Name of the members who were present in the meeting are as follows: -

| 1) | Roshni Sen, IAS | Secretary, SEAC | Present through VC |
|-----|------------------------------------|-----------------|--------------------|
| 2) | Dr. Ashit Kumar Mukherjee | Chairman, SEAC | Present |
| 3) | Dr. Anirban Gupta | Member, SEAC | Present through VC |
| 4) | Dr. Indranath Sinha | Member, SEAC | Present through VC |
| 5) | Dr. Pradip Kumar Sikdar | Member, SEAC | Present through VC |
| 6) | Prof. (Dr.) Aniruddha Mukhopadhyay | Member, SEAC | Present through VC |
| 7) | Prof. (Dr.) Sampa Chakrabarti | Member, SEAC | Present through VC |
| 8) | Prof. (Dr.) Suchandra Bardhan | Member, SEAC | Present through VC |
| 9) | Dr. Nilangshu Bhusan Basu | Member, SEAC | Present through VC |
| 10) | Dr. Goutam Kumar Saha | Member, SEAC | Present through VC |
| 11) | Shri Shubhendu Bandyopadhyay | Member, SEAC | Present through VC |

The 28th meeting of the reconstituted State Expert Appraisal Committee (SEAC), was held on 08.01.2022 at 10:30 p.m. through both physical and online modes in the Conference Room at Paribesh Bhawan, Bidhan Nagar. The meeting was attended by Shri Samik Panigrahi, Deputy Secretary, Dept. of Industry, Commerce & Enterprises, Govt. of West Bengal. At the outset, the Chairman, SEAC welcomed all the members.

Shri Debashis Sarkar, Chief Engineer, WBPCB mentioned that five (05) District Survey Report (DSR) of the five districts namely Purba Bardhaman, Paschim Bardhaman, Murshidabad, Purulia and Uttar Dinajpur were received from the Dept. of Industry, Commerce & Enterprises and forwarded by the Member Secretary, SEIAA, WB to SEAC for appraisal. In this regard, the Hon'ble Supreme Court in the matter of CIVIL APPEAL NOS. 36613662 OF 2020 has passed an order dated 10.11.2021 wherein it was mentioned : 'It is to be noted that MoEF&CC, in accordance with the directions of the Tribunal, had issued Enforcement and Monitoring Guidelines for Sand Mining (hereinafter to referred to as "the 2020 guidelines") in the month of January 2020. Chapter 4 of the 2020 guidelines deals with identification of possible sand mining sources and preparation of DSR.

It is also mentioned that : 'Needless to state that while preparing DSRs and the appraisal thereof by SEAC and SEIAA, it should be ensured that a strict adherence to the procedure and parameters laid down in the policy of January 2020 should be followed'

Hence, the appraisal of the DSRs should be done based on the Enforcement & Monitoring Guidelines for Sand Mining (E&MGSM) 2020 as directed by the Hon'ble Supreme Court.

Shri Samik Panigrahi, Deputy Secretary, Dept. of Industry, Commerce & Enterprises mentioned that the Dept of IC&E, had engaged NABET accredited consultants for preparation of the DSRs. The District Survey reports were prepared by the Agencies/Consultants engaged either by the Mines Branch, Industries, Commerce and Enterprise, Government of West Bengal or by West Bengal Mineral Development & Trading Corporation Limited (a state Government PSU). All the reports were duly vetted by the technical team of Directorate of Mines and Minerals, Government of West Bengal before being forwarded to SEIAA for final approval. The Directorate of Mines and Minerals will undertake future upgradation of the DSR through periodical study in future as per recommendation of the SEAC and SEIAA. As directed in the E&MGSM, 2020, the DSRs have been placed in the public domain for obtaining comments of the general public. He also categorically mentioned that the IC&E Dept. shall bear the responsibility of the data and content of DSRs prepared.

After the introductory session, the technical presentations were made by accredited consultants. M/s. Global Management & Engineering Consultants presented the DSRs for the districts Murshidabad, Uttar Dinajpur and Purba Bardhaman. M/s. RSP Green Development and Laboratories Pvt. Ltd. presented the DSRs for the districts Paschim Bardhaman and Purulia.

After going through all the presentations, the SEAC was of the opinion that the DSRs presented were not entirely in conformity with the E&MGSM, 2020 as directed by the Hon'ble Supreme Court. After careful consideration and detailed deliberation, the SEAC decided that the following queries information should be addressed incorporated in the DSRs :-

- 1. In the drainage map watersheds and micro-watersheds should be marked.
- 2. Hydrographs at key intersections along the entire stretch of the river falling in the particular district along with a discussion on the runoff of the river in the upstream and downstream within the district.
- 3. A separate map showing locations of dams, barrages, bridge, river bed tube wells, river bed collector wells and infiltration galleries.
- 4. Depth to base flow in the riverbed sand mining areas, present and proposed, in pre-monsoon and post-monsoon periods.
- 5. Field photographs showing activities of replenishment study.
- 6. A map showing long-term (10-year or more) erosion-accretion areas on both the banks of the rivers which would help to identify no-mining zone on the river bed along with a discussion.
- 7. In each proposed block, the RL of the sand surface (pre and post Monsoon) will be useful and the suggested mining depth corresponds to a particular RL of the deepest layer mined (not depth on absolute terms in case replenished quantity is different)
- 8. Depth of mining considered for calculation of potential reserve. It presumes that base flow depth is more than the mining depth in pre-monsoon period. That needs to be substantiated with data for each block.
- 9. Ground water level pre and post monsoon in the watershed (of district) may be put in a map.
- 10. It was also suggested to show in maps the approach roads (accessibility plan complying with guidelines) for the blocks.

- 11. Sand mining in designated upstream blocks may affect the replenishment in blocks downstream and this consideration may be relevant for estimating the percentage of replenishment. What should be the percentage for minable reserve with respect to potential reserve of sand?
- 12. Data on river flow on all seasons and the sediment load data (especially during seasons of replenishment) will constitute a baseline condition to judge any effect of increased mining on the river flow characteristics.
- 13. Stowing sand excavation blocks have not been shown in river map.
- 14. Existing mining leases may be shown on river map along with potential blocks
- 15. On the river map, potential new blocks and existing blocks may also be designated by serial or code number so that it matches with the tables.
- 16. Table 28 (Paschim Bardhaman) why length and width have been estimated? In subsequent table, area of each block is given which may be added up.
- 17. It will be appropriate if the methodology adopted (not only the available theory) for annual replenishment estimation is clearly and objectively narrated with applicable data and sample calculations.
- 18. Representative satellite and/or drone photography, if used for surveying, may also be produced in DSR.
- 19. The suggested mining depth should be indicated for each block in the table (not done for Purba Bardhaman).
- 20. Order of sections in the report are not logical in some reports.
- 21. A table showing all general compliances in DSR as per the Mining Rules may be furnished.
- 22. For existing mines (sand and other minerals), minable reserve has not been mentioned.
- 23. All the documents leave much to be desired in respect of reserve assessment and replenishments estimations.
- 24. Reserve assessment has been rudimentary and the replenishment estimation needs to be carried out using accepted methods and models available for the purpose.
- 25. Rivers are one of the main sources to supply sand for construction projects. Depending on river morphology and hydraulic characteristics, its sediment transport capacity, and mining operation method, the extraction of river bed materials may affect its ecosystem through bank and bed erosion. This needs to be incorporated in the DSR.
- 26. To advance the mechanisms of river pit infilling, the effects of various parameters (i.e., the distance between pits, the pit plan shape, the pit depth, sediment size, and approaching flow velocity) needs to be investigated.
- 27. Monitoring should provide data to evaluate the upstream and downstream effects of sand and gravel extraction activities, and long-term changes. A brief report summarizing the annual results of the physical and biological monitoring should document the evolution of the sites over time, and the cumulative effects of sand and gravel extraction. The summary should also recommend any maintenance or modification of extraction rates needed to minimize impacts of extraction.
- 28. Sand Replenishment, Geomorphology and Hydrology Physical monitoring requirements of sand and gravel extraction activities should include surveyed channel cross-sections, longitudinal profiles, bed material measurements, geomorphic maps, and discharge and sediment transport measurements. The physical data will illustrate bar replenishment and any changes in channel morphology, bank erosion, or particle size.

- 29. With reference to (point no 4.1.1 g) of enforcement guidelines 2020 read with Standard environmental conditions for sand mining (point no 8 page 73) of SSMMG-2016, all DSRs so prepared, should contain a chapter on NO MINING ZONE with name of mouza, dag no and geo references along with areas of sensitivity. Appraisal of the DSRs should NOT be taken for consideration without the chapter on NO MINING ZONE and AREAS of SENSITIVITY.
- 30. The areas of sensitivity should contain those NON-FOREST AREAS which are in excellent line of habitat for wild animals, birds, turtles, dolphins and other aquatic life, which need be excluded from the list of mining areas on ecological and environmental grounds. This is utmost necessary and has to be done to avoid conflict about wetland use in near future.
- 31. For example, low lying swamps by the side of river Ajay in Paschim Midnapur and Ahiran lake, pathan beel, Bishnupur beel area in Murshidabad District provide an excellent niche for migratory birds in the winter. Part of river Damodar and the confluence of Damodar and Hooghly in East Barddhaman District house one of the last surviving habitats of endangered gangetic dolphin (Platinista gangeticus), should be identified in consultation with the concerned forest circles of the Department of Forests and to be excluded from the list of mining areas.
- 32. Though all the DSRs so prepared, have not followed the same format yet it is felt that necessary remedial measures to mitigate the effect of mining and a reclamation plan in mined out areas should be included, especially in those DSRs which have not yet mentioned the same.
- 33. Data, satellite imageries and allied information in respect of flora, fauna and their habitat biological environment, if collected from ENVIS centre may be included in the DSRs for ready reference.
- 34. DSR comprises of secondary data which are required to be endorsed by concerned Departments.
- 35. Catchment of the river Ajay is 398.11 sq km which is lying exposed to the onslaught of torrential rain and has become an area of unabated erosion. A catchment treatment plan with micro watershed approach may be thought of and included in the DSRs,
- 36. Revision should be done every year and actual survey should be done.

<u>Purba Bardhaman</u>

- 1) It is to be clearly mentioned that there are no other minerals than sand in this district.
- 2) Dates of NIC database and other data should be provided
- 3) Outcome / response to the public consultation should be mentioned
- 4) No-Mining-Zone should be clearly mentioned with special mention to the ecologically and otherwise sensitive zones. Bridges and river-bed tubewells should also be clearly demarcated. Wildlife should also be considered.
- 5) Hydrographs of the rivers and volume of rain should be studied to correlate with the minable sand reserve.
- 6) Text parts (as in Chapter 6) should be provided with proper reference and citation of authentic books. Sources of Tables and figures should be mentioned. Some are very old data those should be replaced by latest data.
- 7) Depth of mining and distance from banks should be clearly mentioned and highlighted.
- Secondary (Collected) data/ map from other departments should be certified from the respective departments (e.g., Forest and wildlife data, demography, aquifer, transportation route to the blocks)
- 9) Evidence (like dated photographs) of surveying, collection of primary data to be provided.

- 10) Sample calculation and methodology for calculation for minable resource and replenishment data to be provided with proper units.
- 11) If any predictive model is used, its validity should be established.

<u>Murshidabad</u>

In addition to the above comments put for the DSR of Purba Bardhaman (as applicable), following are the specific comments:

- 1) Evidence for 4 times physical survey to be provided
- 2) Table-3.2, Table-3.3 : Unit of rainfall should be provided
- 3) Legend mismatch is there in Fig 7.3
- 4) Table-7.10 proper explanation is required.
- 5) Land utilization and forests data are upto 2013/2014 should be updated.

Pashchim Bardhaman

In addition to the above comments put for the DSR of Purba Bardhaman (as applicable), following are the specific comments:

- 1) Point-wise compliance to the guidelines should be provided at the beginning of the report.
- 2) In Map-1, map of India looks distorted to be complied with the official map.
- 3) The criteria for the 'proposed future mining area' should be clearly stated.

<u>Purulia</u>

In addition to the above comments put for the DSR of Purba Bardhaman (as applicable), following are the specific comments:

- Source of information for the data should be provided with date of collection of information (Table-29). 'Name of the Proponent' may be replaced by 'Name of the landowner'. A suitable note may be added.
- 2) For minor minerals, quantity of reserve and other details should be provided, both as data and on a district map.
- 3) Depth of baseflow should be indicated clearly.

The SEAC shall only consider the DSR proposals on submission of satisfactory reply to the abovementioned queries.

Reconsideration Proposals :-

Industry Sector

 Proposed expansion of Steel Plant by installation of 3x15 T Induction Furnaces instead of 2x8 T Induction Furnaces with matching LRF & CCM to produce 148500 TPA billets and by increasing Rolling Mill capacity from 48000 TPA to 96000 TPA and setting up a Galvanizing unit of 160 MT/day by M/s. Gajanan Iron Private Limited at Jamuria Industrial Estate, Mandalpur, PO & PS – Jamuria, Dist – Paschim Bardhaman, West Bengal. (Proposal No. SIA/WB/IND/61399/2014).

Activity:

 This is a proposal for expansion of Steel Plant by installation of 3x15 T Induction Furnaces instead of 2x8 T Induction Furnaces with matching LRF & CCM to produce 148500 TPA billets and by increasing Rolling Mill capacity from 48000 TPA to 96000 TPA and setting up a Galvanizing unit of 160 MT/day.

Chronology:

• Salient features of the proposed project are -

| Location of the Site | Jamuria Industrial Estate, Mandalpur, P.O.& P.S. – Jamuria, Dist. – Burdwan in the state of West Bengal. | | | | | |
|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|--|
| Latitude & Longitude: | Latitude 23°41'05.77"N and Longitude 87°05'24.20"E | | | | | |
| Land Area | The proposed expansion project will be installed on the available land within the existing plant premises, comprising of total 1.55 hectares (3.83 acres) land as well as on some additional land [0.55 hectares (1.35 acres)] adjoining the existing plant premises. The land is in possession by the Company. Total plant area of total 5.18 acres (2.1 hectares) | | | | | |
| Greenbelt Development | 1.7 acres (0.68 hectares) of land (33% of the covered under Green Belt. | | the total plant | area) shall be | | |
| Details of Existing & Proposed Units | Units for which EC has already been obtained | Existing Capacity (as per EC) | Proposed Units | Proposed Capacity | Total Capacity | |
| | Induction Furnace (2x8 T) | 48,000 TPA (has not yet been set up | Induction Furnace (3x15T) with matching CCM in place of 2x8T Induction furnaces | 1,48,500 TPA (total) Billets | 1,48,500 TPA Billets | |
| | Rolling Mill | 48,000 TPA (is operational) | Rolling Mill | 48,000 TPA TMT bars / angles / channels / rounds / flat products, etc. | 96,000 TPA TMT bars / angles / channels / rounds / flat products, etc. | |
| | | | Galvanizing Unit | 160 MT/day | | |
| Raw Materials | RAW MATERIALS | | ANNUAL | ANNUAL REQUIREMENT (IN TPA) | | |
| | SPONGE IRON | | 1,20,000 | | | |
| | PIG IRON | | 22,500 | | | |
| | SCRAPS | | 16,000 | 16,000 | | |
| | FERRO ALLO | OYS | 1,160 | | | |

| Manpower | Around 300 persons (100 - Permanent and 200 - Contractual) | | |
|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| Total Water | Requirement : 97 KLD for total project after expansion | | |
| Requirement | Source: Jamuria Municipal Corporation/Borewells. | | |
| Total Wastewater Generated | The plant will be designed as a zero-discharge plant | | |
| Power requirement | 23.2 MW for total project after expansion Source: From DVC / IPCL | | |
| Solid Waste generation and Disposal | • Solid waste that will be generated from Induction Furnace is slag. The hot slag generated from IF will be transferred to slag yard after cooling. The slag from Induction Furnace will be used for road construction and land filling purposes after metal recovery. | | |
| | Solid wastes from CCM (viz. Scales) and Rolling Mill (end cuts and missed rolls) will be reused in Induction Furnaces. | | |
| | • Zinc Dross & Acidic Sludge will be given to the authorized Vendors. | | |
| | • Solid waste of domestic/commercial origin that would be generated in the Plant will be disposed off suitably in consultation with the concerned Civic body. | | |
| Project Cost | Rs. 70 Crores | | |

- The project proponent presented their proposal for Terms of Reference presentation in the 178th SEAC meeting held on 09.08.2019.
- In accordance with the recommendation of the SEAC, ToR was issued on 20.08.2019.
- Public hearing was conducted on 05.11.2020.
- The project proponent submitted Final EIA report on 20.04.2021.
- The project proponent presented their proposal final EIA Report in the 16th reconstituted SEAC meeting held on 04.06.2021 and based on the submission and presentation made by the project proponent, the committee recommended the following points for submission / clarifications :
 - i. Six monthly EC compliance report.
 - ii. Land documents along with plot nos. showing the present status of ownership and status of conversion.
 - iii. Permission regarding withdrawal / supply of water from the Competent Authority.
 - iv. Emission control and its management for the galvanising unit.
 - v. Present status with photographs and proposed plan for green belt (with percentage) with photograph of the area. Action plan for the green belt development plan in 33% area with not less than 1500 nos/ha should be proposed.
 - vi. A planting plan in (1:100) scale corresponding to the tree list mentioning spacing etc. is to be submitted. It is suggested to undertake planting programme with species like <u>Azadirachta</u> <u>indica</u>, <u>Dalbergia</u> <u>Sissoo</u>, <u>Dalbergia</u> <u>latifolia</u>, <u>Albizia</u> <u>lebbeck</u>, <u>Alstonia</u> <u>scholaris</u>, <u>Mimusops</u> <u>elengi</u>, <u>Artocarpus integrifolia</u>, <u>Cordia sebastina</u>, <u>Tectona grandis</u> and <u>Mangifera indica</u> to name a few.

- vii. Due care should be taken to protect the green belt already developed. A third party may be engaged to monitor the rate of survival percentage of the planted trees. Areas having low density vegetation should be systematically and scientifically reforested in consultation with local forest department.
- viii. Revised water balance including rainwater harvesting.
- ix. Revised EMP to be submitted as per Office Memorandum of MoEF & CC vide F. No. 22-65/2017.IA.III dated 30.09.2020. Items like solar lighting, dedicated internet connection in the schools may be considered.
- x. Details of wastewater/cooling water treatment plant should be furnished along with wastewater analysis before and after treatment.
- xi. The amenities to be provided for 100 workers should be indicated. Drinking water treatment facility to be indicated.
- xii. Prevailing thermal conditions and noise levels in rolling mill area and control measures should be adopted.
- xiii. Photographs of the exact site to find the existing status
- xiv. Details of locations where baseline measurements (air, water, noise) were made. Baseline data within factory premises (air, noise) is important.
- xv. Proposed storage pond for rainwater harvesting will be lined on all sides and bottom if rainwater harvested from industries are allowed for recharging the groundwater through surface ponds, then lining of the pond is not going to serve the purpose in arid regions like Jamuria.
- xvi. Flue gas characteristics and temp (before any treatment/conditioning) should be specified.
- xvii. Hazardous waste characteristics, quantity and storage plan/facility should be indicated
- xviii. Specific water consumption (water quantity per unit quantity of product) may be mentioned.
- The project proponent submitted their reply on 12.08.2021, which was considered in the 19th reconstituted SEAC meeting held on 26.08.2021. SEAC scrutinized the documents submitted by the project proponent in the meeting and noted that the project proponent has not submitted any satisfactory reply to the queries raised in the earlier meeting. Hence the SEAC recommended project proponent may be directed to submit proper / satisfactory reply to queries raised by SEAC in the 16th reconstituted SEAC meeting held on 04.06.2021.
- The project proponent once again submitted their reply on 03.01.2022 in PARIVESH Portal which
 was considered in the 28th reconstituted meeting held on 07.10.2021. SEAC scrutinized the
 documents submitted by the project proponent in the meeting and deliberated on the submissions
 made by the project proponent.

SEAC considered the inspection report of WBPCB dated 05.08.2019. The unit had a Rolling Mill with CBM fired reheating furnace which was in operation during inspection. The present Consent to Operate from WBPCB is valid upto 30.11.2022. It was also noted that the present application is for installation of 3x15 T Induction Furnaces instead of 2x8 T Induction Furnaces with matching LRF & CCM to produce 148500 TPA billets and by increasing Rolling Mill capacity from 48000 TPA to

96000 TPA and setting up a Galvanizing unit of 160 MT/day. The proposed expansion project will be installed on the available land with the existing premises comprising of 3.83 acres as well as additional land of 1.35 acres (Total 5.18 acres). The entire land of the project is converted to industrial land.

SEAC accepted the final proposal consisting of various environmental parameters and salient features and **recommended Environmental Clearance** for the proposed project.

Table-1 : List of the projects which were placed before the reconstituted SEAC in the twenty-eighth meeting held on 08.01.2022 and the Summary Decisions thereof:

| SI. | Name of the unit & Project address | Summary Decision | | | | |
|--------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|--|--|--|--|
| No. | | | | | | |
| A. Cases placed for technical presentation | | | | | | |
| 1. | Discussion on DSRs of following five (05) districts received from the Dept. of Industry, Commerce & Enterprises and forwarded by the Member Secretary, SEIAA, WB. a) Purba Bardhaman, b) Paschim Bardhaman, c) Murshidabad, d) Purulia, e) Uttar Dinajpur. | Asked for additional submission | | | | |
| B. Cas | ses placed for reconsideration | | | | | |
| Industry Sector | | | | | | |
| 1. | M/s. Gajanan Iron Private Limited Proposed expansion of Steel Plant by installation of 3x15 T Induction Furnaces instead of 2x8 T Induction Furnaces with matching LRF & CCM to produce 148500 TPA billets and by increasing Rolling Mill capacity from 48000 TPA to 96000 TPA and setting up a Galvanizing unit of 160 MT/day at Jamuria Industrial Estate, Mandalpur, PO & PS – Jamuria, Dist – Paschim Bardhaman, West Bengal. | Recommended for Environmental Clearance | | | | |

The meeting ended with a vote of thanks to the Chair.

Sd/-

(Dr. Ashit Kumar Mukherjee) Chairman State Expert Appraisal Committee, West Bengal Sd/-

(Dr. Nilangshu Bhusan Basu) Member State Expert Appraisal Committee, West Bengal

Sd/-

(Dr. Pradip Kumar Sikdar) Member State Expert Appraisal Committee, West Bengal Sd/-

(Prof. (Dr.) Aniruddha Mukhopadhyay) Member State Expert Appraisal Committee, West Bengal

Sd/-

(Dr. Anirban Gupta) Member State Expert Appraisal Committee, West Bengal Sd/-

(Prof. (Dr.) Sampa Chakrabarti) Member State Expert Appraisal Committee, West Bengal

Sd/-

(Shri Subhendu Bandhopadhyay) Member State Expert Appraisal Committee, West Bengal Sd/-

(Dr. Indranath Sinha) Member State Expert Appraisal Committee, West Bengal

Sd/-

(Dr. Goutam Kumar Saha) Member State Expert Appraisal Committee, West Bengal Sd/-

(Prof. (Dr.) Suchandra Bardhan) Member State Expert Appraisal Committee, West Bengal

Sd/-(Roshni Sen, IAS) Secretary State Expert Appraisal Committee, West Bengal