

**INSPECTION REPORT OF THE JOINT COMMITTEE CONSTITUTED BY THE HON'BLE NATIONAL GREEN TRIBUNAL (SOUTHERN ZONE) IN RESPECT OF O.A.NO.21 OF 2017 FILED BY THIRU REMESH VELLORE S/O. LATE B K NAIR RESIDING AT FLAT NO.32/1, JYOTSNA, MAIN STREET, PADMAVATHY NAGAR EXTENSION, VELACHERY, CHENNAI - 42.**

M/s. Esthell Hotels & Resorts has been issued with Environmental Clearance vide SEIAA Letter No. SEIAA/TN/F.481/EC/8(a)/165/2012 dated 04.06.2013 for construction of Multi-storied commercial Building "Esthell Paragon Mall" - Block (A) - Mall/ Multiplex/ Hotel Complex with 3 nos. of Basement + G +7 Nos. of Floors and Multi-storied Residential Building "Esthell Golden Square" - Block (B) - Residential Apartment with 2 nos. of Basement + Stilt + 13 Nos. of Floors (91 Dwellings) in the plot area of 8517.00 m<sup>2</sup> & with total built up area of 41203.00 m<sup>2</sup> at S.F No. 638/1, 2 & 3 , 639/1, 2&3, 644/1, T.S No. 1/10, Block No. 176, of Velachery Village, Mambalam - Guindy Taluk, Chennai District, subject to certain conditions.

Thiru Remesh Vellore, S/o. Late B K Nair Residing at Flat No. 32/1 Jyotsna, Main Street, Padmavathy Nagar Extension, Velacherry, Chennai 17 filed case against M/s. Esthell Hotels & Resorts, project of construction of Multi-storied commercial Building "Esthell Paragon Mall" - Block (A) - Mall/ Multiplex/ Hotel Complex and Multi-storied Residential Building "Esthell Golden Square at S.F No. 638/1, 2 & 3 , 639/1, 2&3, 644/1, T.S No. 1/10, Block No. 176, of Velachery Village, Mambalam - Guindy Taluk, Chennai District before the Hon'ble National Green Tribunal, Southern Zone(SZ), Chennai vide O.A.No.21 of 2017.

In this regard, Hon'ble National Green Tribunal (SZ) in its order dated 06.03.2020 has constituted a Joint Committee comprising of Senior Scientist of Ministry of Environment Forest & Climate Change (MoEF & CC), Chennai, Senior Officer of State Environment Impact Assessment Authority (SEIAA), Regional Office, Chennai, Senior Officer of Chennai Metropolitan Development Authority (CMDA), Senior Officer of the Tamil Nadu State Pollution Control Board, Senior Structural Engineer from Public Works Department (PWD) Construction, to inspect the area in question and submit a report as to whether there was any violation committed by fourth respondent in carrying out the construction which resulted in any damage to the applicant, the extent of damage caused and what is the compensation payable for the same, whether there was any negligence on the part of fourth respondent in

carrying out the construction and not providing the necessary safety measures while making excavations in their property for a high level construction and if there is any violation found in complying with the terms and conditions of the Environmental Clearance and Consent to Establish or Consent to Operate what is the action taken by the authorities against fourth respondent for the violation committed by him including the recovery of compensation for the damage caused to environment, apart from any individual damage caused to the applicant and submit a factual and action taken report to this Tribunal through e-mail @ ngtszfileing@gmail.com. The State Environment Impact Assessment Authority (SEIAA) shall act as nodal agency for co-ordination and providing necessary logistics for this purpose. The applicant as well as fourth respondent are directed to cooperate with the Committee for carrying out the inspection and assessing damage and also to find out any violation if any committed by fourth respondent which resulted in the alleged damage to the applicant's property. Registry is directed to communicate this order to the above officials by e-mail immediately so as to enable them to comply with the directions.

In this connection, the nomination were received from concerned departments and the committee members details are as follows

1. Thiru.R.Sridhar, Scientist –C  
MoEF&CC, Regional Office  
34, Cathedral Garden Road, Nungambakkam,  
Chennai – 34
2. The Joint Chief Environmental Engineer (Monitoring),  
Tamil Nadu pollution Control Board,  
77 A, South Avenue, Ambattur Industrial Estate, Chennai- 58
3. Thiru.S.Panneerselvam  
Deputy Planner, Enforcement Cell (south)  
Chennai Metropolitan Development Authority  
Egmore, Chennai
4. Er.C.Kalyanasundaram M.E,  
Superintending Engineer  
Public Works Department, Chennai
5. Dr.S.Rajendiran  
Assistant Environmental Engineer  
SEIAA-Tamil Nadu as a member of the committee and as a Nodal officer.

In this regard, the Joint Committee decided to inspect the site on 06.11.2020 (Friday) at 11.00 AM to comply the Hon'ble National Green Tribunal, Southern Zone, Chennai order. The date of inspection was informed to the applicant as well as to the fourth repondent. Accordingly, the said site was inspected by the following members of Joint Committee on 06.11.2020:

1. Thiru.R.Sridhar, Scientist –C  
MoEF&CC, Regional Office  
34, Cathedral Garden Road, Nungambakkam,  
Chennai – 34
2. Thiru S.Vijayarajan,  
Environmental Engineer --- representing  
Joint Chief Environmental Engineer (Monitoring),  
Tamil Nadu pollution Control Board,  
77 A, South Avenue, Ambattur Industrial Estate, Chennai- 58
3. Thiru.S.Panneerselvam  
Deputy Planner, Enforcement Cell (south)  
Chennai Metropolitan Development Authority  
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4. Er.C.Kalyanasundaram M.E,  
Superintending Engineer  
Public Works Department, Chennai
5. Dr.S.Rajendiran  
Assistant Environmental Engineer  
SEIAA-Tamil Nadu as a member of the committee and as a Nodal officer.

At the time of inspection, both the applicant as well as the fourth repondent were present. Before starting the inspection, a detailed discussion were carried out with the applicant as well as with fourth repondent.

The applicant has narrated the incidents happened, before the Joint Committee Members stating as follows:

1. The fourth respondent had continued with construction activity at the site without taking any safety precautions and large scale excavations were carried out within 2 feet of the compound wall of Jyotsna complex where

he is residing in Block 19A/2 which is adjacent to the project of fourth respondent.

2. The fourth respondent had been carrying on construction activity day and night, creating major disturbance and nuisance including sound, air and water pollution. None of the necessary pollution control measures were taken by fourth respondent and the construction activity is being continued in violation of the conditions imposed by respondent 2 and 3.
3. On account of the construction activities of the fourth respondent, cracks have come up on the walls and roads in the Jyotsna apartment complex near to the construction site.
4. The owners of the association submitted a representation to the authorities on 12.11.2014 but no action was taken.
5. Subsequently, in May, 2015 part of the compound wall of the complex along plot 19A collapsed and fourth respondent carried out superficial repair work to the protest of the association and the residents and continued with the construction.
6. On 29th September, 2015 they approached fourth respondent and asking him to comply with the precautions and take all necessary safety measures to avoid any damage being caused to the neighbouring properties.
7. On 13.11.2015 at around 3.30 PM major landslide occurred and part of the land of plot 19A, including compound wall, sump, gate and the entire drive way caved in and the entire block's access to the road was blocked and the end of 5th street also caved in, destroying the road.
8. Since they did not have access to the road, the same was restored at the instance of the Fire and rescue services.
9. On account of the same, severe mental stress was caused to the applicant and others. Though they attempted to file a police complaint, the police refused to register a case and only CSR was made regarding the incident.
10. On 14.11.2015 morning further landslides occurred along fourth street along fourth respondent's construction and the disaster management team arrived at the spot.
11. Though the authorities have issued stop memo dated 26.11.2015, fourth respondent continued with his illegal activity.

12. Though Jyotsna Association has arranged discussions with fourth respondent along with few of the affected and willing parties, the resident of Plot 19A (Applicant) did not join the association as some of the terms and conditions were not acceptable and they could not come back to Chennai.
13. The applicant has reported that because of the illegal activity of fourth respondent construction, the applicant have been rendered homeless and have to spend nearly Rs.5,53,000/- (Rupees Five lakhs and fifty three thousand) towards rent and maintenance apart from rental deposit RS.87,000/- (Rupees Eighty seven thousand) being done for alternative accommodation.
14. In view of the above, the applicant filed this application seeking following reliefs:
- a. "(a) Suspend the clearance issued by first respondent to the fourth respondent in Letter No. SEIAA/TN/F.481/EC/(a)/165/2012 dated 04.06.2013 until necessary studies and assessments are conducted by the accredited consultant/s to assess the stability and the safety of the area.
  - b. (b) Direct respondents 1 to 3 to take necessary action against fourth respondent for violations of EIA Notification, 2006, the Town and Country planning Act, 1971.
  - c. (c) Direct fourth respondent to pay compensation to the applicant for losses suffered by them and for the mental agony suffered by them.
  - d. (d) Direct the fourth respondent to carry out all necessary repairs to the applicant's premises by a competent, recognized third party agency to ensure the safety and integrity of the building.
  - e. (e) Direct respondents 1 to 3 to conduct a risk assessment of the project of the 4th respondent."
15. The applicant has also furnished the copy of photos taken during various occasions.

The fourth respondent has reported before the Joint Committee Members as follows.

1. The fourth repondent reported that they have obtained necessary Environmental Clearance and they did not make any violation or deviation and they were complying with the conditions.
2. The fourth repondent reported that they have completed the construction of two blocks and basement etc. have been filled up.
3. The fourth repondent reported that they have taken all necessary safety measures before beginning the construction.
4. The fourth repondent reported that they have taken all necessary precautions against mud-sliding on the eastern side adjacent to the Block by adopting soil shoring and nailing techniques.
5. The fourth repondent reported that the stagnated drainage water started flowing in the reverse direction on the night of 13.11.2015 due to the clogging and breakage of the existing drainage system in the adjacent streets (4th and 5th streets of Padmavathy Nagar) resulting in the reverse flow of storm and drainage water into our property with force which loosened and damaged our soil nailing and guniting resulting in the mud-sliding for a small area and this was not due to any act committed by them.
6. The incident happened due to heavy rain and people have to vacate the premises and they are not responsible for any of the act as alleged.
7. The fourth respondent has taken the following steps to restore the setback area so as to prevent any further damage to the neighbouring property.
8. The fourth repondent reported that they have organized an inspection by a team consisting of Soil Consultant, Structural Consultant, Architect immediately on 21st November 2015 once the area became accessible.
9. Due to stagnation of water all around our site and due to continuous monsoon climate our plot was full of water and it was advised that immediate de-watering was not possible.
10. The fourth repondent reported that they have been advised by the soil and structural consultants not to de-water as it may result in erosion of soil.
11. The reduction of water has enabled us to start piling of sand bags to the adjacent buildings in order to help us to commence de-watering on a slow pace.

12. The fourth respondent reported that they have fully covered their side of the adjacent properties with sand bags up to a length of 70 meters and width of 1.5 meters from the adjacent building forming their setback.
13. The fourth respondent reported that they have also obtained the partial completion certificate from CMDA for its complex vide letter No EC/S-1/7715/2017 dated 06.12.2017.
14. The fourth respondent has produced the copy of certified compliance obtained from Regional office, MoEF&CC and CTO for Phase I obtained from TNPCB.

After detailed discussion with the applicant as well as with the fourth respondent, the Joint Committee Members inspected the **applicant's residence** & fourth respondent's construction site.

#### **OBSERVATIONS**

##### **A. APPLICANT'S RESIDENCE (DAMAGE TO THE APPLICANT NOTICED & THE EXTENT OF DAMAGE CAUSED)**

- a) During inspection, the following observations were noticed in the applicant residence of Flat 32/1, Jyotsna Main Street, Padmavathy Nagar, Extension Velachery are submitted as follows:
  - (i) **Compound Wall:**
    - a. The compound wall on west side was found collapsed completely.
    - b. The compound wall on south side was also found collapsed (Though a portion of about 26 feet exists on south side, it was found over turned and to be demolished and new one is to be constructed).
    - c. The compound walls on North and East side were found to be ok.
    - d. Hence Length of compound wall to be reconstructed is about 90 Feet and the height of compound wall is 5 Feet
  - (ii) **Gate:**
    - a. Out of two gates on Northern side, the one on western end was found completely damaged and the length and height of gate were 8 feet and 5 feet respectively.
  - (iii) **Pavement Arrangement:**
    - a. The pavement all-round the building is provided with Grano Flooring, over plain concrete.

- b. Damages were noticed in many portions of pavement. Pavement was found sunken down from the original laid level and found separated from the wall in few places.
- c. The entire pavement arrangement all-round the building is to be redone.

(iv) **Sump:**

- a. The underground sump was found collapsed and completely caved-in.

(v) **EB Box Arrangements:**

- a. The E.B (power supply) connection box arrangements provided in the Building was found damaged and to be replaced with new one with necessary accessories.

(vi) **Miscellaneous damages:**

- a. Cracks & damages were found in the following portions:
  - a. In the sun shades on two sides
  - b. In the wall under over head tank.
  - c. Damages in few roofing tiles (Pressed tiles)

**B. FOURTH RESPONDENT'S CONSTRUCTION SITE**

1. M/s Esthell Golden square & Esthell Paragon Mall (M/s Esthell Hotel & Resorts) has obtained Consent to Establish (CTE) on 5.12.2014 for the Construction of Residential cum commercial complex with two Blocks A and B:
  - a. Block A- Commercial/hotel complex- 3 basements+ ground floor and 7 Floor
  - b. Block B- Residential blocks- basement + stilt and 13 floors with total built up area of 41,203 sqm.
2. The Project Authorities have obtained Consent to operate on 24.9.2020 in the name of M/s Esthell Golden square and Esthell Paragon Mall - Esthell Homes – Phase I for the Residential Complex blocks-- Basement + stilt and 13 floors with total built up area of 17,752.56 sqm (91 dwelling units) with permission to discharge 54 KLD of treated sewage as follows:
  - a) 22 KLD for utilizing for toilet flushing,
  - b) 5 KLD for gardening and
  - c) The remaining 27 KLD into CMWSSB sewer

and to discharge emission through 4metre height stack attached to 380 KVA DG set.

- 3. During inspection, the following were observed:
  - a. The unit had completed the Rear block (Block B -Residential block) only and out of 91 units only 20 units were occupied. Block A (front block –which is adjacent to the Petitioner's house) was under construction in which structural works for 3 basement+ Ground and 2 Floors only were completed.
  - b. The unit has provided Sewage Treatment Plant (STP) for the residential block which was under stabilization. The Project Authorities informed that the raw sewage is at present sent through lorry tankers to CMWSSB STP for treatment as only 20 dwelling units, out of 91 units, have been occupied recently and the STP is under stabilization.
  - c. The unit has installed one DG Set of 380 KVA with 4 metre height stack.
  - d. One Organic Waste Converter (OWC), to process the organic wastes generated from the dwelling units, has been kept in place but yet to commission. The Project authorities informed that at present the solid waste (including the organic waste) is disposed through Chennai Corporation.

**RECOMMENDATIONS:**

The Joint Committee after having a detailed inspection has suggested the following recommendations:

**A. COST ESTIMATION TO THE DAMAGE CAUSED TO THE APPLICANT.**

**1. Compound Wall:**

- 1) Compound wall is of brick masonry and height of Compound Wall is 5 Feet & Thickness of Compound Wall = 5.5 inch and Brick pillars are 9 inch X 9 inch (provided at about 9 feet intervals).
- 2) The Collapsed Compound Wall Length
  - a. Western side = 36 feet

- b. Southern side = 42 feet (including overturned wall of 18 feet in length)
- c. Extra at Junctions etc; = 12 feet
- d. The total length of the Collapsed Compound Wall is 90 feet & the Rate per one feet length = Rs. 4000

3) Hence the Cost for reconstructing the collapsed compound wall is (90x4000) **Rs. 3, 60, 000. -- (i)**

**2. Gate:**

- a. The damaged steel gate is of size 8' - 6" X 5' - 0"
- b. Total Weight = 850 kg
- c. Cost of replacing the damaged gates with new gate: **Rs. 85,000 -- (ii)**

**3. Pavement Arrangements:**

- a. Pavement is finished with grano flooring over cement concrete.
- b. Area of pavement to be re-laid = 1000 sqft
- c. Adopting rate of Rs. 125 per sqft,
- d. Hence the Cost of relaying entire pavement arrangement = 1000 X 125 = **Rs.1, 25,000 ----- (iii)**

**4. Sump:**

- a. Capacity of sump (about) = 6000 litre
- b. Adopting Rate of Rs. 25 per litre
- c. Cost of sump = 6000 X 25 = **Rs. 1, 50,000 ----- (iv)**

**5. E.B Box Arrangements:**

Cost of replacing E.B Box Arrangement = **Rs. 30,000 ---- (v)**

**6. Miscellaneous damages:**

Repairing miscellaneous damages like cracks in sunshade, Walls etc., is **Rs. 25,000 ----- (vi)**

**7. Unforeseen Expenditure during repairing is Rs. 25,000 ----- (vii)**

**8. Total amount = (i) + (ii) + (iii) + (iv) + (v) + (vi) + (vii)**

$$= (360000+85000+125000 + 150000 + 30000 + 25000 + 25000)$$

**Total = Rs. 8, 00,000 (Rupees Eight lakhs only)**

**B. COMPENSATION PAYABLE TO THE APPLICANT.**

As per the cost estimation done above, the compensation payable to the applicant to repair/reconstruction of the damage noticed is **Rs.8, 00,000.**

**C. NEGLIGENCE IN CARRYING OUT THE CONSTRUCTION.**

It is reported that in order to protect the soil from sliding during deep excavation, the method adopted was soil shoring and nailing technique. In this method, steel rods are driven into the excavated vertical sides, to compact it and cement grouting is done after spreading, wire mesh which act like a thick sheet/wrapper and prevent the sliding of earth. The above technique adopted is adequate in normal condition. But when there is an intrusion of excess water, there are chances of erosion and sliding which may cause damages and collapse of adjacent structures like compound walls, amenities and even buildings in the neighbourhood. Hence it is opined that water inundation due to rain has caused the failure of this shoring and nailing technique resulted in loosening and erosion of portions excavated for the purpose of constructing underground basement walls resulting in collapse and damage to compound wall and other amenities of neighbouring buildings.

**D. SAFETY MEASURES PROVIDED WHILE MAKING EXCAVATIONS.**

The incident occurred in the year 2015. The following observations are submitted based on present site conditions (06.11.2020) and also on scrutinizing the relevant old photographs furnished, regarding the safety measures provided while making excavations.

1. Meticulous care is to be taken while carrying out the deep excavation for triple basement floor below the ground.
2. There are many ways to protect the soil from sliding during deep excavation and the method adopted here was soil shoring and nailing technique.
3. In this method, steel rods are driven into the excavated vertical sides, to compact it and cement grouting is done after spreading, wire mesh which act like a thick sheet/wrapper and prevent the sliding of earth.
4. The above technique adopted is adequate in normal condition. But when there is an intrusion of excess water, there are chances of erosion and sliding

which may cause damages and collapse of adjacent structures like compound walls, amenities and even buildings in the neighbourhood.

5. Other shoring methods like sheet piles, contiguous piling, etc. are good enough to withstand this water pressure. Hence it is opined that water inundation due to rain has caused the failure of this shoring and nailing technique resulted in loosening and erosion of portions excavated for the purpose of constructing underground basement walls resulting in collapse and damage to compound wall and other amenities of neighbouring buildings.

**E. COMPLIANCE & VIOLATION WITH RESPECT TO ENVIRONMENTAL CLEARANCE.**

The report on compliance & violation with respect to Environmental Clearance issued to m/s Esthell Hotels & Resorts, S.F No 638/1, 2 & 3, 639/1,2&3, 644/1, T.S.No.1/10, Block No.176 of Velachery Village, Mambalam - Guindy Taluk, Chennai District is enclosed as Annexure-1

**F. COMPLIANCE & VIOLATION WITH RESPECT TO CONSENT TO ESTABLISH OR CONSENT TO OPERATE.**

The report on compliance & violation with respect to consent to establish (for block A and B) issued to M/s Esthell Golden Square & Esthell Paragon Mall (M/s Esthell Hotel & Resorts) proposed at S.F No 638/1, 2 & 3, 639/1,2&3, 644/1, T.S.No.1/10, Block No.176 of Velachery Village, Mambalam - Guindy Taluk, Chennai District and consent to operate issued in the name of M/s Esthell Golden Square & Esthell Paragon Mall - Esthell HOMES Phase I ( Block B only) at S.F No 638/1 and 639/2 is enclosed as Annexure-2 and 3 respectively.

At the time of inspection, only 20 units were occupied out of 91 units and the STP was under stabilization and the Organic Waste Converter (OWC) has been installed. However, the sewage was sent to CMWSSB through tankers and the solid waste generated is disposed through Chennai Corporation then and there. The unit authorities informed that due to less occupancy and also availability of less labour in Covid Pandemic situation, STP and the OWC was not operated

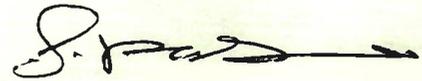
and will be commissioned shortly and disposal outside will be completely stopped.



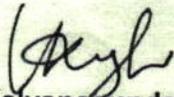
**Thiru.R.Sridhar,**  
Scientist -C  
MoEF&CC, Regional Office



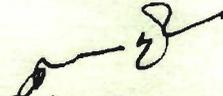
**Thiru S.Vijayarajan**  
Environmental Engineer  
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**Thiru.S.Panneerselvam**  
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**Er.C.Kalyanasundaram, M.E,**  
Superintending Engineer  
PublicWorks Department,



**Dr.S.Rajendiran**  
Assistant Environmental  
Engineer, SEIAA-TN

**Annexure-1**

**REPORT ON COMPLIANCE & VIOLATION WITH RESPECT TO ENVIRONMENTAL CLEARANCE ISSUED TO M/S ESTHELL HOTELS & RESORTS, S.F NO 638/1, 2 & 3, 639/1,2&3, 644/1, T.S.NO.1/10, BLOCK NO.176 OF VELACHERY VILLAGE, MAMBALAM - GUINDY TALUK, CHENNAI DISTRICT**

SL.NO.	CONDITIONS	COMPLIANCE
A.	<b><u>SPECIFIC CONDITIONS</u></b>	
	<b><u>Construction Phase</u></b>	
i)	"Consent for Establishment" shall be obtained from the Tamil Nadu Pollution Control Board and a copy shall be submitted to the SEIAA, Tamil Nadu before taking up of any construction activity at the site.	Complied - Consent for Establishment" has been obtained from the Tamil Nadu Pollution Control Board.
ii)	The entire water requirement during construction phase shall be met from authorized water suppliers as committed.	Part of the construction is under progress and the proponent has reported that the entire water requirement during construction phase shall be met from authorized water suppliers as committed.
iii)	Provision shall be made for the housing labour within the site with all necessary infrastructures and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project	It was noticed that Housing for the labour has not been provided within the project sit.
iv)	The height and coverage of the constructions shall be in accordance with	The proponent has reported it is strictly complied.

	the existing FSI/FAR norms as per Coastal Regulation Zone Notification, 2011.	
v)	The approval of the competent authority shall be obtained for structure safety of the buildings due to earthquake, adequacy of fire fighting equipments, etc as per National Building Code including protection measures from lightening etc.	
vi)	All required sanitary and hygienic measures should be in place before starting construction activities and they have to be maintained throughout the construction phase.	The proponent has reported it will be strictly complied always.
vii)	A First Aid Room shall be provided in the project site during the entire construction phase of the project.	First Aid Room shall be provided. The proponent has reported it will be strictly complied always.
viii)	Adequate drinking water and sanitary facilities should be provided for construction workers at the site. The safe disposal of waste water and solid wastes generated during the construction phase should be ensured.	Adequate drinking water and sanitary facilities has been provided for construction workers at the site
ix)	All the labourers to be engaged for construction should be screened for health and adequately treated before and during their employment on the work at the site.	The proponent has reported it will be strictly complied always.
x)	The solid waste in the form of excavated earth excluding the top soil generated from the project activity shall be scientifically utilized for construction of	The proponent has reported it is strictly complied always.

	approach roads and peripheral roads, as reported.	
xi)	All the top soil excavated during construction activities should be stored for use in horticulture/ landscape development within the project site.	The proponent has reported it is strictly complied always.
xii)	Disposal of other construction debris during construction phase should not create any adverse effect on the neighboring communities and be disposed off only in approved sites, with the approval of Competent Authority with necessary precautions for general safety and health aspects of the people.	The proponent has reported it is strictly complied always.
xiii)	Construction spoils, including bituminous materials and other hazardous materials, must not be allowed to contaminate watercourses. The dump sites for such materials must be secured so that they should not leach into the adjacent land/ lake/ stream etc.	The proponent has reported it will be strictly complied always.
xiv)	Low Sulphur Diesel shall be used for the operating diesel generator sets to be used during construction phase. The air and noise emission shall conform to the standards prescribed in the Rules under the Environment (Protection) Act, 1986, and the Rules framed thereon.	The proponent has reported it will be strictly complied always.
xv)	The diesel required for operating DG sets shall be stored in underground tanks and	No storage of diesel was noticed at time of inspection. The proponent has reported

	if required, clearance from Chief Controller of Explosives shall be taken.	it will be strictly complied always.
xvi)	Vehicles hired for bringing construction materials to the site should be in good condition and should conform to air and noise emission standards, prescribed by TNPCB/CPCB. The vehicles should be operated only during non-peak hours.	The proponent has reported it will be strictly complied always.
xvii)	Ambient air and noise levels should conform to residential standards prescribed by the TNPCB, both during day and night. Incremental pollution loads on the ambient air and noise quality should be closely monitored during the construction phase.	The proponent has not produced any documental evidences for conduction of Ambient air and noise levels survey
xviii)	Fly- Ash bricks should be used as building material in the construction as per the provision of Fly ash Notification of September, 1999 and amended as on 27 <sup>th</sup> August, 2003.	The proponent has reported it will be strictly complied always.
xix)	Ready mix concrete of high quality should be used in building construction and necessary cub-tests should be conducted to ascertain their quality.	The proponent has reported it is strictly complied always.
xx)	Storm water control and its re-use shall be as per CGWB and BIS standards for various applications.	The proponent has reported it is strictly complied always.
xxi)	Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best	The proponent has reported it is strictly complied always.

	practices prevalent.	
xxii)	Fixtures for showers, toilet flushing and drinking water should be of low flow type by adopting the use of aerators / pressure reducing devices / sensor based control.	The proponent has reported it is strictly complied always.
xxiii)	Use of glass shall be reduced up to 40% to reduce the electricity consumption and load on air conditioning. If necessary, high quality double glass with special reflecting coating shall be used in windows.	The proponent has reported it will be strictly complied always.
xxiv)	Roof should meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material, to fulfill the requirement.	The proponent has reported it will be strictly complied always.
xxv)	Adequate measures to reduce air and noise pollution during construction shall be adopted, conforming to norms prescribed by the TNPCB on noise limits.	The applicant reported that the proponent has not adopted adequate measures to reduce air and noise pollution during construction
xxvi)	Opaque wall should meet prescriptive requirement as per Energy Conservation Building Code which is mandatory for all air conditioned spaces by use of appropriate thermal insulation material to fulfill the requirement	The proponent has reported it will be strictly complied wherever necessary.
xxvii)	The Project proponent is requested to indicate the probable date of commissioning of the project supported	The Project proponent has not reported the probable date of commissioning of the project supported with necessary bar

	with necessary bar charts.	charts.
xxviii)	Adequate fire protection equipments and rescue arrangements should be made as per the prescribed standards.	The proponent has reported it will be strictly complied always.
xxix)	Proper approach road for fire-fighting vehicles and for rescue operations in the event of emergency shall be made.	The proponent has not made proper approach road for fire-fighting vehicles and for rescue operations in the event of emergency in the rear side.
xxx)	Design of buildings should be in conformity with the Seismic Zone Classifications.	The proponent has reported that the design of buildings is in conformity with the Seismic Zone Classifications. But not produced any document.
xxxi)	All ECBC norms have to be adopted.	The proponent has reported it will be strictly complied always.
xxxii)	The proponent should also ensure to keep necessary road width as per O.M. dated 7.2.12 of MOEF, GOI, New Delhi with respect to high rise buildings	The proponent has reported it will be strictly complied always.
xxxiii)	Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects. Occupational health surveillance program of the workers should be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.	The proponent has reported it will be strictly complied always.
xxxiv)	Periodical medical examination of the	The proponent has reported it is strictly

	workers engaged in the project shall be carried out and records maintained. For the purpose, schedule of health examination of the workers should be drawn and followed accordingly. The workers shall be provided with personnel protective measures such as masks, gloves, boots etc.	complied always.
	<b><u>Operation Phase</u></b>	
i)	The Proponent should be responsible for the maintenance of common facilities including greening, rain water harvesting, sewage disposal, solid waste disposal and environmental monitoring for a period of 10 years.	It is noted that the construction is still under progress and the proponent has reported it will be strictly complied.
ii)	The entire water requirement during operation phase shall be met from CMWSSB as per permissions obtained from CMWSSB for commercial purposes and before handing over of flats to the allottees as committed.	It is noted that the construction is still under progress and the proponent has reported it will be strictly complied.
iii)	There shall be no drawal of ground water. If ground water required, it has to be drawn necessary permission shall be obtained from the competent Authority.	It is noted that the construction is still under progress and the proponent has reported it will be strictly complied.
iv)	The Proponent as committed shall utilize 111KLD of treated sewage for flushing, 9KLD for gardening & 57KLD for HVAC scientifically throughout the period of operation. The area allotted for gardening shall not be used for any other	It is noted that the construction is still under progress and the proponent has reported it will be strictly complied.

	construction activity. No effluent shall be discharged outside the premises and also through CMWSSB sewer line.	
v)	The proponent shall ensure that storm water drain provided at the project site shall be maintained without choking or causing stagnation and should also ensure that the storm water shall be properly disposed off in the natural drainage / channels without disrupting the adjacent public. Adequate harvesting of the storm water should also be ensured.	It is noted that the construction is still under progress and the proponent has reported it will be strictly complied.
vi)	The proponent should also ensure that necessary trenches for openings shall be provided at periodic intervals along the compound wall, so as to let out the storm water during rainy season, without stagnation / ponding.	It is noted that the construction is still under progress and the proponent has reported it will be strictly complied.
vii)	The proponent shall ensure that roof rain water run-off collected from the covered roof of the buildings, etc shall be scientifically harvested so as to ensure the maximum beneficiation of rain water harvesting. It shall be stored in a sump of capacity 2720 CUM and reused.	It is noted that the construction is still under progress and the proponent has reported it will be strictly complied.
viii)	Rain water harvesting for surface run-off, as per plan submitted should be implemented. Before recharging the surface run off, pre-treatment with screens, settlers etc. must be done to remove suspended matter, oil and	It is noted that the construction is still under progress and the proponent has reported it will be strictly complied.



	grease, etc. The Proponent shall provide 4 - 5 nos. of borewells / percolation pits/ etc. as committed. The borewells / percolation pits/ etc. for rainwater recharging should be kept at least 5 mts. above the highest ground water table.	
ix)	<p>The proponent shall issue plans showing Separate pipelines marked with different colour with the following details</p> <ul style="list-style-type: none"> <li>i. Location of STP, compost system, underground sewer line.</li> <li>ii. Pipe Line conveying the treated effluent for green belt development.</li> <li>iii. Pipe Line conveying the treated effluent for toilet flushing</li> <li>iv. Water supply pipeline</li> <li>v. Gas supply pipe line if proposed</li> <li>vi. Telephone cable</li> <li>vii. Power cable</li> <li>viii. Storm water drain</li> <li>ix. Rain water harvesting system</li> </ul> <p>to all the allottees/owners while executing the allotment order/sale deed.</p>	It is noted that the construction is still under progress and the proponent has reported it will be strictly complied.
x)	<p>The Biodegradable solid waste, Non - Biodegradable solid waste, STP sludge, etc generated from the project activity shall be properly collected, segregated and disposed as committed, and as per the provision of Solid Waste</p>	The proponent has just installed organic waste convertor in the residential side. It is noted that the construction is still under progress and the proponent has reported it will be strictly complied.

	(Management and Handling) Rules, 2000.	
xi)	To facilitate easy disposal and making the solid waste disposal less laborious, chute shall be provided in each floor with a collection bin (wheeled bins with top lid arrangement) in the bottom of the chute to be kept in the ground floor level which the bins shall be transferred to the solid waste disposal area identified within the facility.	It is noted that the construction is still under progress and the proponent has reported it will be strictly complied.
xii)	The biodegradable municipal solid waste shall be decomposed through Organic Waste Converter and the manure shall be used as compost for green belt development/ avenue plantation as committed.	The proponent has just installed organic waste converter in the residential side
xiii)	A First Aid Room shall be provided during operation of the project, with necessary equipments and life- saving medicines.	The proponent has provided first aid room
xiv)	The Plastic wastes shall be segregated and disposed as per the provisions of Plastic Waste (Management & Handling) Rules 2011	The proponent has reported it will be strictly complied always.
xv)	Diesel power generating sets proposed as source of back-up power during operation phase should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be	It is noted that the construction is still under progress and the proponent has reported it will be strictly complied.

	(Management and Handling) Rules, 2000.	
xi)	To facilitate easy disposal and making the solid waste disposal less laborious, chute shall be provided in each floor with a collection bin (wheeled bins with top lid arrangement) in the bottom of the chute to be kept in the ground floor level which the bins shall be transferred to the solid waste disposal area identified within the facility.	It is noted that the construction is still under progress and the proponent has reported it will be strictly complied.
xii)	The biodegradable municipal solid waste shall be decomposed through Organic Waste Converter and the manure shall be used as compost for green belt development/ avenue plantation as committed.	The proponent has just installed organic waste converter in the residential side
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xiv)	The Plastic wastes shall be segregated and disposed as per the provisions of Plastic Waste (Management & Handling) Rules 2011	The proponent has reported it will be strictly complied always.
xv)	Diesel power generating sets proposed as source of back-up power during operation phase should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be	It is noted that the construction is still under progress and the proponent has reported it will be strictly complied.

	equal to the height needed for the combined capacity of all proposed DG sets. The location of the DG sets may be decided with in consultation with Tamil Nadu Pollution Control Board.	
xvi)	The diesel required for operating DG sets shall be stored in underground tanks and if required, clearance from the Chief Controller of Explosives shall be taken.	It is noted that the construction is still under progress and the proponent has reported it will be strictly complied.
xvii)	The acoustic enclosures shall be installed at all noise generating equipments such as DG sets, air conditioning systems, etc. and the noise level shall be maintained as per MoEF/CPCB/TNPCB guidelines/ norms both during day and night time.	The proponent has provided acoustic enclosure to the DG Set provided
xviii)	The green belt design along the periphery of the plot shall achieve attenuation factor conforming to the day and night noise standards prescribed for residential land use. The open spaces inside the plot shall be suitably landscaped and covered with vegetation of suitable variety.	It is noted that the construction is still under progress and the proponent has reported it will be strictly complied.
xix)	Incremental pollution loads on the ambient air quality, noise and water quality shall be periodically monitored after commissioning of the project.	It is noted that the construction is still under progress and the proponent has reported it will be strictly complied.
xx)	Application of solar energy should be incorporated for illumination of common areas, lighting for gardens and street lighting in addition to provision for solar	It is noted that the construction is still under progress and the proponent has reported it will be strictly complied.

	water heating. A hybrids system or fully solar system for a portion of the apartments shall be provided.	
xxi)	Traffic congestion near the entry and exit points from the roads adjoining the proposed projects site shall be avoided. Parking shall be fully internalized and no public space should be utilized. Parking plan to be as per MoEF norms.	It is noted that the construction is still under progress and the proponent has reported it will be strictly complied.
xxii)	A report on the energy conservation measures conforming to energy conservation norms prescribed by the Bureau of Energy Efficiency shall be prepared incorporating details about building materials & technology; R & U factors etc and submitted to the SEIAA in three month's time.	It is noted that the construction is still under progress and the proponent has reported it will be strictly complied.
xxiii)	Energy conservation measures like installation of CFLs/TFLs for lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning. Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination. Use of solar panels may be done to the extent possible.	It is noted that the construction is still under progress and the proponent has reported it will be strictly complied.
xxiv)	The installation of the Sewage Treatment	The proponent has not furnished certified

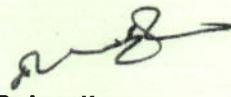
	<p>Plant (STP) should be certified by an independent expert and a report in this regard should be submitted to the SEIAA, TN before the project is commissioned for operation. Treatment affluent emanating from STP shall be recycled / reused to the maximum extent possible. Treatment of 100 % grey water by decentralized treatment should be done. Discharge of unused treated effluent shall conform to the norms and standards of the Tamil Nadu State Pollution Control Board. Necessary measures should be made to mitigate the odour problem from STP. Explore the less power consuming systems viz. baffle reactor etc. for the treatment of sewage. The Proponent shall install STP units each consists of Bar Screen Chamber, Collection Tank, Raw Effluent pump sets, Aeration Tank – Double stage, Air Blowers, Secondary Settling tank, Sludge Holding tank, Filter Feed Pump, Pressure Sand Filter, Activated Carbon Filter, Chlorine Doser, UV Filtration &amp; Treated Effluent collection sump as committed (Capacity of 131KLD &amp; 61KLD) and operated continuously to achieve the standards prescribed by the Tamil Nadu Pollution Control Board.</p>	<p>report obtained from an independent expert for installation of the Sewage Treatment Plant (STP).</p>
xxv)	<p>The Proponent shall provide DG set to operate STP in case of power failure.</p>	<p>It is noted that the construction is still under progress and the proponent has reported it will be strictly complied.</p>

xxvi)	It is the sole responsibility of the proponent that the treated sewage water disposed for green belt development/ avenue plantation should not pollute the soil/ ground water/ adjacent canals/ lakes/ ponds, etc.	It is noted that the construction is still under progress and the proponent has reported it will be strictly complied.
xxvii)	No construction activity of any kind shall be taken up in the OSR area. Consent of the local body concerned should be obtained for using the secondary treated sewage in the OSR area.	The proponent has reported it will be strictly complied always.
xxviii)	Spent oil from D.G sets should be stored in HDPE drums in an isolated covered facility and disposed as per the Hazardous Wastes (Management, Handling, Transboundary Movement) Rules 2008. Spent oil from D.G sets should be disposed off through registered recyclers.	The proponent has reported it will be strictly complied always.
xxix)	The e - waste generated should be collected and disposed to a nearby authorized e-waste centre as per e waste (Management & Handling), Rules 2011.	The proponent has reported it will be strictly complied always.
xxx)	The ground water level and its quality should be monitored regularly in consultation with Central Ground Water Authority.	The proponent has reported it will be strictly complied always.
xxxi)	Adequate measures should be taken to prevent odour problem from solid waste processing plant and STP.	The proponent has reported it will be strictly complied always.

xxxii)	The building should have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation. Landscape plan to be revised accordingly.	The proponent has reported it will be strictly complied always.
xxxiii)	A terrace garden shall be developed [15% of the Roof Top Area] and maintained continuously by the Proponent	It is noted that the construction is still under progress and the proponent has reported it will be strictly complied.

  
**Dr.R.Sridhar,**  
**Scientist – C**  
**MoEF&CC, Regional Office**

  
**Thiru S.Vijayarajan,**  
**Environmental Engineer -**  
**representing**  
**Joint Chief Environmental**  
**Engineer (Monitoring),TNPCCB**

  
**Dr.S.Rajendiran**  
**Assistant Environmental**  
**Engineer, SEIAA-TN**

## ANNEXURE-2

### Report on compliance with respect to Consent to Establishment order dated:05.12.2014 extended vide order dated.24.11.2017 issued to M/s. Esthell Golden Square and Esthell Paragon Mall - Esthell Homes, S.F.No. 638/1,2&3, 639/1,2&3 and 644/1 Velacheri Part 2 Village, Velacheri Taluk and Chennai District

Sl. No.	CONDITIONS	COMPLIANCE REPORT												
1.	<p>This Consent to establish is valid for establishing the facility for the manufacture of products/by products (Col.2) at the rate (Col 3) mentioned below. Any change in the product/by product and its quality has to be brought to the notice of the Board and fresh consent has to be obtained.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="3" style="text-align: center;">Main Products manufactures</td> </tr> <tr> <th style="width: 10%;">S. No.</th> <th style="width: 50%;">Description</th> <th style="width: 40%;">Quantity</th> </tr> <tr> <td style="text-align: center;">1</td> <td>Residential cum commercial complex with two Blocks A and B Block A – Commercial / hotel complex – 3 basements + ground Floor and 7 Floor Block B – Residential Blocks – Basement + Stilt and 13 Floors with total built up area of 41203 Sq.m</td> <td></td> </tr> <tr> <td colspan="2">By/Intermediate Product Details</td> <td style="text-align: center;">Nil</td> </tr> </table>	Main Products manufactures			S. No.	Description	Quantity	1	Residential cum commercial complex with two Blocks A and B Block A – Commercial / hotel complex – 3 basements + ground Floor and 7 Floor Block B – Residential Blocks – Basement + Stilt and 13 Floors with total built up area of 41203 Sq.m		By/Intermediate Product Details		Nil	<p>The unit had completed the Rear block (Block B – Residential block) only. Out of 91 units, only 20 units were occupied.</p> <p>Block A (front block – which is adjacent to the Petitioners house) was under construction in which structural works for 3 basement + Ground and 2 floors were completed. Work under progress.</p>
Main Products manufactures														
S. No.	Description	Quantity												
1	Residential cum commercial complex with two Blocks A and B Block A – Commercial / hotel complex – 3 basements + ground Floor and 7 Floor Block B – Residential Blocks – Basement + Stilt and 13 Floors with total built up area of 41203 Sq.m													
By/Intermediate Product Details		Nil												
2.	<p>This consent to establish is valid for establishing the facility with the below mentioned outlets for the discharge of sewage/trade effluent. Any change in the outlet has to be brought to the notice of the board and fresh consent has to be obtained if necessary.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">Outlet No.</th> <th style="width: 30%;">Description of outlet</th> <th style="width: 20%;">Maximum daily discharge in KLD</th> <th style="width: 40%;">Point of disposal</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">Sewage</td> <td style="text-align: center;">175 KLD</td> <td>109 KLD – Toilet flushing 9 KLD – Gardening 57 KLD – HVAC</td> </tr> <tr> <td style="text-align: center;">2</td> <td style="text-align: center;">Trade Effluent</td> <td style="text-align: center;">Nil</td> <td style="text-align: center;">Does not arise</td> </tr> </tbody> </table>	Outlet No.	Description of outlet	Maximum daily discharge in KLD	Point of disposal	1	Sewage	175 KLD	109 KLD – Toilet flushing 9 KLD – Gardening 57 KLD – HVAC	2	Trade Effluent	Nil	Does not arise	<p>The unit has provided Sewage Treatment Plant (STP) of 65 KLD for the residential block which was under stabilization. The Project Authorities informed that the raw sewage is at present sent through lorry tankers to CMWSSB STP (for treatment) as only 20 dwelling units, out of 91 units, have been occupied recently. STP is under stabilization.</p>
Outlet No.	Description of outlet	Maximum daily discharge in KLD	Point of disposal											
1	Sewage	175 KLD	109 KLD – Toilet flushing 9 KLD – Gardening 57 KLD – HVAC											
2	Trade Effluent	Nil	Does not arise											
3.	<p>a. The unit shall provide sewage Treatment Plant (131 KLD) as indicated below :</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">Sl.No.</th> <th style="width: 25%;">Components of STP</th> <th style="width: 30%;">Dimensions in m</th> <th style="width: 35%;">Nos.</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Sl.No.	Components of STP	Dimensions in m	Nos.					<p>The unit has provided only 65KLD STP for Residential block which was under stabilization.</p>				
Sl.No.	Components of STP	Dimensions in m	Nos.											

1	Bar Screen	1.0 x 1.6 x 0.75	1	
2	Equalization tank	6.3 x 3.3 x 3.05	1	
3	Aeration Tank	6.13 x 3.0 x 5.48	1	
4	Aeration Tank 2	3.3x3.3x5.48	1	
5	Secondary Clarifier Tank	3.3x3.3x5.48	1	
6	Sludge holding tank	3.5x5.0x2.8	1	
7	Filter press	3.5x5.0x2.8	1	
8	Filter feed tank	450mm x 450mm	1	
9	Treated water tank	6.1 x 5.0 x 3.7	1	
10	Pressure sand filter	1.3 Dia	1	
11	Activated Carbon filter	1.3 Dia	1	
12	UV Disinfection	3 Nos of 1.2 Kw Lamp	1	
b. The unit shall provide Effluent Treatment Plant (65KLD) as indicated below				
Sl.No.	Components of STP	Dimensions in m	Nos.	
1.	Bar Screen	1.6 x 1.0 x 0.75 (LD)	1	
2.	Equalization tank	1.8 x 4.6 x 3.05 + 0.95 fb	1	
3.	Aeration Tank	1.8 x 4.6 x 3.4 + 0.95 fb	1	
4.	Aeration Tank 2	1.9 x 4.6 x 3.1 + 0.9 fb	1	
5.	Secondary Clarifier Tank	2.5 x 3.4 x 2.8 + 1.2 fb	1	
6.	Sludge holding tank	2.5 x 1.0 x 3.7 + 0.3 fb	1	
7.	Filter press	450mm x 450 mm	1	
8.	Filter feed tank	1.4 x 4.6 x 3.7 + 0.3 fb	1	
9.	Treated water tank	3.5 x 4.6 x 3.7 + 0.3fb	1	
10.	Pressure sand filter	0.9 Dia	1	
11.	Activated Carbon filter	0.8 Dia	1	
12.	UV Disinfection	3 Nos of 1.2 Kw Lamp	1	
4.	The unit shall provide the sewage Treatment Plant of 1x131KLD, 1x65 KLD having total capacity of 196 KLD as proposed above ground level with UV Disinfection system to treat the sewage to achieve the standards prescribed by the board.			The unit has provided 65KLD STP for Residential block which was under stabilization.

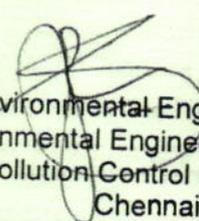
5.	The unit shall make arrangements to utilize the treated waste water 109 KLD for Toilet flushing 57 KLD for HVAC and 9 KLD for gardening.	The unit has made arrangements to utilize the treated sewage for toilet flushing.
6.	<p>The unit shall furnish a BG for a sum of Rupees Rs.10,00,000/- before the establishment of project for the compliance of following conditions.</p> <p>a. The unit shall obtain and furnish permission letter from CMWSSB for fresh water supply to the board.</p> <p>b. The unit shall furnish the STP Design check approved by Academic Research Institution</p> <p>c. The unit shall provide organic waste convertor/Bio-Methanation plant for scientific disposal of solid waste</p>	The unit has submitted Bank Guarantee of Rs.10,00,000/- to the TNPCB.
7.	The unit shall comply with the conditions imposed in the environmental clearance obtained from the SEIAA vide its clearance SEIAA/TN/F.48a/EC/8(a)/165/2012 dt 04.06.2013.	Residential complex Block B – Basement + stilt and 13 floors with total built up area of 17,752.56 sq.m has been constructed and completed. In Block A (Mall/Multiplex/Hotel complex), basement I, II & III ground and 2 floors have been completed and construction works were under process.
8.	The unit shall provide the EMFMs with automatic recorder and display arrangement at the inlet/outlet of STP and at the disposal point of the treated sewage for green belt, toilet flushing and to HVAC.	The unit has provided electromagnetic flow meter at the inlet and outlet of the STP.
9.	The unit shall provide water flow meters with automatic recorder and display for the raw water supply.	Flow meter not provided. Raw water is purchased through Lorry tankers only.
10.	The unit shall provide energy meter for the operation of STP.	The unit has provided separate energy meter for the sewage treatment plant.
11.	The unit shall not clean the STP tanks manually and it should be carried out only by mechanical system.	The proponent has assured to comply.
12.	The unit shall provide continuous monitoring system in the STP area for monitoring the emission of toxic gases such as H <sub>2</sub> S, CH <sub>4</sub> etc.,	The proponent has assured to comply.
13.	Necessary safety equipment's. Testing kits, goggles, aprons, gloves, masks, gas detectors etc., should be made available in STP premises and the same shall be used properly while carrying out the cleaning operations.	The proponent has assured to comply.

14.	The unit shall utilize the sludge generated from the STP as manure for gardening as proposed.	The proponent has assured to comply.
15.	The project proponent shall apply for authorization under Hazardous waste (Management, Handling and Tran boundary) Rules 2008 for handling used oil generated from diesel generator sets.	The proponent has assured to comply.
16.	The unit shall collect and treat the waste water generated from laundry activities if any proposed in the hotel complex before disposal into STP for further treatment.	Hotel complex (Block A) is under construction. Hence not applicable at present.
17.	The unit shall ensure that the bio degradable solid waste non bio degradable solid waste, STP sludge etc generated from the project activity shall be properly collected, segregated and disposed as per the provision of solid waste (Management and handling) Rules 2000 and the plastic waste shell be segregated and disposed as per the provisions of plastic waste (Management and Handling) Rules 2011.	The proponent has assured to comply.
18.	The unit shall adopt safe and environment friendly management practices within the premises.	The proponent has assured to comply.
19.	The unit shall coordinate with the local police and workout schemes for the regulation of the increased traffic flow in the area due to this project.	The proponent has assured to comply.
20.	This consent order does not absolve from obtaining necessary permission/Clearance from other Authority or under other statutes as applicable.	The proponent has assured to comply

**Air Act:**

Sl. No.	CONDITIONS	COMPLIANCE REPORT						
1.	This Consent to establish is valid for establishing the facility for the manufacture of products/by products (Col.2) at the rate (Col 3) mentioned below. Any change in the product/by product and its quality has to be brought to the notice of the Board and fresh consent has to be obtained.	<p>The unit had completed the Rear block (Block B - Residential block) only. Out of 91 units only 20 units were occupied.</p> <p>Block A (front block - which is adjacent to the Petitioners house) was under construction in which structural works for 3 basement + Ground and 2 floors were completed. Work under progress.</p>						
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	By/Intermediate Product Details	Nil						

2.	<p>This consent to establish is valid for establishing the facility with the below mentioned emission/noise sources along with the control measures and/or stack. Any change in the emission source/control measures/change in stack height has to be brought to the notice of the board and fresh consent has to be obtained if necessary.</p> <table border="1" data-bbox="239 559 1148 937"> <thead> <tr> <th data-bbox="239 559 322 755">Sl. No</th> <th data-bbox="322 559 536 755">Source Of emission</th> <th data-bbox="536 559 702 755">Air Pollution Control measures (Proposed)</th> <th data-bbox="702 559 826 755">Stack height in m</th> <th data-bbox="826 559 982 755">Additional facilities to be provided</th> <th data-bbox="982 559 1148 755">Maximum discharge in m<sup>3</sup>/Hr</th> </tr> </thead> <tbody> <tr> <td data-bbox="239 755 322 833">1</td> <td data-bbox="322 755 536 833">DG 1250 KVA 2 Nos</td> <td data-bbox="536 755 702 833">Stack</td> <td data-bbox="702 755 826 833">42</td> <td data-bbox="826 755 982 833"></td> <td data-bbox="982 755 1148 833"></td> </tr> <tr> <td data-bbox="239 833 322 937">2</td> <td data-bbox="322 833 536 937">DG 380 KVA</td> <td data-bbox="536 833 702 937">Stack</td> <td data-bbox="702 833 826 937">47</td> <td data-bbox="826 833 982 937"></td> <td data-bbox="982 833 1148 937"></td> </tr> </tbody> </table>	Sl. No	Source Of emission	Air Pollution Control measures (Proposed)	Stack height in m	Additional facilities to be provided	Maximum discharge in m <sup>3</sup> /Hr	1	DG 1250 KVA 2 Nos	Stack	42			2	DG 380 KVA	Stack	47			Stack of 4m height provided to 380KVA DG Set.
Sl. No	Source Of emission	Air Pollution Control measures (Proposed)	Stack height in m	Additional facilities to be provided	Maximum discharge in m <sup>3</sup> /Hr															
1	DG 1250 KVA 2 Nos	Stack	42																	
2	DG 380 KVA	Stack	47																	
3.	<p>The unit shall comply with the conditions imposed in the environmental clearance obtained from the SEIAA vide its clearance SEIAA/TN/F 48a/EC/8(a)/165/2012 dt 04.06.2013.</p>	<p>Residential complex Block B – Basement + still and 13 floors with total built up area of 17,752.56 sq.m has been constructed and completed. Out of 91 units only 20 units were occupied. In Block A (Mall/ Multiplex / Hotel complex), basement I, II &amp; III ground and 2 floors have been completed and construction works were under process.</p>																		
4.	<p>The unit shall provide stack of adequate height for discharge of emissions from the diesel generator sets as proposed and ensure that the emissions let out shall satisfy the standards prescribed by the Board.</p>	Stack provided to DG Set																		
5.	<p>The unit shall provide acoustic measures for the DG set to meet the noise level standards prescribed for residential area as proposed.</p>	Provided acoustic measures for the DG set.																		
6.	<p>The unit shall provide solar panel to generate solar power for lighting of common areas and parking spaces, solar water heating.</p>	The proponent has assured to comply.																		
7.	<p>The unit shall adopt safe and environment friendly management practices with in the premises.</p>	The proponent has assured to comply																		
8.	<p>The unit shall coordinate with the local police and workout schemes for the regulation of the increased traffic flow in the area due to this project.</p>	The proponent has assured to comply																		
9.	<p>This consent order does not absolve from obtaining necessary permission/Clearance from other Authority or under other statutes as applicable.</p>	The proponent has assured to obtain permission /clearances as applicable.																		

  
 Environmental Engineer,  
 O/o Joint Chief Environmental Engineer (M),  
 Tamil Nadu Pollution Control Board,  
 Chennai Zone.

**ANNEXURE-3**

**Report on compliance with respect to consent to operate order dated:24.09.2020 issued to M/s. Esthell Golden Square and Esthell Paragon Mall - Esthell Homes - Phase - I, S.F.No. 638/1 and 639/2, Velacheri Part 2 Village, Velacheri Taluk and Chennai District**

Sl. No	Conditions	Compliance																																
<b>Water Act</b>																																		
<b>Special conditions:</b>																																		
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2.	<p>This consent to operate is valid for operating the facility with the below mentioned permitted outlets for the discharge of sewage/trade effluent. Any change in the outlets and the quantity has to be brought to the notice of the Board and fresh consent has to be obtained.</p> <table border="1"> <thead> <tr> <th>Out let No.</th> <th>Description of Outlet</th> <th>Maximum daily discharge in KLD</th> <th>Point of disposal</th> </tr> </thead> <tbody> <tr> <td colspan="4"><b>Effluent Type : Sewage</b></td> </tr> <tr> <td>1.</td> <td>Sewage</td> <td>22.0</td> <td>Utilizing Toilet flushing for</td> </tr> <tr> <td>2.</td> <td>Sewage</td> <td>5.0</td> <td>On land for gardening</td> </tr> <tr> <td>3.</td> <td>Sewage</td> <td>27.0</td> <td>CMWSSB</td> </tr> <tr> <td colspan="4"><b>Effluent Type : Trade Effluent</b></td> </tr> </tbody> </table>	Out let No.	Description of Outlet	Maximum daily discharge in KLD	Point of disposal	<b>Effluent Type : Sewage</b>				1.	Sewage	22.0	Utilizing Toilet flushing for	2.	Sewage	5.0	On land for gardening	3.	Sewage	27.0	CMWSSB	<b>Effluent Type : Trade Effluent</b>				The unit has provided Sewage Treatment Plant (STP) for the residential block which was under stabilization. The project Authorities informed that the raw sewage is at present sent through lorry tankers to CMWSSB STP for treatment as only 20 dwelling units, out of 91 units, have been occupied recently and the STP provided is under stabilization.								
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3.	The effluent discharge shall not contain constituents in excess of the tolerance Limits as laid down hereunder.	No trade effluent.
4.	All units of the sewage and Trade effluent treatment plants shall be operated efficiently and continuously so as to achieve the standards prescribed in Sl.No.3 above or to achieve the zero liquid discharge of effluent as applicable.	STP under stabilization.
5.	The occupier shall maintain the Electro Magnetic Flow Meters/water Meters installed at the inlet of the water supply connection for each of the purposes mentioned below for assessing the quantity of water used and ensuring that such meters are easily accessible for inspection and maintenance and for other purposes of the Act. a. Industrial Cooling, Spraying in mine pits or boiler feed. b. Domestic purpose. c. Process.	Flow meters not provided. Raw Water is being purchased from outside through Lorry Tankers only.
6.	The occupier shall maintain the Electro Magnetic Flow Meters with computer recording arrangement for measuring the quantity of effluent generated and treated for the monitoring purposes of the Act.	The unit has provided electromagnetic flow meters in the STP.
7.	Log book for each of the unit operations of ETP have to be maintained to reflect the working condition of ETP along with the readings of the Electro Magnetic Flow Meters installed to assess effluent quantity and the same shall be furnished for verification of the Board officials during inspection.	No ETP. Not applicable.
8.	The occupier shall at his own cost get the samples of effluent/surface water/ground water collected in and around the unit by Board officials and analyzed by the TNPC Board Laboratory periodically.	Residential construction project. Not applicable.
9.	Any upset condition in any of the plants of the factory which is, likely to result in increased effluent discharge and result in violation of the standards mentioned in Sl. No.3 above shall be reported to the Member Secretary / Joint Chief Environmental Engineer-Monitoring and	Not applicable.

	the concerned District/Assistant Environmental Engineer of the Board by e-mail immediately and subsequently by Post with full details of such upset condition.	
10.	The occupier shall always comply and carryout the order/directions issued by the Board in this Consent Order and from time to time without any negligence. The occupier shall be liable for action as per provisions of the Act in case of non compliance of any order/directions issued.	The proponent has assured to comply.
11.	The occupier shall develop adequate width of green belt at the rate of 400 numbers of trees per Hectare.	It is noted that the construction of Block A is still under progress and the proponent has reported that it will be strictly complied before completion of the block A.
12.	The occupier shall provide and maintain rain water harvesting facilities.	Rain water harvesting facilities provided.
13.	The occupier shall ensure that there shall not be any discharge of effluent either treated or untreated into storm water drain at any point of time.	No trade effluent. Not applicable.
14.	<p>In the case of zero liquid discharge of effluent units, the occupier shall adhere the following conditions as laid under.</p> <p>i. The occupier shall ensure zero liquid discharge of effluent, thereby no discharge of untreated / treated effluent on land or into any water bodies either inside or outside the premises at any point of time.</p> <p>ii. The occupier shall operate and maintain the Zero liquid discharge treatment components comprising of Primary, Secondary and tertiary treatment systems at all times and ensure that the RO permeate/Evaporator condensate shall be recycled in the process and the final RO reject shall be disposed off with the reject management system ensuring zero liquid discharge of effluents in the premises.</p> <p>iii. The occupier shall operate and maintain the reject management system effectively and recover the salt from the system which shall be reused in the process if reusable or shall be disposed off as ETP sludge</p>	No Trade effluent is generated. Not applicable.

	<p>iv. In case of failure to achieve zero discharge of effluents for any reason, the occupier shall stop its production and operations forthwith and shall be reported to the Member Secretary/Joint Chief Environmental Engineer-Monitoring and the concerned District/Assistant Environmental Engineer of the Board by e-mail immediately and subsequently by Post with full details of such upset condition.</p> <p>v. The occupier shall restart the production only after ascertaining that the Zero discharge treatment system can perform effectively for achieving zero discharge of effluents.</p>	
<b>Additional Conditions:</b>		
1.	The unit shall operate and maintain the STP provided for the treatment of sewage efficiently and continuously so as to satisfy the standards prescribed by the Board.	<p>The unit has provided Sewage Treatment Plant (STP) for the residential block which was under stabilization.</p> <p>The project Authorities informed that the raw sewage is at present sent through lorry tankers to CMWSSB STP for treatment as only 20 dwelling units, out of 91 units, have been occupied recently and the STP is under stabilization.</p>
2.	The unit shall utilise the treated sewage for Toilet flushing and Gardening to the maximum possible extent.	The unit has made arrangements to utilize the treated sewage for toilet flushing.
3.	The unit shall operate and maintain the Organic Waste Converter efficiently and continuously so as to scientifically treat the organic waste generated at the premises.	<p>One Organic Waste Converter (OWC), to process the organic wastes generated from the dwelling units has been kept in place but yet to commission.</p> <p>The Project authorities informed that at present the solid waste (including the organic waste) is disposed through Chennai Corporation. OWC will be commissioned shortly.</p>
4.	The unit shall comply with the provisions of the Hazardous and Other Wastes (M&TM) Rules, 2016.	The proponent has assured to comply.
5.	The unit shall dispose the solid wastes	Being compiled with

	generated then and there without any accumulation.	
6.	The unit shall take utmost safety precautions during maintenance of the STP.	STP under stabilization
7.	The unit shall not use the banned use and throw plastic items notified vide G.O Ms. No.84, E & F Department dated 25.06.2018.	The proponent has assured to comply.
8.	In case of revision of consent fee by the Government, the unit shall remit the difference in amount within one month from the date of notification. Failing to remit the consent fee, this consent order will be withdrawn without any notice and further action will be initiated against the unit as per law.	The proponent has assured to comply.
9.	The unit shall apply and obtain separate consents of the Board for Mall/ Multiplex/hotel complex.	The proponent has assured to apply.

**Air Act:**

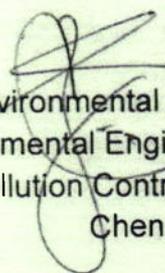
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2.	This consent to operate is valid for operating the facility with the below mentioned emission/noise sources along with the control measures and/or stack. Any change in the	No Change																																

	<p>emission source/control measures/change in stack height has to be brought to the notice of the Board and fresh consent/Amendment has to be obtained.</p> <table border="1"> <tr> <th colspan="5">I Point source emission with stack :</th> </tr> <tr> <th>Stack No</th> <th>Point Emission Source</th> <th>Air pollution Control measures</th> <th>Stack height from Ground Level in m</th> <th>Gaseous Discharge in Nm<sup>3</sup>/hr</th> </tr> <tr> <td>1</td> <td>DG Set (380 KVA)</td> <td>Acoustic enclosures with stack</td> <td>4.0</td> <td></td> </tr> <tr> <th colspan="5">II Fugitive/Noise emission :</th> </tr> <tr> <th>Sl. No</th> <th>Fugitive or Noise Emission sources</th> <th>Type of emission</th> <th>Control measures</th> <th></th> </tr> <tr> <td>1.</td> <td>DG Set (380 KVA)</td> <td>Noise</td> <td>Acoustic Enclosures</td> <td></td> </tr> </table>	I Point source emission with stack :					Stack No	Point Emission Source	Air pollution Control measures	Stack height from Ground Level in m	Gaseous Discharge in Nm <sup>3</sup> /hr	1	DG Set (380 KVA)	Acoustic enclosures with stack	4.0		II Fugitive/Noise emission :					Sl. No	Fugitive or Noise Emission sources	Type of emission	Control measures		1.	DG Set (380 KVA)	Noise	Acoustic Enclosures		
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3.	<p><b>3(a).</b>The emission shall not contain constituents in excess of the tolerance limits as laid down hereunder :</p> <p><b>3(b).</b>The Ambient Air in the industrial plant area shall not contain constituents in excess of the tolerance limits prescribed below.</p> <p><b>3(c)</b> The Ambient Noise Level in the industrial plant area shall not exceed the limits prescribed below:</p> <table border="1"> <tr> <th>Limits in L.eq.-dB(A)</th> <th>Day Time</th> <th>Night Time</th> </tr> <tr> <td>Residential Area</td> <td>55</td> <td>45</td> </tr> </table>	Limits in L.eq.-dB(A)	Day Time	Night Time	Residential Area	55	45	<p>Not applicable</p> <p>The proponent has assured to comply.</p>																								
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4.	<p>All units of the Air pollution control measures shall be operated efficiently and continuously so as to achieve the standards prescribed in Sl. No.3 above.</p>	Not applicable																														
5.	<p>The occupier shall not change or alter quality or quantity or the rate of emission or replace or alter the air pollution control equipment or change the raw material or manufacturing process resulting in change in quality and/or quantity of emissions without the previous written permission of the Board.</p>	The proponent has assured to comply.																														
6.	<p>The occupier shall maintain log book regarding the stack monitoring system or operation of the plant or any other particulars for each of the unit operations of air pollution control systems</p>	Not Applicable																														

	to reflect the working condition which shall be furnished for verification of the Board officials during inspection.	
7.	The occupier shall at his own cost get the samples of emission/air/noise levels collected and analyzed by the TNPC Board Laboratory once in every 6 months/once in a year/periodically for the parameters as prescribed.	The proponent has assured to comply.
8.	Any upset condition in any of the plants of the factory which is likely to result in increased emissions and result in violation of the standards mentioned in Sl.No.3 shall be reported to the Member Secretary / Joint Chief Environmental Engineer-Monitoring and the concerned District/Assistant Environmental Engineer of the Board by e-mail immediately and subsequently by Post with full details of such upset condition.	Residential Construction project Not applicable
9.	The occupier shall always comply and carryout the order/directions issued by the Board in this Consent Order and from time to time without any negligence. The occupier shall be liable for action as per provisions of the Act in case of non compliance of any order/directions issued.	The proponent has assured to comply.
<b>Special Additional Conditions:</b>		
1.	The unit shall install the approved retrofit emission control device/equipment with at least 70% Particulate matter reduction efficiency on all DG sets with capacity of 125 KVA and above or otherwise the unit shall be shift to gas based generators within the time frame prescribed in the notification No. TNPCB/Labs/DD (L) 02151 /2019 dated 10.06.2020 issued by TNPCB.	Not Applicable as this is a new DG Set.
<b>Additional Conditions:</b>		
1.	The unit shall operate and maintain the Air Pollution Control measures and acoustic enclosures efficiently and continuously so as to achieve the AAQ /Emission standards prescribed by the Board	The proponent has assured to comply.
2.	The unit shall adhere to the ANL standards prescribed by the Board	The proponent has assured to comply.
3.	The unit shall comply with the provisions of the	The proponent has assured to

	Hazardous and Other Wastes (M&TM) Rules, 2016.	comply.
4.	The unit shall comply with the CPCB Guidelines for the in-house Generators (Noise & Emission).	The proponent has assured to comply.
5.	In case of revision of consent fee by the Government, the unit shall remit the difference in amount within one month from the date of notification. Failing to remit the consent fee, this consent order will be withdrawn without any notice and further action will be initiated against the unit as per law.	The proponent has assured to comply.
6.	The unit shall comply with the Hon'ble National Green Tribunal order dated 06/08/2019 in OA. No 681/2018 for DG sets already operational, ensure usage of either of the two options: (a) use of retrofitted emission control equipment having a minimum specified PM capturing efficiency of at least 70%, type approved by one of the 5 CPCB recognized labs; or (b) shifting to gas-based generators by employing new gas-based generators or retrofitting the existing DG sets for partial gas usage as part of the National Clean Air Programme (NCAP).	Not applicable as this is a new DG Set.

  
Environmental Engineer  
O/o Joint Chief Environmental Engineer (M),  
Tamil Nadu Pollution Control Board,  
Chennai Zone.