The 382<sup>nd</sup> meeting of the State Level Environment Impact Assessment Authority was convened on 05.11.2016 at the Authority's Office in Environmental Planning and Co-Ordination Organization (EPCO), Paryavaran Parisar, Bhopal. The meeting was chaired by Shri Waseem Akhtar, Chairman, SEIAA. The following members attended the meeting:-

1 Shri H.S. Verma

Member

2. Shri Anupam Rajan

Member Secretary

A. Following other than mining cases received from SEAC have been considered :-

| S.No. | Case No.  | Category | No. & date of latest SEAC              |
|-------|-----------|----------|--|
| 1.    | 5417/2016 | 8(a)     | 282 <sup>nd</sup> SEAC dtd. 10.10.2016 |
| 2.    | 4954/2016 | 8(a)     | 282 <sup>nd</sup> SEAC dtd. 10.10.2016 |

- 1. Case No. 5417/2016: Prior Environmental Clearance for proposed Group Housing Project "Rainbow Residency" at Khasra no. Khasra no.238, 239, 245/1,245/2, 245/3, 246, 247/1 to 247/12 Village Maharajpur Tehsil & District Jabalpur (MP). Total Land Area –19,232 sq.m., Total Built- up area- 44,349.061sq.m., by M.R. Thakure Executive Engineer- Jabalpur Division M.P. Housing & Infrastructure Development Board, Division Division-2 Jabalpur, MP 450001, Ph. No. 9424025255, E-mail-mrthakure16 @ gmail.com
  - (1) The proposed project is building and construction Group Housing Residential Project "Rainbow Residency" at Khasra no. Khasra no.238, 239, 245/1,245/2, 245/3, 246, 247/1 to 247/12 Village - Maharajpur Tehsil & District - Jabalpur (M.P). The project includes 7 blocks with 432 nos. of dwelling units (EWS: 36 nos., LIG: 24 nos., MIG: 192 nos., HIG: 180 nos.).
  - (2) As per the T & CP Jabalpur (vide letter dtd 11.04.2016) the total land area of the proposed project is 19,232 sq.m. The total built up area proposed by PP is 44,349.061.93 sq.m. The project comes under 8 (a) category (B) of schedule of EIA Notification, 2006 because total construction is between 20,000 sq.mt. & 1,50,000 sq mt. and plot area is less than 50 ha.
  - (3) The case was discussed in SEAC meetings 282<sup>nd</sup> SEAC meeting dtd. 10.10.2016 and is recommended for grant of prior EC subject to 13 special conditions.
  - (4) The case was also discussed in 380<sup>th</sup> SEIAA meeting dtd. 03.11.2016, and decided to PP may call for presentation.
  - (5) The case was discussed in depth and it is noted that :-
    - (i). PP has submitted notarized copy of Khasra Panchsala 2014-15. As per the Khasra Panchsala the land is the name of Madhya Pradesh Grih Nirman Mandal.

(ii). The total water requirement is 215 KLD. The fresh water requirement is 145 KLD & recycled water is 70 KLD. The source of water supply is Municipal Corporation, Bhopal. PP has submitted letter (dtd. 08-08.2016) from Municipal Corporation, pabalpur for supply of water.

(Anupam Bajan) Member Secretary

(H.S.Verma) Member

- (iii). The total waste water generation is 164 KLD. PP has provided Sewage Treatment Plant of 200 KLD. PP has proposed Phytorid technology for waste water treatment. The total treated waste water is 139 KLD (Flushing-48 KLD+ Landscaping & General washing 22 KLD) and remaining 69KLD is proposed to be disposed off in the municipal sewer line. PP has submitted letter (dtd. 08.08.2016) from Commissioner, Municipal Corporation, Jabalpur for disposal of extra treated waste water.
- (iv). Approximately 1155 kg/day Municipal Solid waste shall be generated. The generated biodegradable and non biodegradable waste will be collected separately. The bio degradable waste proposed to dispose to MSW site for composting and non-biodegradable waste, will be deposited at a landfill site of Municipal Corporation. PP has submitted letter (dtd. 08.08.2016) from Municipal Corporation, Jabalpur for disposal of solid waste.
- (v). PP has proposed to provide fire water storage tank, fire extinguisher, hose reel, automatic sprinkler system, manual fire alarm system & down comer etc. as per NBC 2005
- (vi). PP has proposed the maximum height of the building is 21 m. PP has provided Road wdth 45m; Front MOS 7.5 m and side / rear MOS 6.0 m. As per MP Bhumi Vikas Niyam 2012 rule 42 (1) road width 18 m; Front MOS 7.50 m and side / rear MOS 6.0 m for building height upto 24 m.
- (vii). PP has submitted roof top rain water harvesting system for ground water recharging and has proposed 05.no of recharging pits.
- (viii). The total power requirement is 2790 KW. The source of electricity is Madhya Pradesh Kshetra Vidyut Vitran Company Limited. PP has also proposed DG set of capacity 1x160 KVA (for common areas and essential services only. For energy conservation measures PP has proposed use of Total flat light load will be reduced by 40% by use of LED lamps in place of fluorescent/ incandescent lamps, powered fixtures used for street and landscape lighting.
- (ix). PP has proposed an area of 476 ECS (Open- 105 ECS, Stilt -251ECS and Basement 120 ECS) .
- (x). PP has proposed an area of 3641.34 sq. m (18.93%) to be developed as green area by planting 376 no. of trees and species of Saltree, Kachnar, Kadam, Neem, Gulmohar etc.

The submissions made by the PP were found to be satisfactory and acceptable hence It is decided to accept the recommendations of 282<sup>nd</sup> SEAC meeting dtd 10.10.16 with 13 special conditions and accord Prior Environmental Clearance for proposed Group Housing Project "Rainbow Residency" at Khasra no. Khasra no.238, 239, 245/1,245/2, 245/3, 246, 247/1 to 247/12 Village - Maharajpur Tehsil & District - Jabalpur (MP). Total Land Area –19,232 sq.m., Total Built- up area- 44,349.061sq.m., by M.R. Thakure Executive Engineer- Jabalpur Division M.P.Housing & Infrastructure Development Board, Division Division-2 Jabalpur, MP 450001 subject to following specific conditions imposed by SEIAA:-

(Anupam Rajan) Member Secretary

(H.S.Verma) Member

- (1) The entire demand of water should be met through Municipal Corporation, Jabalpur there should be no extraction of ground water.
- (2) The inlet and outlet point of natural drain system should be maintained with adequate size of channel for ensuring unrestricted flow of water.
- (3) Disposal of waste water.
  - (a) PP should ensure linkage with municipal sewer line for disposal of waste water.
  - (b) Dual plumbing system should be adopted to utilize the treated waste water for flushing (48 KLD), landscaping (22 KLD) to reduce the demand of fresh water as committed.
  - (c) Ensure regular operation and maintenance of the STP.
  - (d) For Phytorid technology the suitability of a site for constructing a treatment wetland may depend on the condition of one or more factors such as substrate, soil chemistry, hydrology/geomorphology, vegetation, cultural/socioeconomic impacts including environmental justice issues, the surrounding landscape, land use/zoning considerations and potential impacts to safety and health. Project proponents should carefully examine these factors and consult with applicable agencies in determining the most appropriate site for their projects.
  - (e) For constructing the treatment wetland a distance of 5 to 10 m should be left from the residential building to avoid any odour or nuisance in the vicinity.
  - (f) The location is to be selected in such a manner that drinking water sources are not impaired.
  - (g) Dispose of the treated effluent at the selected site as per standards set by the concerned regulatory agency.
  - (h) Since this technology is not time tested, therefore operation and maintenance of this process is of utmost importance. The agency establishing this processing unit should also maintain it for a long term period. For the qualitative monitoring on a regular basis, a lab should be established to record the sensitive parameters.
  - (i) The following precautions shall be taken such as
    - Treatment System has to be marked clearly/ labled as wastewater treatment systems.
    - 2. The site should have sufficient space for maintenance.
    - Natural slope should be used, to avoid the need for pumps.
    - 4. The application of Phytorid Treatment System and the design depends on the availability of suitable filling material for the filter beds.

(Anupam Bajan) Member Secretary

(H.S.Verma) Member

- (4) Solid Waste Management:
  - (a) Provide compactors for MSW.
  - (b) Separate wet and dry bins must be provided at the ground level for facilitating segregation of waste.
  - (c) The solid waste generated should be properly collected and segregated. Wet garbage should be composted and dry inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material.
- (5) PP should ensure road width, front MOS and side / rear as per MPBVR 2012.
- (6) For firefighting:-
  - (a) PP should ensure connectivity to the fire station from the project site.
  - (b) As per MPBVR, 2012 rule 42 (3) PP should submit necessary drawings and details to the Authority (Municipal Corporation, Jabalpur) incorporating all the fire fighting measures recommended in National Building Code Part IV point no. 3.4.6.1. The occupancy permit shall be issued by Municipal Council only after ensuring that all fire fighting measures are physically in place.
- (7) For Rain Water Harvesting, and Ground water recharge:-
  - (a) PP should ensure the rain water harvesting with 05 nos of recharging pits and these pits should be connected laterally to consume the surplus runoff. In addition, PP should provide recharging trenches. The base of the trenches should be Kachha with pebbles.
  - (b) The storm water from roof top, paved surfaces and landscaped surfaces should be properly channelized to the rain water harvesting sumps through efficient storm water network as proposed. The budget should be included in EMP plan for storm water management.
  - (c) Rain water harvesting for roof run- off and surface run- off, as plan submitted should be implemented. Before recharging the surface run off, pre-treatment must be done to remove suspended matter, oil and grease.
  - (d) The unpaved area shall be more than or equal to 20% of the recreational open spaces.
- (8) PP should ensure to provide car parking as proposed 476 ECS (Open- 105 ECS, Stilt -251ECS and Basement 120 ECS).
- (9) For Energy Conservation PP should Ensure :-
  - (a) Use of LED lights in the common areas, landscape areas, signage's, entry gates and boundary compound walls etc.
  - (b) Solar lights provide for common amenities like Street lighting & Garden lighting.

(c) Touse of solar water heating systems

(Anupam Rajan) Member Secretary (H.S.Verma) Member

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(Waseem Akhtar) Chairman

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- (d) For power back up ensure to provide 01 no. DG set capacity of 1x160 KVA.
- (e) PP should also ensure to adopt energy conservation measure as per the latest State Govt. Policy for generating roof top solar energy and make use of the subsidies to be granted as per the policy. Any surplus generation from solar energy should be ploughed back in the grid to generate additional revenues for the proposed RWA.

## (10) Air Quality and Noise:-

- (a) Dust, smoke & debris prevention measures such as wheel washing, screens, barricading & debris chute shall be installed at the site during construction including plastic/tarpaulin sheet covers for trucks bringing in sand & material at the site.
- (b) The exhaust pipe of the DG set if installed must be minimum of 10 mtr away from the building or in case it is less than 10m away, the exhaust pipe shall be taken up to 6m above the building.

#### (11) Green belt :-

- (a) PP should ensure plantation to the 3641.34 sq. m (18.93%) as per the proposed landscape plan by planting 376 no. of trees two rows in periphery, besides, this along the road, around open space area, parking area and other amenities. Trees of indigenous local varieties like Neem, Peepal, Kadam, Karanj, Kachnaar, Saptparni, Saltree, Gulmohar etc. etc. should be planted.
- (b) No existing trees will be allowed to cut. Every effort should be made to protect the existing trees on the plot.
- (c) The green belt of the adequate width and density preferably with local species along the periphery of the plot shall be raised so as to provide protection against particulates and noise.
- (12) In the case of future expansion in the scope or any changes(s) in the scope of the project shall again require Prior Environmental Clearance as per EIA notification, 2006.
- (13) The project authorities shall earmark adequate funds to implement the conditions stipulated by SEIAA/SEAC along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purpose.

### Suggestions:-

- a. From the architectural point of view, proper micro planning should be done to ensure better livability.
- b. Project needs sound techniques for energy conservation and waste water.

(Anupam Rajan) Member Secretary

(H.S.Verma Member

- Case No 3324 /2015: Prior EC for proposed Group Housing Scheme at Khasra no. 57,58,59,60,69,70 Village Khajuri Kalan District- Bhopal, M.P. Plot area 105622.13 sq.m Built up Area 228098.4 sq. m. by Shri Ajay Kumar Tiwari, E.E MPH & IDB Dn. No.4, Satellite Plaza, 1st floor, Ayodhya Nagar, Bhopal, MP- 462041 E-mail dn4bhopal@mphousing.in Mob No. 91-9406912017
  - (1) The proposed project is construction of Group Housing Project at Village Khajuri Kalan, Bhopal, (M.P). The project includes Residential High Rise, Row Houses, Convenient Shopping, Club House and Nursing home.
  - (2) As per the T & CP Bhopal (vide letter no. 670 dtd 04.02.2014). The total land area is for the proposed project is 10.558 ha (105622.13 sq.m.) The total built up area proposed by PP is 2,28,098.4 sq. m. The project falls under item 8 (b) Area & Township development project category (B1) of schedule of EIA Notification, 2006 & its amendments because total construction is more than 1,50,000 sq m.
  - (3) The case was discussed in SEAC meetings 210<sup>th</sup> dtd. 25.07.15, 279<sup>th</sup> dtd. 02.07.16 & 282<sup>nd</sup> dtd. 10.10.2016 and is recommended for grant of prior EC subject to 14 special conditions.
  - (4) The case was also discussed in 380<sup>th</sup> SEIAA meeting dtd. 03.11.2016, and decided to PP may call for presentation.
  - (5) The case was discussed in depth and it is noted that :-
    - (i). PP has submitted Khasra Panchsala 2011-12.As per Khasra Panchsala the land is in the name of M.P. housing & Infrastructure Development Board.
    - (ii). The total water requirement is 1002 KLD. The fresh water requirement is 470 KLD & recycled water is 532 KLD. The source of water supply is Municipal water. PP has submitted letter (05.05.16) from Municipal Corporation Bhopal for water supply.
    - (iii). The total waste water generation is 802 KLD. PP has provided three sewage treatment plants of 835 KLD(310KLD +150KLD+375KLD). The total treated waste water is 641 KLD. PP has proposed 332 KLD recycled (flushing- 322 KLD + Gardening- 59 KLD + Misc-151KLD) & remaining 109 KLD is proposed to be disposed off in sewer line to be laid under Amrit Yojna. PP has submitted letter (dtd. 27.06.2016) from Municipal Corporation Bhopal for disposal of extra treated waste water. During monsoon season, any extra treated water shall be used for construction purposes.
    - (iv). It is noted that a Nallah(length 175m Depth- 2.5m) is passing through the site from West to East direction with gradual slope and meeting the existing levels of the nallah at entry and exit point. For protection of nallah, PP has proposed to chanalize it using rubble masonry. 9m of greenbelt is proposed on both sides of nallah and 1.2m high RCC parapet wall along the periphery of the nallah also proposed for the protection. Two RCC bridges are proposed over the nallah for connecting sector 2 & 3.

(Anupam Rajan) Member Secretary

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- (v). Approximately 4782kg/day (MSW- 3646kg/day, Horticulture waste- 473 kg/day, Street sweeping- 663 kg/day) waste shall be generated. The generated biodegradable and non biodegradable waste will be collected separately. Biodegradable waste & sludge from STP to be dewatered & will be used as manure. The non- recyclable and non-biodegradable waste will be deposited at a landfill site through Municipal Corporation Indore. PP has submitted letter (dtd. 16.05.2016) from Municipal Corporation Bhopal for disposal of solid waste.
- (vi). PP has proposed the maximum height of the building is 30 m+stilt. PP has provided Road wdth 24m; Front MOS 12 m and side / rear MOS 7.50 m. As per MP Bhumi Vikas Niyam 2012 rule 42 (1) road width 24 m; Front MOS 12.0 m and side / rear MOS 7.50 m for building height upto 30 m.
- (vii). PP has proposed to provide Portable Fire Extinguisher, Hose Reel, Wet riser cum down comer system, Fire hydrants, Automatic fire sprinkler system & Fire Alarm system. etc. as per NBC 2005.
- (viii). PP has submitted roof top rain water harvesting system for ground water recharging and has proposed 09 nos. of recharging pits.
- (ix). The total power requirement is 10566KVA. The source of electricity is Madhya Pradesh Kshetra Vidyut Vitran Company Limited. PP has also proposed DG set of capacity 1x1000KVA+ 1x630KVA + 1x825KVA. For energy conservation, PP has proposed installation of solar panel in an area of 91000 sq.ft. for 52KW with cost of Rs. 31 Lakh
- (x). PP has proposed to provide 1379ECS (Residential –1235 + 50 ECS & Commercial- 94 ECS) in stilt, basement and open area.
- (xi). PP has proposed an area of **11,827.02** sq. m. (11.2 %) to be developed as green area by planting 560 numbers of trees.

The submissions made by the PP were found to be satisfactory and acceptable hence It is decided to accept the recommendations of 282<sup>nd</sup> SEAC meeting dtd. 10.10.16 with 14 special conditions and accord Prior Environmental Clearance for proposed Group Housing Scheme at Khasra no. 57,58,59,60,69,70 Village Khajuri Kalan District- Bhopal, M.P. Plot area – 105622.13 sq.m Built up Area – 228098.4 sq. m. by Shri Ajay Kumar Tiwari, E.E MPH & IDB Dn. No.4, Stellite Plaza, 1st floor, Ayodhya Nagar, Bhopal, MP- 462041, subject to following specific conditions imposed by SEIAA:-

- (1) The entire demand of water should be met through Municipal Corporation, Indore there should be no extraction of ground water.
- (2) The inlet and outlet point of natural drain system should be maintained with adequate size of channel for ensuring unrestricted flow of water.
- (3) Disposal of waste water.

(a) PP should ensure linkage with municipal sewer line for disposal of waste water.

(Anupam Fajan) Member Secretary

(H.S.Verma) Member

- (b) The treated wastewater of 532 KLD shall be recycled and reused for flushing (322 KLD) gardening (59 KLD) and others (151KLD) to reduce the demand of fresh water as committed.
- (c) PP has proposed STPs at lower level from the proposed main trunk. They should ensure proper pumping arrangement for extra treated water besides regular operation and maintenance of the STP.
- (d) Water quality monitoring should be carried out regularly in consultation with MPPCB.
- (e) The existing nallah should be properly channelized and developed for recreational use of the in house population. A 4.5 m. pathway on both sides with proper seating arrangement and 3 m. for plantation on the embankment should be developed. This 175 m. nalla portion should have arrangement for replenishment of fresh water and no treated waste water be allowed to enter the existing nalla. For proper aeration, fountains be provided. RCC parapet wall/steel railing on both sides of the nalla be constructed for protection.
- (4) The storm water management should be regulated in such a way that it should not mix with the extra treated sewage water. The budget should be including in EMP plan for storm water management.
- (5) Solid Waste Management:
  - (a) Provide compactors for MSW.
  - (b) Separate wet and dry bins must be provided at the ground level for facilitating segregation of waste.
  - (c) The solid waste generated should be properly collected and segregated. Wet garbage should be composted and dry inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material.
- (6) PP should ensure road width, front MOS and side / rear as per MPBVR 2012.
- (7) For firefighting:-
  - (c) PP should ensure connectivity to the fire station from the project site.
  - (d) As per MPBVR, 2012 rule 42 (3) PP should submit necessary drawings and details to the Authority (Municipal Corporation, Bhopal) incorporating all the fire fighting measures recommended in National Building Code Part – IV point no. 3.4.6.1. The occupancy permit shall be issued by Municipal Council only after ensuring that all fire fighting measures are physically in place.
- (8) For Rain Water Harvesting, and Ground water recharge:-
  - (a) PP should ensure the rain water harvesting with 09nos of recharging pits. In addition, PP should provide recharging trenches. The base of the trenches should be Kachha with pebbles.

(Anupam Rajan) Member Secretary

H.S.Verma) Member

- (b) Rain water harvesting for roof run- off and surface run- off, as plan submitted should be implemented. Before recharging the surface run off, pre-treatment must be done to remove suspended matter, oil and grease. The bore well for rainwater recharging should be kept at least 4 mts. above the highest ground water table.
- (c) The unpaved area shall be more than or equal to 20% of the recreational open spaces.
- (9) PP should ensure to provide car parking as proposed 1379ECS (Residential –1235 + 50 ECS & Commercial- 94 ECS) in stilt, basement and open area.
- (10) For Energy Conservation PP should Ensure :-
  - (a) Use of LED lights in the common areas, landscape areas, gates and boundary compound walls etc.
  - (b) Solar panel in an area of 91000 sq.ft..
  - (c) For power back up ensure to provide 03 no. DG set capacity of 1x1000KVA+ 1x630KVA + 1x825KVA
  - (d) PP should also ensure to adopt energy conservation measure as per State norms.
- (11) Air Quality and Noise:-
  - (a) Dust, smoke & debris prevention measures such as wheel washing, screens, barricading & debris chute shall be installed at the site during construction including plastic/tarpaulin sheet covers for trucks bringing in sand & material at the site.
  - (b) The exhaust pipe of the DG set if installed must be minimum of 10mtr away from the building or in case it is less than 10m away, the exhaust pipe shall be taken up to 6m above the building.
  - (c) Air quality Monitoring should be carried out regularly in consultation with MPPCB.

#### (12) Green belt :-

- (a) PP should ensure plantation to the **11,827.02** sq. m. (11.2 %) as per the proposed landscape plan by planting 506 nos of trees two rows in periphery, besides, this along the road, around open space area, parking area and other amenities. Trees of indigenous local varieties like Neem, Peepal, Kadam, Karanj, Kachnaar, Saptparni etc.should be planted.
- (b) No existing trees will be allow to cut. Every effort should be made to protect the existing trees on the plot.
- (c) The green belt of the adequate width and density preferably with local species along the periphery of the plot shall be raised so as to provide protection against particulates and noise.

(Anupam Bajan) Member Secretary

(H.S.Verma) Member

- (13) PP should be responsible for constructing the 24m wide road (250 m. length) beyond the project area on the eastern side to ensure connection with the existing 24m wide Master plan road to facilitate smooth traffic movement. Separate financial provision to be made in the EMP.
- (14) In the case of future expansion in the scope or any changes(s) in the scope of the project shall again require Prior Environmental Clearance as per EIA notification, 2006.
- (15) For establishing the nursing home at the earmarked site, PP has to apply separately for Prior EC, before the start of construction.
- (16) The project authorities shall earmark adequate funds to implement the conditions stipulated by SEIAA/SEAC along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purpose.

Meeting ended with a vote of thanks to the Chair



(Anupam Bajan) Member Secretary

(H.S.Verma) Member