

STATE EXPERT APPRAISAL COMMITTEE (SEAC): ASSAM
3RD FLOOR, STATE POLLUTION CONTROLBOARD, ASSAM,
BAMUNIMADAM, GUWAHATI- 781021
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Minutes of the 6th Meeting (2nd Sitting) of the State Expert Appraisal Committee (SEAC) held on 23rd February, 2024 from 2.00 PM to 5.00 PM in the Conference Hall, Convention Centre, KNP & TR, Kaziranga, Assam.

List of the Hon'ble Members / Officials present in the meeting:

Sl no.	Name	Designation	Signature
1	Sri Jatindra Sarma, IFS (Retd.)	Chairman	Sd/-
2	Dr. Raja Rofique Haque	Member	Sd/-
3	Sri. Arup Barpujary	Member	Sd/-
4	Shri Shantanoo Bhattacharyya	Member	Sd/-
5	Dr. Bijoy Sankar Goswami	Member	Sd/-
6	Dr. Apurba Kr Das	Member	Sd/
7	Dr. Rahul Mahanta	Member	Sd/
8	Dr. S.K. Dutta	Member Secretary	Sd/-

At the very outset, the Member Secretary, SEAC welcomed the Hon'ble Chairman, SEAC and the PCB, Assam (who was a special invitee) and all the Members of the Committee. He briefed the house about the agenda for the meeting as circulated and requested the esteemed members for their thorough participation and deliberation to expedite the process of disposal of the pending cases.

As per the agenda, the august committee duly reviewed the Minutes of the Meetings (1st Sitting and 2nd Sitting) held on 30th January'2024 and ratified the minutes.

As per the agenda for the 2nd Sitting, the august Committee duly deliberated, discussed and made appraisal and furnished their opinion / views which were unanimously accepted, as pointed out against each of the agenda items, quoted here under:

1. EC for Redevelopment of Assam Police Reserve Campus, Guwahati, Assam by Public Works Department (Loko Nirman Bibhag) SEIAA. 3547/2023 (SIA/AS/INFRA2/434599/2023)

The proposal was discussed in 1st SEAC meeting held on 30/10/2023 and ADS is sought. Resolution of 1st SEAC Meeting is as follows:



" The project is on Re-development of the **Assam Police Reserve Campus** by the M/S Public Works Department (PWD), Assam located at Dag no. 541, Patta No (Government Land), Guwahati, District: Kamrup Metropolitan, Guwahati, Assam - 781001. Total Built up area under the Project =**1,02,740.69 m²**. Project cost is projected at Rs **544 Crore**.

As the total built up area is **1,02,740.69 m²**, therefore, **1284** number of plants are required to be planted by the project proponent in suitable patches in and around the project area covering around **1Ha** of the total project area. It was suggested by the committee that the plant species may be Bakul (*Mimosops elengi*), Nahor (*Mesua ferrea*), Ashoka (*Saraca asoca*), Bokphul (*Sesbania grandiflora*), Kordoi (*Averrhoa carambola*), Kanchan (*Bauhinia purpurea*), Jalphai (*Ealeocarpus floribundus*), Hilikha (*Terminalia chebula*), Amlokhi (*Phyllanthus embelica*), Rudrakshya (*Elaeocarpus ganitrus*), Kuji thekera (*Garcinia morella*), Ronga Joba (*Hibiscus rosa sinensis*), Bael (*Aegle marmelos*), Chandan (*Santalum album*), Agor (*Aquillaria malaccensis*), Giloy (*Tinospora cordifolia*), Sewali phul (*Nyctanthes arbor tris tis*), Mohaneem (*Azadirachta indica*), Money plant (*Araceae* member), indigenous flowering species of shrubs like Kamini kusum (*Murraya paniculata*), Narasingha (*Murraya koengii*) etc.

Development of green belt or the plantation activities around the Project area shall mandatorily be carried out by the project proponent and uploaded accordingly with photographic evidence which shall be treated as one of the primary condition for the compliance report subject to monitoring in due course by the competent authority.

The committee further found the documents and information wanting in the aforesaid proposal submitted by the proponent:

1. Approved Plan by the GMDA/ Gauhati Municipal Corporation
2. Disaster Management Plan
3. Rain water harvesting, Sewage Treatment Plan (STP)
4. Certificate regarding use of ground water from the Central Ground Water Authority.
5. Solid waste management plan
6. Plan for translocation of existing tree species, if any, to avoid felling as far as practicable
7. Concept and plan of Green building with its stipulations so far use of solar energy and parameters to be adhered to.

With the above observations the committee in principle unanimously agreed to recommend approval for grant of the EC by the SEIAA after due compliance of the information /documents sought and presentations by the proponent in the next meeting."

Resolution No 6/1:

The proponent have replied to the ADS on 26.10.2023 and supporting documents as uploaded and furnished are placed before the Committee for discussion and deliberation. Requisite documents requiring clearances from the statutory bodies are uploaded including the EMP, Water and Waste Water Management details, Municipal Solid Waste Management Plan, Rain Water Harvesting (RWH), Drainage plan, Parking Plan etc . It was observed that the NOC from the GMC is not yet furnished and uploaded.

Detailed presentation was made by the consultant Sri Krishan Chandra Panda representing the OCEAO-ENVIRO Management Solutions (India) Private Limited in presence of the authorized signatory of the project Proponent. It is on record that the total plot area of the project is 65,310.03 Sq m. The project is comprising of proposed 9 buildings eg. Office, Barrack, School, Residential (Type B, C and D), Community Hall, Namghar, Temple, Multi Level Car Parking etc. Estimated cost of the project is Rs 544.54 Crore. The project is falling under the Category 8(a) of the Schedule to the EIA Notification dated 14.09. 2006.

The Built up area details and the numbers of Floors for each category of the Buildings are as under:

- I) School Building- up to First floor- 2178.82 Sq m
- II) Police Barrack- up to Sixth floor- 4489.50 Sq m
- III) Community Centre-Ground floor- 299 Sq m
- IV) Multi level car parking- up to 9th floor + terrace - 21,016.27 Sq m
- V) Namghar-Ground floor-84.09 Sq m
- VI) Temple-Ground floor- 65.64 Sqm
- VII) Office Building-up to 5th floor+ terrace- 7376.80 Sqm
- VIII) Residential Building (Type B and C)- up to 15 th floor + terrace- 47,231.46 Sqm
- IX) Residential Building (Type D)- up to 12 th floor + terrace- 7,008.53 Sqm

As the total built up area is 1,02,740.69 m² · therefore, 1284 numbers of plants are required to be planted by the project proponent in suitable patches in and around the project area covering almost 1Ha of the total project area. It was suggested by the committee that the plant species may be Bakul (*Mimosups elengi*), Nahor (*Mesua ferrea*), Ashoka (*Saraca asoca*), Bokphul (*Sesbania grandiflora*), Kordoi (*Averrhoa carambola*), Kanchan (*Bauhinia purpurea*), Jalphai (*Ealeocarpus floribundus*), Hilikha (*Terminalia chebula*), Amlokhi (*Phyllanthus embelica*), Rudrakshya (*Elaeocarpus ganitrus*), Kuji thekera (*Garcinia morella*), Ronga Joba (*Hibiscus rosa sinensis*), Bael (*Aegle marmelos*), Chandan (*Santalum album*), Agor (*Aquillaria malaccensis*), Giloy (*Tinospora cordifolia*), Sewali phul (*Nyctanthes arbor tris tis*), Mohaneem (*Azedirachta indica*), Money plant (*Araceae* member), indigenous flowering species of shrubs like Kamini kusum (*Murraya paniculata*), Narasingha (*Murraya koengii*) etc etc.

The Committee felt it expedient that the numbers of plants should not be restricted to the stipulations and the same should invariably be increased accordingly comprising of herbs, shrubs, climbers and trees, etc with touch of religious utility of flowering plants and effort to garner support from the inmates for future maintenance with their active support, particularly school going Children. Efforts need to be put to get the plants with their scientific names, local names properly labeled showing medicinal value for appreciation by the inmates specially by the school going children.

The Committee is also of the considered opinion that adequate provision is made by the proponent for the inmates specially for the school going Children, the Women and as well for the **elderly** inmates for a **YOGA Hall** (Yoga Centre) wherein a trained personnel in Yoga could be engaged for impart of proper training for a healthy living.

The committee after due deliberations and discussions suggest the Proponent for mandatory compliance of conditions of Indian Green Building Council (IGBC) or **GRIHA** (Green Rating for Integrated Habitat Assessment) / **LEEDS** (Leadership in Energy and Environmental Development Systems) including the proposed greenery around the premises, as prescribed, and the same are to be uploaded in the **PARIVESH** portal.

Further, the STP is to be managed by the Project Proponent for the period even after handing over the projects to the stakeholders. The PP shall have the AMC with the STP provider for operation and maintenance for a period of at least initial 10 (Ten) years at the 1st instance and shall be monitor the compliance by the PCB, Assam.

Certificate from the Central Ground Water Authority for use of water in the operational phase needs to be obtained by the Proponent including the requisite permission / NOC from the GMC. Other requisite information with layout plan are to be furnished by the proponent as suggested above.

The Committee is of the opinion to have an inspection of the site in question by a sub-committee to be constituted for the purposes and shall suggest the Proponent accordingly for remediation of the deficiencies in the overall plan and also the requirements as suggested including furnishing of requisite documents as may deem necessary.

The cost earmarked for the environmental safeguards contained in the Environment Management Plan (EMP) amounting to **Rs 117 Lakh** as Capital Cost and **Rs 20.50 Lakh** as recurring cost per year for 5 (five) years against each of the components shall have to be utilized and shall not be diverted for any other purposes and year wise expenditures both in constructional and operational phases shall be reported to the PCB, Assam & SEIAA, the Regional Office, MoEF& CC, Gol, Guwahati along with the break up of expenditures for record and monitoring for the same provided the activities and expenditures do not require further change due to other additional requirements in the plan as now suggested. The cost requiring changes and increase in the Budget shall be reflected accordingly.

The project Proponent shall need to get the EC transferred by filing application to the SEIAA in the name of the Developer for compliance of all the conditions / stipulations in terms of the EC and fixation of responsibilities / accountability for environmental safeguard before start of the activities.

2. **EC for Regularization of existing manufacturing unit- Khandelwal Saw Mills private limited that produces timber based products of capacity 8972 MTPA and resin of capacity 243 MTPA by Khandelwal Saw Mills Private Limited. SEIAA. 3606/2023 (SIA/AS/IND3/439525/ 2023)**

Resolution 6/2:

M/s Khandelwal Saw Mills Pvt. Ltd. is a Plywood Manufacturing Industry that produces and consumes **resins**, i.e., **(243 MTPA)** and as such it needs prior Environmental Clearance (EC) for setting up of such an industry. As per the order of the MoEF & CC contained in F.No. 22-93/2017-IA.III dated 10.04.2019 a resin producing unit of less than

1000 MTPA needs to obtain prior EC under the B-2 Category. Accordingly, the PP had applied for regularization of the project by obtaining EC that was established and commissioned in February, 2016.

The project Proponent Sri Bhawesh Mittal, Director had applied for the EC and the documents relevant to the case are furnished. The NOC from the Palashbari Municipal Board, the CTO from the PCBA (valid till 31.03.2023), exemption letter from the Central Ground Water Authority (CGWA), the Pre Feasibility Report (PFR), EMP, Registered Sale Deed in respect of land etc are all uploaded.

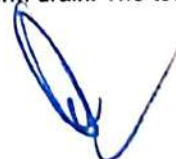
Records were placed before the Committee in its 4th meeting for discussion and appraisal. The Committee was of the opinion to have a ground truth verification of the Project as to its status.

Subsequently, in pursuance to the EIA Notification, 2006 and as envisaged under the Clause 5(d) of the said Notification, 2006 dated 14th September, 2006 by the MoEF & CC in the Govt. of India a sub-committee of the SEAC, Assam was constituted comprising of the Hon'ble Members to conduct physical field inspection of the project site for adequate appraisal of the project proposal.

The mandate of the sub-committee was to inspect the proposed site, assess the present status of operation of the plant and also to assess the existing environmental status, appraisal on the probable environmental impact that may generate on the natural environment in the surroundings. The sub-committee submitted their report and placed for deliberation before the Committee.

The observation and comments / recommendations of the sub-committee who have assessed the environmental issues in the instant Plywood Industry covering the aspects of emission, effluent and Hazardous waste generation are placed for appraisal of the Committee.

- a) The sub-committee observed that the manufacturing processes in a Plywood Factory use Resins, which are of two types in general, viz., Melamine Urea Resin and Phenol Formaldehyde Resin. Melamine, Phenol and Formaldehyde are the major raw materials for production of resins. The resins are produced by blending the raw materials in a batch process and a resin producing unit washes the reactor/vessels intermittently when type of resin production is changed.
- b) Effluent is generated in the form of vessel washings. Further, effluent is also generated from spillage of glue or resins, which are applied on the surface of the ply boards. Member Secretary, SEAC heading the sub-committee pointed out that **a resin producing unit can recycle the entire quantity of such effluent** in the next batch of resin production by proper collection of effluent and subsequent recycling.
- c) It was also observed that the effluent generated from the glue application section was released into the storm drain. Further, during the course of visit to the resin plant located outside the main factory shed, it came to light that effluent generated was released into the storm drain. The team also observed that a small



ETP was installed by the PP at the end of the storm drain and the visiting team was of the opinion that such a small ETP would not function properly in case effluent get mixed with rain water and suggested for a bigger STP in place.

The inspection team strongly felt that a Plywood Industry should invariably install Rain Water Harvesting (RWH) system, which shall function as a sedimentation tank for the rain water mixed with saw dust and other solid particles. The unit should use the harvested rain water in dust suppression measures like water sprinklings in haul roads. After proper sedimentation of the rain water in the RWH tank, which may be even in the form of earthen pond, the water may be allowed to discharge to nearby drains as available.

Entire effluent generated in such a plant shall be fully recycled as the effluent generated in a resin unit contain phenolic substances and formaldehyde (carcinogenic) and these contaminants are potential contaminants to the environment, especially the soil and water environment.

There are examples of complete recycling of effluent in such a resin producing or using industry and such environmental best practices which need to be replicated by all other similarly placed industries in the State.

- d) Since primarily, the Plywood Industries operate boiler to generate steam, the **saw dusts and wood rejects** generated in the plant as wastes, are used as boiler fuel in such a plywood industry. The Committee opined that if **biomass briquettes**, which can be converted from the saw dust and other wood rejects, are used effectively as fuel in the boiler instead of saw dust, emission generated from the boiler would contain lesser dust and as such the emission would be reduced. Emissions as released by the instant Unit as of now contain semi charred carbon.
- e) Empty chemical drums are generated as hazardous waste in the premises of the M/s Khandelwal Saw Mills Pvt. Ltd. It is required to have proper quantification and subsequent stacking of this type of hazardous waste.

After due deliberation the august **Committee is of the opinion for recommending grant of the EC** to the project Proponent subject to the to strict adhere and compliance of the special conditions as best environmental practices while according EC to a Plywood Manufacturing Units.

I) The Unit shall manage the effluent generated in a resin plant in a closed loop without passing the effluent to a storm drain.

II) The Unit shall have agreement with bio mass briquette producing unit. Saw dust generated by the unit shall be converted into briquette and then be used in the boiler as fuel. This would reduce the emission generation to a significant level.

- III) Storm water drain shall be segregated from the effluent drain.
- IV) Rain Water Harvesting system shall be made. A pond shall be constructed within the premises and storm water drain shall be connected to it. The earthen pond shall function as Rain Water Harvesting tank as well as Sedimentation pit.
- V) The HW generated, viz., empty containers of chemicals and resin residues, shall be inventoried and stacked properly for subsequent disposal to TSDFs.
- VI) The Licence from the competent authority in the Forest Department as applicable for the establishment of the Wood Based Industry in terms of the applicable Rules shall be obtained and the copy of the same shall have to be uploaded.

The Committee further made it a point that the premises of the Manufacturing Unit needs to be planted with local species of plants for greenery to ameliorate the environment. It was also urged that the unit shall encourage captive plantation of plywood species in the nearby villages in the vacant areas, roadsides, community lands and also raise private plantations for which adequate fund should be annually earmarked and spent. It is evident that the industry is procuring timbers for the purposes from the nearby areas belonging to private individuals in villages and, therefore, sufficient saplings of the species like Kathal (Artocarpus integrifolia), Jamun (Syzygium cuminii), Kadam (Anthocephalus cadamaba), Am (Mangifera indica), Boga Siris (Albizzia procera) etc should be distributed to the individuals in the villages for plantation in their homestead besides taking up the plantation activities in areas indicated above under due discussions with the DFO, Kamrup East Division, Guwahati. An amount of Rs 10 lakh (Rs 4 lakh-nursery raising+Rs 6 Lakh for plantation) as agreed upon by the PP during the course of presentation should be annually spent as a part of the Corporate Environmental Responsibility (CER) activity and shall be uploaded in the PARIVESH Portal.

3. EC for manufacturing unit Kamlang Saw & Veneer Mills Private Limited of 7500 MTPA capacity that produces timber based products and resins of 475 MTPA by Kamlang Saw & Veneer Mills Pvt Limited, SEIAA. 3603/2023 (SIA/AS/IND3/436150/2023)

Resolution of 4th SEAC Meeting is as follows:

“ Resolution 4/5:

As the case at hand is similarly placed with that of the project under the Project at SI 6 where in site inspection is conducted and, therefore, the observations / findings of the august sub-committee is awaited and the same shall be attended to accordingly deserving its merit.”



Resolution 6/3:

M/s Kamlang Saw & Veneer Mills Pvt. Ltd. is a Plywood Manufacturing Industry that produces timber based products and consumes resins, i.e., (475 MTPA) and as such it needs prior Environmental Clearance (EC) for setting up of such an industry. As per the clarification of the MoEF & CC contained in F.No. 22-93/2017-IA.III dated 10.04.2019 a resin producing unit of less than 1000 MTPA needs to obtain prior EC under the B-2 Category. Accordingly, the PP had applied for regularization of the project by obtaining EC that was established and commissioned in February, 2011.

The project Proponent Sri Abhishek Khetan, Director had applied for the EC and the documents relevant to the case are furnished. The NOC from the Palashbari Municipal Board, the CTO from the PCBA (valid till 31.03.2023), the Pre Feasibility Report (PFR), EMP.

Records were placed before the Committee in its 4th meeting for discussion and appraisal. The Committee was of the opinion to have a ground truth verification of one of the Projects at hand (M/S Khandelwal Saw Mills Pvt Ltd) as to its status since the the unit is similarly placed and functioning.

Subsequently, in pursuance to the EIA Notification, 2006 and as envisaged under the Clause 5(d) of the said Notification, 2006 dated 14th September, 2006 by the MoEF & CC in the Govt. of India a sub-committee of the SEAC, Assam was constituted comprising of the Hon'ble Members to conduct physical field inspection of the project site for adequate appraisal of the project proposal.

The mandate of the sub-committee was to inspect the proposed site, assess the present status of operation of the plant and also to assess the existing environmental status, appraisal on the probable environmental impact that may generate on the natural environment in the surroundings. The sub-committee submitted their report and placed for deliberation before the Committee.

The observation and comments / recommendations of the sub-committee who have assessed the environmental issues relating to Plywood Industry covering the aspects of emission, effluent and Hazardous waste generation are placed for appraisal of the Committee.

- a) The sub-committee observed that the manufacturing processes in a Plywood Factory use Resins, which are of two types in general, viz., Melamine Urea Resin and Phenol Formaldehyde Resin. Melamine, Phenol and Formaldehyde are the major raw materials for production of resins. The resins are produced by blending the raw materials in a batch process and a resin producing unit washes the reactor / vessels intermittently when type of resin production is changed.
- b) Effluent is generated in the form of vessel washings. Further, effluent is also generated from spillage of glue or resins, which are applied on the surface of the ply boards. Member Secretary, SEAC heading



the sub-committee pointed out that a **resin producing unit can recycle the entire quantity of such effluent** in the next batch of resin production by proper collection of effluent and subsequent recycling.

- c) The inspection team strongly felt that a Plywood Industry should invariably install Rain Water Harvesting (RWH) system, which shall function as a sedimentation tank for the rain water mixed with saw dust and other solid particles. The unit should use the harvested rain water in dust suppression measures like water sprinklings in haul roads. After proper sedimentation of the rain water in the RWH tank, which may be even in the form of earthen pond, the water may be allowed to discharge to nearby drains as available.

Entire effluent generated in such a plant shall be fully recycled as the effluent generated in a resin unit contain phenolic substances and formaldehyde (carciogenic) and these contaminants are potential contaminants to the environment, especially the soil and water environment.

There are examples of complete recycling of effluent in such a resin producing or using industry and such environmental best practices which need to be replicated by all other similarly placed industries in the State.

- d) Since primarily, the Plywood Industries operate boiler to generate steam, the **saw dusts and wood rejects** generated in the plant as wastes, are used as boiler fuel in such a plywood industry. The Committee opined that if **biomass briquettes**, which can be converted from the saw dust and other wood rejects, are used effectively as fuel in the boiler instead of saw dust, emission generated from the boiler would contain lesser dust and as such the emission would be reduced.
- e) Empty chemical drums are generated as hazardous waste are required to have proper quantification and subsequent stacking of this type of hazardous waste.

After due deliberation the august **Committee is of the opinion for recommending grant of the EC** to the project Proponent subject to the to strict adhere and compliance of the special conditions as best environmental practices while according EC to a Plywood Manufacturing Units.

- i) The Unit shall manage the effluent generated in a resin plant in a closed loop without passing the effluent to a storm drain.
- ii) The Unit shall have agreement with bio mass briquette producing unit. Saw dust generated by the unit shall be converted into briquette and then be used in the boiler as fuel. This would reduce the emission generation to a significant level.
- iii) Storm water drain shall be segregated from the effluent drain.



- iv) Rain Water Harvesting system shall be made. A pond shall be constructed within the premises and storm water drain shall be connected to it. The earthen pond shall function as Rain Water Harvesting tank as well as Sedimentation pit.
- v) The HW generated, viz., empty containers of chemicals and resin residues, shall be inventoried and stacked properly for subsequent disposal to TSDFs.
- vi) The Licence from the competent authority in the Forest Department as applicable for the establishment of the Wood Based Industry in terms of the applicable Rules shall be obtained and the copy of the same shall have to be uploaded.

The Committee further made it a point that the premises of the Manufacturing Unit needs to be planted with local species of plants for greenery to ameliorate the environment. It was also urged that the unit shall encourage captive plantation of plywood species in the nearby villages in the vacant areas, roadsides, community lands and also raise private plantations for which adequate fund should be annually earmarked and spent. It is evident that the industry is procuring timbers for the purposes from the nearby areas belonging to private individuals in villages and, therefore, sufficient saplings of the species like Kathal (Artocarpus integrifolia), Jamun (Syzygium cuminii), Kadam (Anthocephalus cadamaba), Am (Mangifera indica), Boga Siris (Albizzia procera) etc should be distributed to the individuals in the villages for plantation in their homestead besides taking up the plantation activities in areas indicated above under due discussions with the DFO, Kamrup East Division, Guwahati. An amount of Rs 10 lakh (Rs 4 lakh-nursery raising+Rs 6 Lakh for plantation) as agreed upon by the PP during the course of presentation should be annually spent as a part of the Corporate Environmental Responsibility (CER) activity and shall be uploaded in the PARIVESH Portal.

4. EC for Regularisation of existing manufacturing unit-Gitanjali Udhog that produces Plywoods of capacity 6000 MTPA and resins of capacity 500 MTPA by Gitanjali Udhog, SEIAA. 3605/2023 (SIA/AS/IND3/449744/2023)

Resolution of 4th SEAC Meeting is as follows:

"Resolution 4/7:

As the case at hand is similarly placed with that of the project under the Project at SI 6 where in site inspection is conducted and, therefore, the observations / findings of the august sub-committee is awaited and the same shall be attended to accordingly deserving its merit"

M/s Gitanjali Udhog is a Plywood Manufacturing Industry that produces timber based products and consumes resins, i.e., (500 MTPA) and as such it needs prior Environmental Clearance (EC) for setting up of such an industry.



As per the clarification of the MoEF & CC contained in F.No. 22-93/2017-IA.III dated 10.04.2019 a resin producing unit of less than **1000 MTPA** needs to obtain prior EC under the B-2 Category. Accordingly, the PP had applied for regularization of the project by obtaining EC.

The project Proponent Sri Pawan Kumar Harlalka, Partner had applied for the EC and the documents relevant to the case are furnished. The NOC from the Palashbari Municipal Board, the Pre Feasibility Report (PFR), EMP, Rain Water Harvesting (RWH), Solid Waste Management Plan, Disaster Management Plan etc are uploaded.

Records were placed before the Committee in its 4th meeting for discussion and appraisal. The Committee was of the opinion to have a ground truth verification of one of the Projects at hand (M/S Khandelwal Saw Mills Pvt Ltd) as to its status since the the unit is similarly placed and functioning.

Subsequently, in pursuance to the EIA Notification, 2006 and as envisaged under the Clause 5(d) of the said Notification, 2006 dated 14th September, 2006 by the MoEF & CC in the Govt. of India a sub-committee of the SEAC, Assam was constituted comprising of the Hon'ble Members to conduct physical field inspection of the project site for adequate appraisal of the project proposal.

The mandate of the sub-committee was to inspect the proposed site, assess the present status of operation of the plant and also to assess the existing environmental status, appraisal on the probable environmental impact that may generate on the natural environment in the surroundings. The sub-committee submitted their report and placed for deliberation before the Committee.

The observation and comments / recommendations of the sub-committee who have assessed the environmental issues relating to Plywood Industry covering the aspects of emission, effluent and Hazardous waste generation are placed for appraisal of the Committee.

- a) The sub-committee observed that the manufacturing processes in a Plywood Factory use Resins, which are of two types in general, viz., Melamine Urea Resin and Phenol Formaldehyde Resin. Melamine, Phenol and Formaldehyde are the major raw materials for production of resins. The resins are produced by blending the raw materials in a batch process and a resin producing unit washes the reactor / vessels intermittently when type of resin production is changed.
- b) Effluent is generated in the form of vessel washings. Further, effluent is also generated from spillage of glue or resins, which are applied on the surface of the ply boards. Member Secretary, SEAC heading the sub-committee pointed out that **a resin producing unit can recycle the entire quantity of such effluent** in the next batch of resin production by proper collection of effluent and subsequent recycling.
- c) The inspection team strongly felt that a Plywood Industry should invariably install Rain Water Harvesting (RWH) system, which shall function as a sedimentation tank for the rain water mixed with saw dust and

other solid particles. The unit should use the harvested rain water in dust suppression measures like water sprinklings in haul roads. After proper sedimentation of the rain water in the RWH tank, which may be even in the form of earthen pond, the water may be allowed to discharge to nearby drains as available.

Entire effluent generated in such a plant shall be fully recycled as the effluent generated in a resin unit contain phenolic substances and formaldehyde (carciogenic) and these contaminants are potential contaminants to the environment, especially the soil and water environment.

There are examples of complete recycling of effluent in such a resin producing or using industry and such environmental best practices which need to be replicated by all other similarly placed industries in the State.

- d) Since primarily, the Plywood Industries operate boiler to generate steam, the **saw dusts** and **wood rejects** generated in the plant as wastes, are used as boiler fuel in such a plywood industry. The Committee opined that if **biomass briquettes**, which can be converted from the saw dust and other wood rejects, are used effectively as fuel in the boiler instead of saw dust, emission generated from the boiler would contain lesser dust and as such the emission would be reduced.
- e) Empty chemical drums are generated as hazardous waste are required to have proper quantification and subsequent stacking of this type of hazardous waste.

After due deliberation the august **Committee is of the opinion for recommending grant of the EC** to the project Proponent subject to the to strict adhere and compliance of the special conditions as best environmental practices while according EC to a Plywood Manufacturing Units.

- i) The Unit shall manage the effluent generated in a resin plant in a closed loop without passing the effluent to a storm drain.
- ii) The Unit shall have agreement with bio mass briquette producing unit. Saw dust generated by the unit shall be converted into briquette and then be used in the boiler as fuel. This would reduce the emission generation to a significant level.
- iii) Storm water drain shall be segregated from the effluent drain.
- iv) Rain Water Harvesting system shall be made. A pond shall be constructed within the premises and storm water drain shall be connected to it. The earthen pond shall function as Rain Water Harvesting tank as well as Sedimentation pit.
- v) The HW generated, viz., empty containers of chemicals and resin residues, shall be inventoried and stacked properly for subsequent disposal to TSDFs.



- vi) The Licence from the competent authority in the Forest Department as applicable for the establishment of the Wood Based Industry in terms of the applicable Rules shall be obtained and the copy of the same shall have to be uploaded.

The Committee further made it a point that the premises of the Manufacturing Unit needs to be planted with local species of plants for greenery to ameliorate the environment. It was also urged that the unit shall encourage captive plantation of plywood species in the nearby villages in the vacant areas, roadsides, community lands and also raise private plantations for which adequate fund should be annually earmarked and spent. It is evident that the industry is procuring timbers for the purposes from the nearby areas belonging to private individuals in villages and, therefore, sufficient saplings of the species like Kathal (Artocarpus integrifolia), Jamun (Syzygium cuminii), Kadam (Anthocephalus cadamaba), Am (Mangifera indica), Boga Siris (Albizzia procera) etc should be distributed to the individuals in the villages for plantation in their homestead besides taking up the plantation activities in areas indicated above under due discussions with the DFO, Kamrup East Division, Guwahati. An amount of Rs 10 lakh (Rs 4 lakh-nursery raising+Rs 6 Lakh for plantation) as agreed upon by the PP during the course of presentation should be annually spent as a part of the Corporate Environmental Responsibility (CER) activity and shall be uploaded in the PARIVESH Portal.

5. EC for Regularisation of manufacturing unit- Ju Polymers Private Limited that produces MF Resin of 400 MTPA and pre-laminated Particle Board of 7,20,000 Sq ft/month by Ju Polymers Private Limited SEIAA. 3604/2023 (SIA/AS/IND3/448735/2023)

Resolution of the 4th SEAC Meeting is as follows:

“ Resolution 4/8:

As the case at hand is similarly placed with that of the project under the Project at SI 6 where in site inspection is conducted and, therefore, the observations / findings of the august sub-committee is awaited and the same shall be attended to accordingly deserving its merit.”

M/s Ju Polymers Pvt Ltd is a Manufacturing Industry that produces timber based products (pre Laminated Board) and consumes resins, i.e., (400 MTPA) and as such it needs prior Environmental Clearance (EC) for setting up of such an industry. As per the clarification of the MoEF & CC contained in F.No. 22-93/2017-IA.III dated 10.04.2019 a resin producing unit of less than 1000 MTPA needs to obtain prior EC under the B-2 Category. Accordingly, the PP had applied for regularization of the project by obtaining EC.

The project Proponent Sri Niraj Jajodia, Director had applied for the EC and the documents relevant to the case are furnished. The NOC from the Rani Anchalik Panchayat as the area is falling in the Rani Industrial Estate, the Pre Feasibility Report (PFR), EMP, Rain Water Harvesting (RWH), Solid Waste Management Plan, Disaster Management Plan etc are uploaded.

Records were placed before the Committee in its 4th meeting for discussion and appraisal. The Committee was of the opinion to have a ground truth verification of one of the Projects at hand (M/S Khandelwal Saw Mills Pvt Ltd) as to its status since the the unit is similarly placed and functioning.

Subsequently, in pursuance to the EIA Notification, 2006 and as envisaged under the Clause 5(d) of the said Notification, 2006 dated 14th September, 2006 by the MoEF & CC in the Govt. of India a sub-committee of the SEAC, Assam was constituted comprising of the Hon'ble Members to conduct physical field inspection of the project site for adequate appraisal of the project proposal.

The mandate of the sub-committee was to inspect the proposed site, assess the present status of operation of the plant and also to assess the existing environmental status, appraisal on the probable environmental impact that may generate on the natural environment in the surroundings. The sub-committee submitted their report and placed for deliberation before the Committee.

The observation and comments / recommendations of the sub-committee who have assessed the environmental issues relating to Plywood Industry covering the aspects of emission, effluent and Hazardous waste generation are placed for appraisal of the Committee.

- a) The sub-committee observed that the manufacturing processes in a Plywood Factory / pre-Laminated Board use Resins, which are of two types in general, viz., Melamine Urea Resin and Phenol Formaldehyde Resin. Melamine, Phenol and Formaldehyde are the major raw materials for production of resins. The resins are produced by blending the raw materials in a batch process and a resin producing unit washes the reactor / vessels intermittently when type of resin production is changed.
- b) Effluent is generated in the form of vessel washings. Further, effluent is also generated from spillage of glue or resins, which are applied on the surface of the ply boards. Member Secretary, SEAC heading the sub-committee pointed out that **a resin producing unit can recycle the entire quantity of such effluent** in the next batch of resin production by proper collection of effluent and subsequent recycling.
- c) The inspection team strongly felt that a Plywood Industry should invariably install Rain Water Harvesting (RWH) system, which shall function as a sedimentation tank for the rain water mixed with saw dust and other solid particles. The unit should use the harvested rain water in dust suppression measures like water sprinklings in haul roads. After proper sedimentation of the rain water in the RWH tank, which may be even in the form of earthen pond, the water may be allowed to discharge to nearby drains as available.

Entire effluent generated in such a plant shall be fully recycled as the effluent generated in a resin unit contain phenolic substances and formaldehyde (carciogenic) and these contaminants are potential contaminants to the environment, especially the soil and water environment.

There are examples of complete recycling of effluent in such a resin producing or using industry and such environmental best practices which need to be replicated by all other similarly placed industries in the State.

- d) Since primarily, the Plywood Industries or similar Wood based Industries operate boiler to generate steam, the **saw dusts** and **wood rejects** generated in the plant as wastes, are used as boiler fuel in such a plywood industry. The Committee opined that if **biomass briquettes**, which can be converted from the saw dust and other wood rejects, are used effectively as fuel in the boiler instead of saw dust, emission generated from the boiler would contain lesser dust and as such the emission would be reduced.
- e) Empty chemical drums are generated as hazardous waste are required to have proper quantification and subsequent stacking of this type of hazardous waste.

After due deliberation the august **Committee is of the opinion for recommending grant of the EC** to the project Proponent subject to the to strict adhere and compliance of the special conditions as best environmental practices while according EC to a Plywood Manufacturing Units.

- i) The Unit shall manage the effluent generated in a resin plant in a closed loop without passing the effluent to a storm drain.
- ii) The Unit shall have agreement with bio mass briquette producing unit. Saw dust generated by the unit shall be converted into briquette and then be used in the boiler as fuel. This would reduce the emission generation to a significant level.
- iii) Storm water drain shall be segregated from the effluent drain.
- iv) Rain Water Harvesting system shall be made. A pond shall be constructed within the premises and storm water drain shall be connected to it. The earthen pond shall function as Rain Water Harvesting tank as well as Sedimentation pit.
- v) The HW generated, viz., empty containers of chemicals and resin residues, shall be inventoried and stacked properly for subsequent disposal to TSDFs.
- vi) The Licence from the competent authority in the Forest Department as applicable for the establishment of the Wood Based Industry in terms of the applicable Rules shall be obtained and the copy of the same shall have to be uploaded.



The Committee further made it a point that the premises of the Manufacturing Unit needs to be planted with local species of plants for greenery to ameliorate the environment. It was also urged that the unit shall encourage captive plantation of plywood species in the nearby villages in the vacant areas, roadsides, community lands and also raise private plantations for which adequate fund should be annually earmarked and spent. It is evident that the industry is procuring timbers for the purposes from the nearby areas belonging to private individuals in villages and, therefore, sufficient saplings of the species like Kathal (Artocarpus integrifolia), Jamun (Syzygium cuminii), Kadam (Anthocephalus cadamaba), Am (Mangifera indica), Boga Siris (Albizzia procera) etc should be distributed to the individuals in the villages for plantation in their homestead besides taking up the plantation activities in areas indicated above under due discussions with the DFO, Kamrup East Division, Guwahati. An amount of Rs 10 lakh (Rs 4 lakh-nursery raising+Rs 6 Lakh for plantation) as agreed upon by the PP during the course of presentation should be annually spent as a part of the Corporate Environmental Responsibility (CER) activity and shall be uploaded in the PARIVESH Portal.

The meeting ended with vote of thanks to the Chair.



Chairman
SEAC, Assam

Memo No. SEIAA.33/2013/Pt.-I -A

Dated : 2 / 04 / 2024

Copy to:

- 1) The Chairman, State Environment Impact Assessment Authority (SEIAA), Assam for favour of kind information.
- 2) The Member Secretary, State Environment Impact Assessment Authority (SEIAA), Assam for favour of kind information and necessary action.
- 3) All Members, SEAC, Assam for favour of their kind information.
- 4) Concerned DFO for information and needful compliance.
- 5) Accountant cum Cashier of the office of the SEIAA, Assam for his information.
- 6) Office copy for each of the proposals.


Member Secretary
SEAC, Assam