67 of 1957) and of all other powers enabling it in that behalf, the Government of Maharashtra hereby makes the rules, for regulating the extraction of Minor Minerals namely: These rules are the Maharashtra Minor Mineral Extraction (Development and Regulation) Rules, 2013.

Hon'ble Supreme court of India vide its judgment dated February 27, 2012 and further relief amendment dated April 16, 2012 directed all states, Union Territories and ministry of environment and forest, govt. of India, New Delhi to screen mining of minor minerals leases within the purview of EIA notification 2006 and made requirement of environmental clearance to minor minerals less than 5ha compulsory.

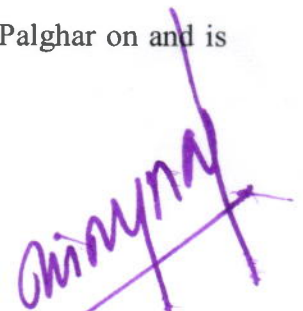
Ministry of environment & forest, GoI vide its office memorandum L-11011/47/2011.IA.II(M) dated 18.05.2012 directed mass to comply Hon'ble Supreme court decision. Further streamlining of Environmental clearance procedures, MOEFCC, GOI amended EIA notification 2006 vide S.O.141(E) dated 15.01.2016 where procedure for preparation of District Survey Report (DSR) for minor minerals has been prescribed. Further the procedure for preparation of DSR and Format is amended vide MOEFCC notification S.O. 3611(E) dated 25.07.2018. The subjected DSR is defined as "Appendix -X (See Paragraph 7(iii)(a))" of the notification S.O.141(E) dated 15.01.2016 and S.O. 3611(E) dated 25.07.2018

It is our pleasure and privilege to release the District Survey Report for the District of Palghar. We thank all the members of the Committee for their valuable suggestions and for sparing time for finalization of this District Survey Report. We are also thankful to the staff of the Mining Branch, Palghar for their contributions in the preparation of this District Survey Report.

The District Survey Report was submitted to the Collector Office, Palghar on and is now being released to the public for information.



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Date - 17/07/2019

Index

Sr. no.	Title	Page
1	Introduction	4
2	Overview of Mining Activity in the District	7
3	The list of mining leases in the district with location, area and period of validity	9
4	Details of Royalty or Revenue received in last three years	33
5	Details of Production of sand or Bajari or Minor mineral in last three years	33
6	Process of Deposition of Sediments in the rivers of the district	34
7	General Profile of the District	38
8	Land utilization pattern in the district- Forest, agriculture, Horticulture, Mining etc	41
9	Physiography of the District	42
10	Rainfall	49
11	Geology and Mineral Wealth	52
12	Drainage System with description of Main rivers.	54
13	Salient Features of Important Rivers and Streams	54
14	Present Status of Mining	55

1. INTRODUCTION

The 21st century is the age of Development, development of Science, Technology and Infrastructure. All these ultimately result to the development of mankind and its standard of living. Taking about infrastructure, it cannot materialize without minerals found on the earth's Crust. However, using this valuable mineral wealth in a sustainable manner is the key long term positive development. Unfortunately, that's not the case. Many minerals, especially minor minerals like (basalt) rock and sand are exploited in an unregulated way since past decade. This leads to rapid exhaustion of essential raw mineral wealth and destruction of environment. Finally, in 2013, Maharashtra Minor Mineral Extraction (Development and Regulation) Rules 2013 came into existence.

As per Gazette notification of 15th January 2016 of Ministry of Environment, Forest and Climate Change a Survey shall be carried out by the District Environment Impact Assessment Authority (DEIAA) with assistance of irrigation department, Drainage department, Forest department, Mining department and Revenue department in the district for preparation of District Survey Report as per the sustainable Sand mining guidelines to ensure identification of areas of aggradations or deposition where mining can be allowed; and identification of areas of erosion and proximity to infrastructural structures and installations where mining should be prohibited and calculation of annual rate of replenishment and allowing time for replenishment after mining in that area.

Every efforts have been made to cover sand mining locations, areas & overview of Mining activity in the district with all its relevant features pertaining to geology & mineral wealth in replenish-able and non-replenish-able areas of rivers, stream and other sand sources. The mineral potential is calculated based on field investigation & geology of the catchment area of the river or streams. Also as per the site conditions and locations, depth of minable mineral is defined. The area for removal of the mineral in a river or stream is decided depending on geomorphology & other factors, it can be 50% to 60% of the area of a particular river or stream. Other constituents like clay and silt are excluded as waste while calculating the mineral potential of particular river or stream. This District Survey Report shall form the basis for application for environment clearance, preparation of reports and appraisal of projects. The report shall be updated once every five years.

GUIDELINES FOR MINING OF MINOR MINERALS

The mining operations for minor minerals were carried out in unscientific manner in Maharashtra since there were no guidelines for extraction of minor mineral. Identifying this fact In exercise of powers conferred by Section 15 of Mines & Minerals (Development & Regulation) Act, 1957 (67 of 1957) and of all other powers enabling it in that behalf, the Revenue & Forest Department, Government of Maharashtra framed the Maharashtra Minor Mineral Extraction (Development and Regulation) Rules, 2013. The present Mining Plan is submitted under rule 22 of MCR 1960.

Since prior environment clearance has now become mandatory for mining of minor minerals irrespective of the area of mining lease after the matter of Deepak Kumar etc. Vs. State of Haryana and Others as per Hon'ble Supreme Court dated the 27th February, 2012 in I.A. No.12-13 of 2011 in Special Leave Petition (C) No. 19628- 19629 of 2009, Ministry of Environment, Forest & Climate Change (MoEF & CC) had issued Office Memorandum No.L-11011/47/2011-IA.II (M) dated 18th May 2012 ; hence forth as per this O.M. all Mining projects of minor minerals would require prior environmental clearance irrespective of the lease area. Mining projects with Lease area less than 5 ha are categorized as category 'B2' and projects With lease area 5 Ha and above and less than 50 ha are categorized as category 'B' whereas Projects with lease area of 50 ha and above are categorized as category 'A'.

Policy on Environment Clearance for mining leases in cluster for minor minerals in the Matter of sand mining was directed by the Hon'ble National Green Tribunal (NGT); vide Its orders dated the 13th January,2015.

The Central Government had constituted the District Level Environment Impact Assessment Authority (DEIAA), for grant of Environment Clearance for Category,, "B2" projects for mining of minor minerals, for all the districts in the country as per the latest amendment S.O. 141 (E) & S.O. 190 (E) dated 15th January 2016 & 20th January 2016 in exercise of the powers conferred by sub- section (3) of Section 3 of the Environment (Protection) Act, 1986 (29 of 1986) and in pursuance of the notification of the Government of India in the erstwhile Ministry of Environment and Forest number S.O. 1533 (E), dated the 14th September.

Direction for preparation of District Survey Report for Sand Mining or River Bed Mining & Mining of other Minor Minerals was made in the Notification dated 15th January 2016 by MoEF & CC along with detailed procedure & format for preparation Of District Survey Report.

To make certain identification of areas of aggradations or depositions where mining can be allowed and indentifying areas of erosion rate of replenishment and allowing time for replenishment after mining in that area is the foremost objective of the preparation of District Survey Report came into existence.

2. Overview of Mining Activity in the District

Minerals are classified into two groups as Major minerals and Minor minerals. Minor Mineral have been defined under section 3 (e) of Mines and Minerals (Regulation and development) Act, 1957. They include building stones, gravel, ordinary sand, limestone Lime burning, boulders, kankar, murum, brick earth ordinary clay used for, bentonite, road metal, slate, marble, stones used for making household utensils etc. Therefore, all othe minerals not defined as minor minerals in the said Act are treated as major minerals. They include coal, manganese ore, iron ore, bauxite, limestone, kyanite, sillimanite, barites, chromite, silica sand, fluorite, quartz, sand used for stowing purposes in coal mines and many other minerals used for industrial purposes.

Maharashtra is the sole producer of corundum and is the second largest producer of manganese ore after Orissa. The principal mineral-bearing belts in Maharashtra are Vidarbha area in the East and Konkan area in the West. Important mineral occurrences are bauxite in Kolhapur, Raigad, Ratnagiri, Satara, Sindhudurg and Thane districts; china clay in Amravati, Bhandara, Chandrapur, Nagpur, Sindhudurg and Thane districts; chromite in Bhandara, Chandrapur, Nagpur and Sindhudurg districts; coal in Nagpur, Chandrapur and Yavatmal districts; dolomite in Chandrapur, Nagpur and Yavatmal districts; fireclay in Amravati, Chandrapur, Nagpur and Ratnagiri districts; fluorite and Shale in Chandrapur district; iron ore (hematite) in Chandrapur, Gadchiroli and Sindhudurg districts; iron ore (magnetite) in Gondia district; kyanite in Bhandara and Nagpur districts; laterite in Kolhapur district; limestone in Ahmednagar, Chandrapur, Dhule, Gadchiroli, Nagpur, Nanded, Sangli and Yavatmal districts; manganese ore in Bhandara, Nagpur and Ratnagiri districts; corundum, pyrophyllite and sillimanite in Bhandara district; quartz and silica sand in Bhandara, Gadchiroli, Gondia, Kolhapur, Nagpur, Ratnagiri and Sindhudurg districts and quartzite in Gondia and Nagpur districts.

Other minerals that occur in the State are barytes in Chandrapur and Gadchiroli districts; copper in Bhandara, Chandrapur, Gadchiroli and Nagpur districts; feldspar in Sindhudurg district; gold in Bhandara and Nagpur districts; granite in Bhandra, Chandrapur, Dhule, Gadchiroli, Nagpur, Nanded, Nasik, Sindhudurg and Thane districts; graphite in Sindhudurg district; lead-zinc in Nagpur district; marble in Bhandara and Nagpur districts; ochre and tungsten in Chandrapur and Nagpur districts; silver and vanadium in

Bhandara district; steatite in Bhandara, Ratnagiri and Sindhudurg districts; and titanium minerals in Gondia and Ratnagiri districts.

Considering the Geology and Geography of Palghar District it is easy to say that the district has a predominant occurrence of Basalt which is considered as a minor minerals according to the MMDR Act 1957. Basalt is an excellent Building stone. It is popularly used as an aggregate in concrete and building roads as road metal, rail metal etc.in very small pockets. Other than basalt minor mineral like Murum and Ordinary earth occurs in the district. Murum is used generally as filling material. Soil is used generally for Brick making. Other major minor mineral is Ordinary sand which is mined from dedicated spots and used popularly in the construction industry.

As of June 2019, there are 25 mining leases for exaction of minor minerals (stone, murrum, soil) operational in Palghar district . Other than these leases Palghar district has many temporary quarry permits issued by the office of Collector, Sub- Divisional Officer and Tahsildar.

In case of **Sand Mining** in Palghar district, there are 2 types of sands based on their source, i.e. 1) River channel sand and 2) Creek sand/ Sea sand .

1) The river channel sand is scarce as the rivers in Palghar district as of short lengths, they also have a steep gradient which and hence inhibiting formation/ deposition of sand in the river channel. This sand is carried by the water to the creek areas where the rivers open into the sea which causes the rivers to slow down and hence depositing the entire sediment load they carry along the way.

2) Palghar district has a coastline dissected by few major and many minor creeks where the fresh water streams/ rivers open into the sea. This region of creeks close to the sea is a part of Costal Regulation Zone (C.R.Z.) where commercial sand mining is completely banned. But according to the government Sand policy dated 21/05/2015 , sand can be excavated from the channel only for clearing the channel for facilitating movements of boats and ships through the creeks / channels. Maharashtra Maritime Board(M.M.B.) is the authority which technically sanctions the area for excavation and quantity of sand to be excavated. On receiving of proposals from M.M.B. ,on behalf of M.M.B. , the collector Office gives Sand excavation permits to interested persons after fulfilling all the requirements. Such mining is done by 2 main methods 1) by means of Mechanical Dredging 2) by means of manual methods like Hatpatti/ Dubbi.

3. The List of Areas Of Existing Stone, Murum And Ordinary Earth Quarries/Leases in the District

The information regarding location and areas of existing Stone, Murum and Ordinary Earth quarries/leases present in Palghar district. All the locations are mentioned taluka wise in the following **Table No. 1 to 8**.

Table 1
Information of Quarries of stone, Murum and soil
Taluka – Palghar

Sr. No.	Name of Mineral	Name of Village	Private /Government	Sr. No./ Gut No.
1	Soil / Murum / Stone	Lalonde	Private	5/1, 105, 66/1, 105/1, 105/2, 104/3,105/1/2, 228/4, 228/5, 53, 59/2, 104/1, 228/4/5, 104
2	Soil / Murum / Stone	Nagzari	Private	151, 73/2, 165/1, 144, 208, 153/2, 133/3, 72/ A
3	Soil / Murum / Stone	Borsheti	Private	78/2,
4	Soil / Murum / Stone	Nihe	Private	20,82
5	Soil / Murum / Stone	Kirat	Private	310, 305, 391/2,289/5,
6	Soil / Murum / Stone	durves	Private	171/2,171/3
7	Soil / Murum / Stone	dahisar	Private	154/1
8	Soil / Murum / Stone	dahisar Manor tarfe	Private	154/1,82/1,82/2,83
9	Soil / Murum / Stone	Chilhar	Private	37
10	Soil / Murum / Stone	Bota	Private	21, 59/2, 80, 22,15, 18, 17/2, 7/1, 69/3
11	Soil / Murum / Stone	Velgoan	Private	25/1
12	Soil / Murum / Stone	Dhuktan	Private	169/3,66/2B,224/1,

				200/6,55/2B, 201/2 A
13	Soil / Murum / Stone	Govade	Private	6
14	Soil / Murum / Stone	Popharan	Private	412,16/1/1/9
15	Soil / Murum / Stone	Amnbadi	Private	20/2
16	Soil / Murum / Stone	Vilangi	Private	32, 30
17	Soil / Murum / Stone	Vadharai	Private	1020
18	Soil / Murum / Stone	Ghivali	Private	32/2
19	Soil / Murum / Stone	Shigoan	Private	995/2
20	Soil / Murum / Stone	Savare	Private	312/A
21	Soil / Murum / Stone	Mande	Govt.	335/1, 335Pai
22	Soil / Murum / Stone	Kandalvan	Govt.	8, 9
23	Soil / Murum / Stone	Khutal	Govt.	19/4, 91/4
24	Soil / Murum / Stone	Wade	Govt.	21/2
25	Soil / Murum / Stone	Masvan	Private	88, 182, 166, 257
26	Soil / Murum / Stone	Shirgoan	Private	464, 344, 851
27	Soil / Murum / Stone	Gundale	Private	196/1,194/11,194/4,150/4, 196/6,186
28	Soil / Murum / Stone	Newale	Private	465/119, 19/1, 19/2
29	Soil / Murum / Stone	Umroli	Private	308
30	Soil / Murum / Stone	Kelve Road	Private	1187,921/3/1, 825
31	Soil / Murum / Stone	Virathan Khurd Teen Dongri	Govt.	67, 12, 85
32	Soil / Murum / Stone	Padghe	Govt.	616, 616/1,559, 560, 561, 562, 542, 555,
33	Soil / Murum / Stone	Kolgaon	Private	239
34	Soil / Murum / Stone	Nandore	Private	360, 363, 366, 222