# GOVERNMENT OF INDIA MINISTRY OF JAL SHAKTI

#### DEPARTMENT OF WATER RESOURCES, RD & GR CENTRAL GROUND WATER AUTHORITY

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## Minutes of first meeting of the Expert Appraisal Committee held on 13.04.2021 and 16.4.2021 held through video conferencing.

First meeting of the Expert Appraisal Committee was held on 13.04.2021 and 16.4.2021 online through video conferencing to review the impact assessment report/Comprehensive Hydrogeological report submitted by the firm for grant of No Objection Certificate for abstraction of groundwater as per the guidelines.

List pf participants is enclosed.

Dr. Uma Kapoor, Regional Director, Central Ground Water Authority & Convenor welcomed all the members of the committee. After a brief introduction of all the participants, Chairman gave his opening remarks. He informed the Committee Members about the NGT order, in pursuance of which the present committee had been constituted. As per the revised guidelines notified by the Ministry of Jal Shakti, all industries located in Over-exploited, Critical and Semi-critical (OCS) assessment units drawing ground water in excess of 100 KLD are required to submit impact assessment report. Further, infrastructure dewatering projects are required to submit impact assessment report along with groundwater modelling covering area within 5 km radius. Furthermore, all mining projects irrespective of dewatering are required to submit comprehensive hydrogeological reports of core and buffer zones in the radius of 2 and 10 sq.km respectively.

Further industries and mining projects located in OCS assessment units and drawing > 500 KLD in areas underlain by hard rock and > 1000 KLD in areas underlain by soft rock/ alluvium are required to conduct modelling studies to predict the impact and plan mitigation measures in all categories of assessment units. In safe assessment units, industries drawing > 500 KLD in areas underlain by hard rock and > 2000 KLD in areas underlain by soft rock/ alluvium are required to submit impact assessment report with modelling studies.

The Agenda Items were then taken up for discussion and the agenda were presented by the Consultants of the respective Project Proponents.

#### Day 1 - 13.04.2021

# Agenda Item No. 1.1: M/s Ultratech Cement Ltd. (Unit Birla White), Khamnor Block, Rajsamand District, Rajasthan, Application No. – 21-4/13529/RJ/IND/2019

The industry has applied for fresh NOC for ground water abstraction of 150 KLD of ground water. This is a new industry located in Critical block. Fresh ground water requirement of the industry is 150 KLD. The following observations were made by the Members:

- 1. Presentation was not as per the template provided.
- 2. Depth to water map was not shown.
- 3. Flow directions on the water table contour map were not shown in the presentation.
- 4. Water quality map was not shown.
- 5. Water should be used optimally as the entire process is dry.
- 6. Data for ground water draft estimation be submitted.
- 7. In the water balance, bifurcation of industrial water use should be given.
- 8. Socio-economic impact was not clear.

- 9. PP has proposed to implement recharge. As the industry is located in hard rock terrain, has the infiltration rate been determined?
- 10. Source of data/ maps should be quoted.

The application was deferred.

# Agenda Item No. 1.2: M/s Pali Hills Breweries Pvt. Ltd., Patratu Block, Ramgarh District, Jharkhand, Application No. - 21-4/728/JH/IND/2021

The industry is an existing industry located in Semi-critical block and has applied for fresh NOC. Fresh ground water requirement of the industry is 210 KLD. The following observations were made by the Members:

- 1. The Geological map should be of 5 km radius.
- 2. Hydrogeological map and Depth to Water Level maps need corrections.
- 3. Water quality maps should be prepared.

The application was deferred.

# Agenda Item No. 1.3. : Tawa III Underground Mine of Western Coalfields Ltd., Ghoradongri Block, Betul District, Madhya Pradesh - 21-4/906/MP/MIN/2020

This is a new project located in safe Block. Anticipated quantum of ground water dewatering is 125 KLD.

The observations of the Members are given along with other projects of WCL.

## Agenda Item No. 1.4: M/s Birla Corporation Ltd., Sohawal Block, Satna District, Madhya Pradesh, Application No. – 21-4/743/MP/IND/2019

This is an existing industry located in Sohawal Block of Santa District, which falls under Semicritical category. The ground water requirement of the industry is 497 KLD through 31 proposed borewells. It was observed that since the water demand is for drinking/ domestic use only for the residential colony, the revised application may be submitted under infrastructure category. The present application shall be rejected by CGWA. Number of bore wells proposed seems to be on a higher side. The same needs to be revised as per the actual yield of wells in the area.

## Agenda Item No. 1.5: M/s Asahi India Glass Ltd., Chanasma Taluk, Patan District, Gujarat, Application No. - 21-4/4561/GJ/IND/2018

This is a new industry located in OE Taluk. The CTO was issued by Gujarat Pollution Control Board on 5.4.2020. The application is for withdrawal of fresh ground water to the tune of 234 KLD. It was informed that the entire taluk is saline. Industry is withdrawing fresh ground water from deeper confined aquifer. The upper aquifer is saline due to presence of clay lenses. There are very few ground water abstraction structures. Rising trend has been observed in the long term in the unconfined as well as first confined aquifer. Ground water development in the area is low due to salinity problem.

It was observed that water requirement projected by the PP was on a higher side. The application was deferred with the advice to submit the revised water requirement.

Agenda Item No.1.6: Tawa II Underground Mine of Western Coalfields Ltd., Ghoradongri Block, Betul District, Madhya Pradesh, Application No. 21-4/563/MP/MIN/2017

Agenda Item No. 1.7: Shobhapur Underground Mine Expansion Project of Western Coalfields Ltd., Ghoradongri Block, Betul District, Madhya Pradesh, Application No. 21-4/560/MP/MIN/2017

Agenda Item No. 1.8: Shivpuri Open Cast Mine Expansion Project of Western Coalfields Ltd., Parasia Block, Chhindwara District, Madhya Pradesh, Application No. 21-4/536/MP/MIN/2017

# Agenda Item No. 1.9: Ghorawari Open Cast Mine of Western Coalfields Ltd., Junnardeo Block, Chhindwara District, Madhya Pradesh, Application No. 21-4/555/MP/MIN/2017

All the projects are located in Safe block. The following observations were made by the Members for projects at Agenda Item Nos. 1.3 and 1.6 to 1.9:

- 1. Aquifer parameters (viz. K, T, Hydraulic gradient etc.) estimated in the field are not in synchronization with the mine seepage calculations.
- 2. Applicant was advised to submit revised calculations of mine seepage as per the aquifer parameters estimated in the field along with working sheets used in calculation.
- 3. Gainful utilization of mine seepage used in industrial process may be elaborated.
- 4. Applicant was advised to corroborate mine seepage quantum with actual seepage in existing nearby mines.
- 5. Applicant was advised to submit depth to water level map and water table contour map clearly showing flow directions.

All these projects were deferred for the next meeting.

## Agenda Item No. 1.10: Amilia Limestone Mine of KJS Cement Limited, Maihar Block, Santa District, Madhya Pradesh, Application No. 21-4/886/MP/MIN/2019

This is an existing project located in Semi-critical Block. Following observations were made by the EAC:

- 1. Applicant was advised to submit revised maps which include major locations name, village drainage, boundary, land-use, Geology etc.
- 2. Applicant should submit depth to water level map and water table contour map clearly showing flow directions.
- 3. Applicant shall submit detailed year wise, bench wise & season wise mine seepage estimation of each mine pit.
- 4. Applicant shall submit the detailed recharge plan (No. of wells, formation, capacity, recharge intake rate etc.)

The application was deferred.

#### Day 2 - 16.04.2021

# Agenda Item No. 1.11: M/s Varun Beverages Ltd., Block Tijara, District Alwar, Rajasthan, Application No. - 21-4/20/RJ/IND/2015

The industry is an existing industry located in Over Exploited block and has applied for Renewal of NOC. Fresh ground water requirement of the industry is 495 KLD. The following observations were made by the Members:

- 1. Applicant was advised to submit the revised map which includes the geology of the area.
- 2. Applicant shall submit the revised map showing the depth to water level.
- 3. Applicant shall revise the groundwater requirement by updating the water balance chart considering the process flow of the unit.
- 4. Applicant will reduce fresh ground water requirement.

5. Presentation should also include outcome of water audit and plan to reduce fresh water consumption by 20% over a period of next three years.

The application was deferred.

### Agenda Item No. 1.12: M/s Torrent Power Limited., Ahmedabad, Gujarat, Application No. - 21-4/3970/GJ/IND/2018

The industry is an existing industry located in Semi critical block and has applied for fresh NOC. Fresh ground water requirement of the industry is 10000 KLD. The following observations were made by the Members:

- 1. Applicant can explore availability of STP treated water.
- 2. In the water balance diagram, fresh water was shown to be used for ash, slurry, coal yard, floor washing, gardening etc. However, for these activities treated water could be used.
- 3. Applicant was advised to reduce fresh ground water requirement.

The application was deferred.

# Agenda Item No. 1.13: M/s Malu Paper Mills Ltd., Tehsil Saoner, District Nagpur, Maharashtra, Application No. - 21-4/1098/MH/IND/2017

The industry is an existing industry located in Semi critical block and has applied for Renewal of NOC. Fresh ground water requirement of the industry is 249 KLD. The following observations were made by the Members:

- 1. Presentation was not as per the template provided.
- 2. Applicant was advised to submit revised maps which include names of major locations, villages, drainage, land-use, Geology etc.
- 3. Applicant should submit depth to water level map and water table contour map clearly showing flow directions.
- 4. Applicant should submit aquifer description of the project area.
- 5. Applicant was advised to include the findings of water audit in the PPT and plan to reduce 20% fresh water consumption over a period of next three years.
- 6. Impact on groundwater resources and socio-economic impacts on groundwater regime not presented by the applicant.

The application was deferred with advice to reduce the freshwater requirement by working on the water balance of the industry.

# Agenda Item No. 1.14: M/s Schaeffler India Ltd., Block Maneja, District Vadodara, Gujarat, Application No. - 21-4/3020/GJ/IND/2017

The industry is an existing industry located in Semi critical block and has applied for fresh NOC. Fresh ground water requirement of the industry is 735 KLD. The following observations were made by the Members:

- 1. Applicant was advised to submit revised maps which include names of major locations, villages, drainage, land-use, Geology etc.
- 2. Applicant should submit depth to water level map and water table contour map clearly showing flow directions.
- 3. Model was found to be incorrect with RM error of 10%. Applicant was advised to conduct modelling studies again to predict the impact and plan mitigation measures.

4. Applicant needs to revise the water balance and reduce fresh water requirement.

The application was deferred.

# Agenda Item No. 1.15: Rama Phosphates Ltd. Oil Division, Block Sanwer, District Indore, Madhya Pradesh, Application No. - 21-4/462/MP/IND/2017

The industry is an existing industry located in Over Exploited block and has applied for fresh NOC. Fresh ground water requirement of the industry is 296 KLD. The following observations were made by the Members:

- 1. Applicant was advised to submit the water level contour map showing groundwater flow direction.
- 2. Applicant shall revisit the groundwater resource estimation and agricultural draft of ground water
- 3. Applicant should reduce the fresh groundwater requirement by working on the water balance of the industry unit.

The application was deferred.

## Agenda Item No. 1.16: Bridgestone India Pvt. Ltd, Block Nalcha, District Dhar, Madhya Pradesh, Application No. - 21-4/793/MP/IND/2019

The above-mentioned project is existing tyre manufacturing unit located in Over Exploited Category. The unit has applied for fresh NOC. Fresh groundwater requirement of the industry is 194 KLD. Industry needs groundwater only for a period of 10 days in a year when there is shortage of surface water supply during the summer season.

It was observed that the industry was getting adequate quantum of surface water supply. It should create sufficient storage space to accommodate the required quantum of water fro 10 days. The application was rejected.

# Agenda Item No. 1.17: ALEMBIC PHARMACEUTICALS LTD., ALEMBIC RESEARCH CENTRE – 1 Block GORWA, District Vadodara, Gujarat, Application No. - 21-4/6855/GJ/IND/2021

The industry is an existing industry located in Semi critical block and has applied for fresh NOC. Fresh ground water requirement of the industry is 169 KLD. The following observations were made by the Members:

- 1. Applicant was advised to submit revised maps which include names of major locations name, villages, drainage, land-use, Geology etc.
- 2. From the water balance diagram it was observed that quantum of water used in washing was 68 KLD which appears to be on a higher side. Also fresh water was being used for gardening// flushing etc.
- 3. It was advised that regenerated water from softener could be used for plantation.
- 4. Applicant was advised to revise the water balance of the industry and reduce the fresh groundwater requirement.

The application was deferred.

#### Agenda Item No. 1.18: Jay Chemical Industries Ltd, Ahmadabad City Taluka, Ahmadabad, Gujarat, Application No. - 21-4/2654/GJ/IND/2017

The industry is an existing industry located in Semi critical block and has applied for fresh NOC. Fresh ground water requirement of the industry is 146.83 KLD.

It was observed that the applicant unit is a chemical, where implementation of recharges measures is not advisable within the premises as it may contaminate the groundwater resources. So, firm was advised to construct the water storage structures for accumulation of rainwater and use it in the industry activity thereby reducing the abstraction of fresh groundwater resources.

Application was approved.

#### Agenda Item No. 1.19: Archean Chemical Industries Pvt Ltd., Block Lakhpat, District Kachchh, Gujarat, Application No. - 21-4/1167/GJ/IND/2014

The industry is an existing industry located in Safe block and has applied for renewal of NOC. Fresh ground water requirement of the industry is 14657 KLD. The following observations were made by the Members:

- 1. Applicant was advised to submit revised maps which include names of major locations, village boundary, drainage, land-use, Geology etc. Maps should cover 5 km radius from the project site.
- 2. Applicant should submit depth to water level map and water table contour map clearly showing flow directions.
- 3. Applicant was advised to conduct modelling studies again to predict the impact and plan mitigation measures accordingly. Applicant was advised to ask the Modeller to be present at the time of next presentation.
- 4. Groundwater quality of the project area is saline, and industry is withdrawing huge quantum 14567 KLD of saline groundwater.
- 5. Applicant was advised to rework on the water balance of the industry.

The application was deferred.

#### LIST OF PARTICIPANTS

#### Members of the Committee:

- 1. Shri G.C. Pati, Chairman, CGWB
- 2. Dr. Uma Kapoor, Regional Director, CGWA
- 3. Shri Sundeep, Scientist 'F' and director, CP division, MoEF&CC.
- 4. Shri A. Sudhakar, Divisional Head, WQM I Division, CPCB.
- 5. Shri KD Bhardwaj, Regional Director, NPC.
- Shri Motipalli Ramesh, Scientist "E', wetland Division, MoEF&CC.
- Dr. Shashank Shekhar, Geology Deptt, Delhi University.

#### **Other Officers**

- 1. Sunil Kumar, Member, CGWA.
- Shri P. K. Naik, Scientist 'D', CGWA
  Dr. Rakesh Kushwaha, Scientist 'D', CGWA
  Ashok Patre, Scientist 'D', CGWA
  Shri Anmol Sharma, Scientist 'C', CGWA

- 6. Aditi Bhatt, Scientist 'B', CGWA.
- 7. M. Goutham, Scientist 'B', CGWA.

- 8. Anita Bisht, Young professional (GW), CGWA.
- 9. Abhishek Upadhyay, Young professional (GW), CGWA
- 10. Anand Bhatt, Young professional (GW), CGWA.
- 11. Ankush Sarange, Young professional (GW), CGWA.

#### **LIST OF PROJECT PROPONENTS FOR 13.04.2021**

#### 1.1 M/s ULTRATECH CEMENT LTD (UNIT BIRLA WHITE) - 21-4/13529/RJ/IND/2019

- 1. Mr. Rajendra P. Mishra (Head Projects )
- 2. Dr. Sandeep Mishra Sr. Manager- Environment
- 3. Mr. Pavan Gupta- AE-Consultant

#### 1.2 M/s PALI HILLS BREWERIES PVT LTD. - 21-4/728/JH/IND/2021

- 1. Mr. Manoj Kumar Sahu Director (Pali Hills Beverages Pvt. Ltd.)
- 2. Mr. Anshul Yadav Vardan Environet (Accredited Ground Water Institution)
- 3. Mr. Kireet Acharya Vardan Environet (Accredited Ground Water Institution)

#### 1.3 M/s TAWA-III UG MINE - 21-4/906/MP/IND/2019

#### 1.6 M/s TAWA II UG EXPN. MINE - 21-4/563/MP/MIN/2017

#### 1.7 M/s SHOBHAPUR UG EXPANSION MINE - 21-4/560/MP/MIN/2017

#### 1.8 M/s SHIVPURI OC EXPN. - 21-4/536/MP/MIN/2017

#### 1.9 M/s GHORAWARI OPENCAST PROJECT - 21-4/555/MP/MIN/2017

- 1. Mr. Kaushik Chakraborty, GM(Env), WCL
- 2. Mr. Rakesh.K, AM(Env), WCL
- 3. Ms. Palak Sobti, AM(Hydro), CMPDI (Consultant)

#### 1.4 M/s BIRLA CORPORATION LTD. - 21-4/743/MP/IND/2019

- 1. Mr Megha Shyam, Ground Water & Mineral Investigation Consultancy Centre (P) Ltd., Jaipur
- 2. Mr Bhaskar Bhattacharya, Unit Head, Birla Corporation Ltd., Satna
- 3. Mr. Manoj Vijayvargiya, Asst. Vice President, Birla Corporation Ltd., Satna
- 4. Dr. Sunil Kasture, SD Head, Birla Corporation Ltd., Satna

#### 1.5 M/s ASAHI INDIA GLASS LIMITED - 21-4/4561/GJ/IND/2018

- 1. Mr. Pankaj Gahlot; Asahi India Glass Ltd
- 2. Mr. Prakash Ramchandra Gupte (Mo. +91 9998765403); Accredited Groundwater Professional
- 3. Ms. Sanam Patel (Mo. +91 8320311760); Environmental Consultant Soni Group of Technologies

#### 1.10 M/s AMILIA LIMESTONE MINES - 21-4/886/MP/MIN/2019

- 1. Mr. Puneet Tripathi
- 2. Mr. Narayan Shukla
- 3. Mr. Pawan Gupta, (CGWA Accredited Hydrologist) from Associate Engineers and Consultant, Jaipur

#### **LIST OF PROJECT PROPONENTS FOR 16.04.2021**

#### 1.11 M/s VARUN BEVERAGES LTD. - 21-4/20/RJ/IND/2005

- 1. Mr. Satya Prakash Chauhan
- 2. Mr. Sanjeev Kumar
- 3. Mr. Pawan Gupta
- 4. Mr. Zakir Hussain

#### 1.12 M/s TORRENT POWER LTD. - 21-4/3970/GJ/IND/2018

- 1. Mr Rakesh Shah
- 2. Mr NVN Chakravarthy
- 3. Mr Viral Mehta
- 4. Mr J B Patel

#### 1.13 M/s MALU PAPER MILLS LTD. - 21-4/1098/MH/IND/2017

- 1. Mr. Jitendra N. Panpalia, Malu Paper Mills Ltd, Manager.
- 2. Shri. Shrivallabh Kothe, Accredited Groundwater Professional.
- 3. Shri. Jagdish Wankhede, Environmental Consultant.

#### 1.14 M/s SCHAEFFLER INDIA LIMITED- 21-4/3020/GJ/IND/2017

- 1. Mr. Shital Shah/Mr.Pratik Barot, Schaeffler India Limited, Maneja
- 2. Mr. N.U.Limbachia, Mr. Nitin Dwivedi, Mr. Rutvik Vaishnav, Baroda Water Management Team (Consultants)

#### 1.15 M/s RAMA PHOSPHATES LTD (OIL DIVISION) - 21-4/462/MP/IND/2017

- 1. Mr. Sudhindra Mohan Sharma
- 2. Mr. Amit
- 3. Mr. R.K Ojha

#### 1.16 M/s BRIDGESTONE INDIA PVT LTD. - 21-4/793/MP/IND/2019

- 1. Mr. Sudheer Mohan Sharma
- 2. Mr. Jitendra Kumar Singh
- 3. Mr. Dharmesh Pandya

#### 1.17 M/s ALEMBIC RESEARCH CENTRE-1 - 21-4/6855/GJ/IND/2021

- 1. Mr. Sushil Kharakwal
- 2. Mr. R.S.Joshi, 9825321699
- 3. Mr. Sujit Koshy-7016702205
- 4. M/s. Baroda Water Management Team (Consultants)

#### 1.18 M/s JAY CHEMICAL INDUSTRIES LTD. (UNIT 3/2) - 21-4/2654/GJ/IND/2017

- 1. Mr. Pankaj Kumar/ Mr. Shirish Kothari
- 2. Mr. Prakash Ramchandra Gupte, (GCWA Accredited Hydrologist)

#### 1.19 M/s ARCHEAN CHEMICAL INDUSTRIES PVT LTD - 21-4/1167/GJ/IND/2014

- 1. R.R.Sorathia Technical Advisor,
- 2. NCVN Chakravarthy Consultant
- 3. Subash Kashinathan Project Head