

FORM-1

APPENDIX -I

(See Paragraph – 6)

FORM 1

(I) Basic Information

Sl. No.	Item	Details
1	Name of the project/s	Sand Mining Project at Mokama & Chintamanichak Ghat on River Ganga, District Patna, State Bihar
2	S.No. of the schedule	1(a)
3	Proposed capacity /area/ length/ tonnage to be handled/command area / lease area/number of wells to be drilled	Mokama & Chintamanichak Ghat Total Area: - 24 Ha. Production:- 815073 tonnes/annum.
4	New/Expansion/Modernization	New
5	Existing Capacity/Area etc.	Not Applicable
6	Category of project i.e. "A" or "B"	B2
7	Does it attract the general condition? If yes please specify	No
8	Does it attract the specific condition? If yes please specify	No
9	Location	Mokama & Chintamanichak Ghat, Area: 24 Ha, Coordinates:- Mokama & Chintamanichak Ghat:- A. 25°23'50.17"N 85°56'26.25"E B. 25°23'54.20"N 85°56'32.55"E C. 25°23'37.65"N 85°57'6.05"E D. 25°23'45.48"N 85°57'9.18"E

Form-1 for Proposed Sand Mining Project of Area 24 Ha at Mokama & Chintamanichak Ghat on Ganga River of District-Patna of State-Bihar

Sl. No.	Item	Details																								
	Plot/Survey/Khasra No.	<table border="1"> <thead> <tr> <th>River name</th> <th>Thana No.</th> <th>Khata No.</th> <th>Khasra No.</th> <th>Name of Ghats</th> <th>Area (in Ha)</th> </tr> </thead> <tbody> <tr> <td rowspan="3">Ganga</td> <td>30</td> <td>1104</td> <td>5929/6026</td> <td rowspan="3">Mokama & Chintamanichak</td> <td rowspan="3">24</td> </tr> <tr> <td>29</td> <td>1049</td> <td>1450/3013</td> </tr> <tr> <td></td> <td>1047</td> <td>1450</td> </tr> <tr> <td colspan="5" style="text-align: center;">Total</td> <td>24</td> </tr> </tbody> </table>	River name	Thana No.	Khata No.	Khasra No.	Name of Ghats	Area (in Ha)	Ganga	30	1104	5929/6026	Mokama & Chintamanichak	24	29	1049	1450/3013		1047	1450	Total					24
River name	Thana No.	Khata No.	Khasra No.	Name of Ghats	Area (in Ha)																					
Ganga	30	1104	5929/6026	Mokama & Chintamanichak	24																					
	29	1049	1450/3013																							
		1047	1450																							
Total					24																					
	Village:	Mauza- Mokama Khas, Chintaman Chak																								
	Tehsil	Mokama																								
	District:	Patna																								
	State:	Bihar																								
10	Nearest railway station/airport along with distance in kms.	Mokama Railway Station, approx. 3.0 Km towards WSW. Patna International Airport, approx. 88 Km towards WNW.																								
11	Nearest Town, City, District Headquarters along with distance in kms.	Nearest Town: Mokama approx. 3.0 Km towards WSW. District Headquarter: Patna approx. 84 Km towards WNW.																								
12	Villages Panchayats, Zilla Parisad, Municipal Corporation, Local body (complete postal address with telephone nos. to be given)	Village- Mokama & Chintamanichak, District- Patna																								
13	Name of the applicant	M/s. Broad-Son Commodities Pvt. Ltd.																								
14	Registered address	Himanshu complex, Block road, Koilwar Chowk, Bhojpur, Bihar																								
15	Address for correspondence:																									
	Name	M/s. Broad-Son Commodities Pvt. Ltd.																								
	Designation (Owner/Partner/CEO)	Owner																								

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Sl. No	Item	Details
	Address	Himanshu complex, Block road, Koilwar Chowk, Bhojpur, Bihar
	Pin Code	802301
	E-mail	broadsonghats@gmail.com
	Telephone No.	9631648555
	Fax No.	-
16	Details of alternative sites examined, if any. Location of these sites should be shown on a topo sheet	Mining is site specific and feasible in the allotted area. Hence no alternative site is examined for mining.
17	Interlinked Projects	None
18	Whether a separate application of interlinked project has been submitted?	Not Applicable
19	If yes, date of submission	Not Applicable
20	If no, reason	Not Applicable
21	Whether the proposal involves approval/clearance under: if yes, details of the same and their status to be given. (a) The Forest (Conservation) Act, 1980? (b) The Wildlife (Protection) Act, 1972? (c) The C.R.Z. Notification, 1991?	--- No No No
22	Whether there is any Governmental Order/ Policy	Yes, Proposed project has been allotted to the proponent vide letter number 651/M on dated 16/11/2014 By District Mining Department Patna, State Bihar for 5 years.

Sl. No.	Item	Details
	relevant/ relating to the site?	
23	Forest land involved (hectares)	No forest land is involved.
24	Whether there is any litigation pending against the project and/or land in which the project is propose to be set up? (a) Name of the Court (b) Case No. (c) Order/directions of the court, if any and its relevance with the proposed projects.	No

- Capacity corresponding to sectoral activity (such as production capacity for manufacturing, mining lease area and production capacity for mineral production, area for mineral exploration, length for linear transport infrastructure, generation capacity for power generation etc.,)

(II) Activity

1. Construction, operation or decommissioning of the Project involving actions, which will cause physical changes in the locality (topography, land use, changes in water bodies, etc.)

Sl. No.	Information/Checklist confirmation	Yes/ No	Details thereof (with approximate quantities /rates, wherever possible) with source of information data
1.1	Permanent or temporary change in land use, land cover or topography including increase in intensity of land use (with respect to local land use plan)	No	The area is River bed, lease area will be used for collection of sand deposited by the Ganga River and will be replenished gradually during succeeding rainy seasons. Hence, there will be no permanent change in

Sl. No.	Information/Checklist confirmation	Yes/ No	Details thereof (with approximate quantities /rates, wherever possible) with source of information data
			land use, land cover or topography of the area.
1.2	Clearance of existing land, vegetation and buildings?	No	The entire mining lease area being part of (dry) river bed, there is no vegetation in the lease area. Hence, there would be no clearance of existing land, vegetation and buildings.
1.3	Creation of new land uses?	No	The mining activity will be confined to the lease area; there will be no creation of new land uses.
1.4	Pre-construction investigations e.g. bore houses, soil testing?	No	Not required
1.5	Construction works?	No	The work relates to only excavation of sand from (dry) river bed during non-monsoon season. No construction work is required for the proposed activity. Only temporary rest shelters will be provided.
1.6	Demolition works?	No	Since no construction work is involved, there will not be any demolition either.
1.7	Temporary sites used for construction works or housing of construction workers?	No	Most of the workers are from nearby villages and they stay in their houses after their work. The basic amenities like safe drinking water, sanitation, toilets, and medical facilities will be provided to workers.
1.8	Above ground buildings, structures or earthworks including linear structures, cut and fill or excavations	No	Not required, as it is an open cast mining of river bed material only.
1.9	Underground works including mining or tunneling?	No	The proposed project is of open cast Sand mining. There will not be any underground mining or tunneling.
1.10	Reclamation works?	No	The minerals excavated during mining process will be replenished naturally during the subsequent rainy seasons. Hence no reclamation works are proposed.
1.11	Dredging?	No	The work involves excavation of Sand from dry river bed and as such no dredging will

Sl. No.	Information/Checklist confirmation	Yes/ No	Details thereof (with approximate quantities /rates, wherever possible) with source of information data
			be done.
1.12	Offshore structures?	No	There will be no off shore structures.
1.13	Production and manufacturing processes?	No	Only excavation of Sand from (dry) river bed (open cast mining). No other production or manufacturing process is involved.
1.14	Facilities for storage of goods or materials?	No	Minerals excavated will be loaded directly into trucks for transportation. Hence no storage facility will be required.
1.15	Facilities for treatment or disposal of solid waste or liquid effluents?	No	No solid waste will be generated. No liquid effluent will be generated; therefore no any treatment or disposal system for solid waste or liquid effluents is envisaged.
1.16	Facilities for long term housing of operational workers?	No	Only local villagers from nearby villages will be employed for the mining activity. Thus no housing facility is proposed. Only temporary rest shelters will be provided to the working peoples.
1.17	New road, rail or sea traffic during construction or operation?	No	No new road, rail will be proposed. Only exiting transport network will be used. There will be an increase in traffic because of movement of few trucks for transportation of minerals.
1.18	New road, rail, air waterborne or other transport infrastructure including new or altered routes and stations, ports, airports etc?	No	The Mokama & Chintamanichak Ghat is well connected to the nearest metalled road (Mokama Ghat Aunta Link road, which further joins NH-31) via an approach road of approx. 0.3 Km towards South. No new road, rail or other transport infrastructure is envisaged.

Sl. No.	Information/Checklist confirmation	Yes/ No	Details thereof (with approximate quantities /rates, wherever possible) with source of information data
1.19	Closure or diversion of existing transport routes or infrastructure leading to changes in traffic movements?	No	There would be no closure or diversion of existing routes, which would change the traffic movements.
1.20	New or diverted transmission lines or pipelines?	No	Not required.
1.21	Impoundment, damming, culverting, realignment or other changes to the hydrology of watercourses or aquifers?	No	No impoundment, damming, culverting, realignment or other changes to the hydrology of watercourses or aquifers is envisaged.
1.22	Stream crossings?	No	No stream crossings are involved, because mining will be done on dry river bed.
1.23	Abstraction or transfers of water from ground or surface waters?	No	No
1.24	Changes in water bodies or the land surface affecting drainage or run-off?	No	There will be no change in the land surface affecting drainage or run-off as mining will be limited within dry river bed.
1.25	Transport of personnel or materials for construction, operation or decommissioning?	Yes	In the operation phase Sand will be excavated and will be loaded directly into trucks and transported to local markets.
1.26	Long-term dismantling or decommissioning or restoration works?	No	Not applicable for this project.
1.27	Ongoing activity during decommissioning which could have an impact on the environment?	No	Not applicable for this project.
1.28	Influx of people to an area in either temporarily or permanently?	No	Only local people will be deployed to carry out minerals excavation. So no influx of people will be seen.
1.29	Introduction of alien species?	No	No such introduction of alien species is foreseen.
1.30	Loss of native species or genetic diversity?	No	As such no loss of native species or genetic diversity is expected
1.31	Any other actions?	No	None

2. Use of Natural resources for construction or operation of the Project (such as land, water, materials or energy, especially any resources which are non-renewable or in short supply):

Sl. No.	Information/checklist confirmation	Yes/ No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data
2.1	Land especially undeveloped or agricultural land (ha)	No	The activity will be done in the proposed mine lease area which is a dry river bed. No agricultural land is involved.
2.2	Water (expected source & competing users) unit: KLD	Yes	Water requirement for the project is Approx. 2.4 KLD for domestic use, Approx. 2.0 KLD for dust suppression and Approx. 1.0 KLD for development of green belt. The total water requirement is 5.4 KLD. This water will be supplied from private tankers or available sources.
2.3	Minerals (MT)	No	No minerals are required for execution of this project.
2.4	Construction material – stone, aggregates, sand / soil (expected source – MT)	No	No construction material is required for this project. On the other hand, construction material will be produced.
2.5	Forests and timber (source – MT)	No	Not required for this project.
2.6	Energy including electricity and fuels (source, competing users) Unit: fuel (MT), energy (MW)	No	Mining operations will be Open cast manual method mining during day hours thus, requiring no electrical energy. However, for transportation of minerals excavated, fuel will be consumed.
2.7	Any other natural resources (use appropriate standard units)	No	No other natural resources will be used.

3. Use, storage, transport, handling or production of substances or materials, which could be harmful to human health or the environment or raise concerns about actual or perceived risks to human health.

Sl. No.	Information/Checklist confirmation	Yes/ No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
3.1	Use of substances or materials, which are hazardous (as per MSIHC rules) to human health or the environment (flora, fauna, and water supplies)	No	This project operation will not involve use of any materials, hazardous to human health or environment.
3.2	Changes in occurrence of disease or affect disease vectors (e.g. insect or water borne diseases)	No	No change in occurrence of diseases, due to mining of Sand. However insect and other poisonous bites are quite possible. For this first aid facility along with anti-venom facility will be made available.
3.3	Affect the welfare of people e.g. by changing living conditions?	Yes	There will be no adverse effect on welfare of the people. On the other hand, the project will improve the living conditions of the people due to earnings from the mining work.
3.4	Vulnerable groups of people who could be affected by the project e.g. hospital patients, children, the elderly etc.,	No	This project will not affect the vulnerable groups of people.
3.5	Any other causes	No	Transportation is one of the major activities during the project. Accidents may occur, which could be avoided by taking due care and precautions.

4. Production of solid wastes during construction or operation or decommissioning (MT/month)

Sl. No.	Information/Checklist confirmation	Yes/ No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
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4.1	Spoil, overburden or mine wastes	No	Proposed mining is for sand from inactive channel of riverbed, so no overburden will be generated. A thin layer of soil will be found at some places, will be scraped manually and used for plantation of green belt.
4.2	Municipal waste (domestic and or commercial wastes)	No	No Municipal domestic waste is expected to be generated from the proposed project.
4.3	Hazardous wastes (as per Hazardous Waste Management Rules)	No	No hazardous wastes are envisaged.
4.4	Other industrial process wastes	No	No industrial process waste is envisaged.
4.5	Surplus product	No	No surplus products are expected as all production will be lifted side by side.
4.6	Sewage sludge or other sludge from effluent treatment	No	No sewage will be generated.
4.7	Construction or demolition wastes	No	No construction or demolition wastes are expected.
4.8	Redundant machinery or equipment	No	No redundant machinery or equipment is involved.
4.9	Contaminated soils or other materials	No	No contaminated soils are generated.
4.10	Agricultural wastes	No	No agricultural wastes are produced.
4.11	Other solid wastes	No	No other solid wastes are generated.

5. Release of pollutants or any hazardous, toxic or noxious substances to air (Kg/hr)

Sl. No.	Information/Checklist confirmation	Yes/ No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
5.1	Emissions from combustion of fossil fuels from stationary or mobile sources.	Yes	During operational phase there may be emissions by movement of vehicles (vehicular exhaust) which will be minimized by using only PUC certified & Bharat IV stage vehicles in the mining lease area.
5.2	Emissions from production processes	No	No emissions from the production process

Sl. No.	Information/Checklist confirmation	Yes/ No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
			because mining operation will be Open cast method. Emission is expected only from the vehicles used in transportation of minerals only.
5.3	Emissions from materials handling including storage or transport	Yes	Some dust is likely to be emitted during transportation of minerals i.e. dust, vehicular exhaust anticipated during loading, unloading of excavated material. However adequate measures will be taken to suppress the dust and preventing it to become airborne.
5.4	Emissions from construction activities including plant and equipment	No	No construction will be done at the mining site. Hence, no emissions are anticipated.
5.5	Dust or odors from handling of materials including construction materials, sewage and waste	Yes	Dust emission is expected during handling of minerals i.e. during loading of minerals.
5.6	Emissions from incineration of waste	No	There are no such waste generated which require incineration.
5.7	Emissions from burning of waste in open air (e.g. slash materials, construction debris)	No	No burning of waste is done, hence no emission is expected.
5.8	Emissions from any other sources	No	Not involved in this project.

6. Generation of Noise and Vibration, and Emissions of Light and Heat:

Sl. No.	Information/Checklist confirmation	Yes/ No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data with source of information data
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Sl. No.	Information/Checklist confirmation	Yes/ No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data with source of information data
6.1	From operation of equipment e.g. engines, ventilation plant, crushers	No	Mining will be done by open cast manual method mining during day time only.
6.2	From industrial or similar processes	No	No such process involved.
6.3	From construction or demolition	No	No construction or demolition work is Proposed.
6.4	From blasting or piling	No	Blasting and piling is not proposed for the mining process
6.5	From construction or operational traffic	Yes	Some noise will be generated from vehicular movement during transportation of minerals.
6.6	From lighting or cooling systems	No	Mining will be carried during day time and in open area. Thus there is no need for lighting and cooling systems.
6.7	From any other sources	No	None

7. Risks of contamination of land or water from releases of pollutants into the ground or into sewers, surface waters, groundwater, coastal waters or the sea:

Sl. No.	Information/Checklist confirmation	Yes/ No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
7.1	From handling, storage, use or spillage of hazardous materials	No	Since no hazardous material will be used or produced at the site, no risk of contamination of land or water envisaged.
7.2	From discharge of sewage or other effluents to water or the land (expected mode and place of discharge)	No	No discharge of sewage or other effluents will be there.

Sl. No.	Information/Checklist confirmation	Yes/ No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
7.3	By deposition of pollutants emitted to air into the land or into water.	No	Adequate measures to suppress dust and not to allow dust to become airborne are provided.
7.4	From any other sources	No	Not envisaged
7.5	Is there a risk of long term build up of pollutants in the environment from these sources?	No	Scraping of accumulated dust build-up on road will be done frequently to keep the road in good order, thus avoiding any risk to environment.

8. Risk of accidents during construction or operation of the Project, which could affect human health or the environment

Sl. No.	Information/Checklist confirmation	Yes/ No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
8.1	From explosions, spillages, fires etc from storage, handling, use or production of hazardous substances	No	No hazardous substance will be used or produced during the proposed mining operations.
8.2	From any other causes	No	Risk of accidents are expected: <ol style="list-style-type: none"> 1. During transportation. 2. During Excavations. 3. During loading of minerals into tractor trolleys. Accidents can be avoided by taking due care and precautions.
8.3	Could the project be affected by natural disasters causing environmental damage	Yes	The mine lease area lies in Seismic Zone IV. This zone is classified as High Damage Risk

Sl. No.	Information/Checklist confirmation	Yes/ No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
	(e.g. floods, earthquakes, landslides, cloudburst etc)?		Zone. Floods are also anticipated during monsoon season. However mining will be stopped during monsoon and flood alerts will be given during non-monsoon period, if any. <i>(SOURCE: http://ndma.gov.in/ndma/eqmeasurement.html)</i>

9. Factors which should be considered (such as consequential development) which could lead to environmental effects or the potential for cumulative impacts with other existing or planned activities in the locality

Sl. No.	Information/Checklist confirmation	Yes/ No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
9.1	Lead to development of supporting facilities ancillary development or development stimulated by the project which could have impact on the environment e.g.: <ul style="list-style-type: none"> • Supporting infrastructure (roads, power supply, waste or waste water treatment, etc.) • Housing development • Extractive industries 	Yes	With improvement in availability of employment living standard of the people will raise which itself may lead to build economic structure of the society. These are positive impacts

Sl. No.	Information/Checklist confirmation	Yes/ No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
	<ul style="list-style-type: none"> • Supply industries • Other 		
9.2	Lead to after-use of the site, which could have an impact on the environment.	No	The site will not be used for any other purpose which will have an impact on the environment.
9.3	Set a precedent for later developments	Yes	Proposed mining activity can set a precedent for increase in infrastructure developmental activity.
9.4	Have cumulative effects due to proximity to other existing or planned projects with similar effects	No	No any other projects are existing proximity of project site.

(III) Environmental Sensitivity

Sl. No.	Areas	Name/ Identity	Aerial distance (within 15 km.) Proposed project location boundary
1	Areas protected under international conventions, national or local legislation for their ecological, landscape, cultural or other related value	Nil	Distance and direction Not Found
2	Areas which are important or sensitive for ecological reasons - Wetlands, watercourses or other water bodies, coastal zone, biospheres, mountains, forests.	Ganga River Mohani River Dewan River	Mining lease allocated on the inactive channel of the mentioned river. Approx. 7.0 Km towards SW. Approx. 8.0 Km towards South.

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Sl. No.	Areas	Name/ Identity	Aerial distance (within 15 km.) Proposed project location boundary
3	Areas used by protected, important or sensitive species of flora or fauna for breeding, nesting, foraging, resting, overwintering, migration.	No	There is no such area within 15 km from the site.
4	Inland, coastal, marine or underground waters	No	Not present
5	State, National boundaries	Nil	Not within 15 km from the project site.
6	Routes or facilities used by the public for access to recreation or other tourist, pilgrim areas	NH-80 NH-82 NH-31	Approx. 2.0 Km towards South. Approx. 5.0 Km towards SSW. Approx. 5 Km towards SE.
7	Defense installations	Nil	There is no such area within 15 km from the site.
8	Densely populated or built-up area	Mokama	Approx. 3 Km towards WSW
9	Areas occupied by sensitive man-made land uses (<i>hospitals, schools, places of worship, community facilities</i>)	Hospital: Medicam Hospital Educational Institutions Govt. Primary School Worship; Maa Jagdamba Mandir	Approx. 2.5 Km towards WSW. Approx. 3.0 Km towards WSW. Approx. 14 Km towards SSE.

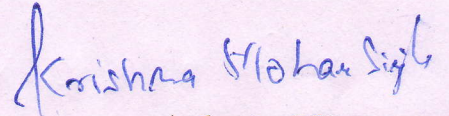
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Sl. No.	Areas	Name/ Identity	Aerial distance (within 15 km.) Proposed project location boundary
10	Areas containing important, high quality or scarce resources (<i>Ground water resources, surface resources, forestry, agriculture, fisheries, tourism, minerals</i>)	No	Not present
11	Areas already subjected to pollution or environmental damage. (<i>Those where existing legal environmental standards are exceeded</i>)	No	There is no Area already subjected to pollution or environmental damage. (<i>Those where existing legal environmental standards are exceeded</i>)
12	Areas susceptible to natural hazard which could cause the project to present environmental problems (<i>Earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions</i>)	Yes	Area is susceptible to Earthquake. Project area falls in Zone-IV as High Damage Risk Zone.

"I hereby given undertaking that the data and information given in the application and enclosures are true to the best of my knowledge and belief and I am aware that if any art of the data and information submitted is found to be false or misleading at any stage, the project will be rejected and clearance give, if any to the project will be revoked at our risk and cost.

Place:

Date:



Authorized Signatory

M/s. Broad-Son Commodities Pvt. Ltd.
Himanshu complex, Block road, Koilwar
Chowk, Bhojpur, Bihar

Note:

1. The projects involving clearance under coastal Regulation Zone Notification, 1991 shall submit with the application a C.R Z map duly demarcated by one of the authorized agencies, showing the project activities, w.r.t. C.R.Z (at the stage of TOR) and the recommendations of the State Coastal Zone Management Authority (at the stage of EC). Simultaneous action shall also be taken to obtain the requisite clearance under the provisions of the C.R.Z Notification, 1991 for the activities to be located in the CRZ.
2. The projects to be located within 10 km or the National parks, Sanctuaries, Biosphere Reserves, Migratory corridors of wild Animals, the project proponent shall submit the map duly authenticated by chief wildlife warden showing these features vis-à-vis the project location and the recommendations or comments of the Chief Wildlife Warden' thereon (at the Stage of EC)."
3. All correspondence with the Ministry of Environment & Forests including submission of application for TOR/Environmental Clearance, subsequent clarifications, as may be required from time to time, participation in the EAC Meeting on behalf of the project proponent shall be made by the authorized signatory only. The authorized signatory should also submit a document in support of his claim of being an authorized signatory for the specific project."