118 - F.6506/2018	**Expansion of resin manufacturing plant by M/s. Aypols Polymers Private Limited at Plot No. B12, SIPCOT Industrial Growth Centre, S.F.No. 165(pt), 186 (pt) of Perundurai Village, Perundurai Taluk, Erode District, Tamil Nadu – Category "B1"-5(f) Synthetic Organic Chemical Industry – Environmental Clearance (EC)- Regarding**
	The Proponent, M/s. Aypols Polymers Private Limited initially applied for Terms of Reference for the proposed expansion of resin manufacturing plant at Plot No. B12, SIPCOT Industrial Growth Centre, S.F.No. 165(pt), 186 (pt) of Perundurai Village, Perundurai Taluk, Erode District, Tamil Nadu on 06.03.2018. On scrutiny of the application certain details was requested vide SEIAA letter dated: 13.03.2018. The project proponent has furnished the details on 22.03.2018. The project proposal was placed in the 105th meeting of the SEAC held on 23.03.2018. The proponent made a presentation about the project proposal and the Members of SEAC interacted with the proponent regarding the environmental implications of the project proposal. The observations of the SEAC and corresponding conditions which the proponent must fulfil in preparing the EIA report were as follows: 1. During the presentation, the project proponent has explained about effluent treatment plant (ETP) for treating 1 KLD of trade effluent. The ETP component involves only evaporator with incinerator. As per law the proponent cannot adopt incineration of the hazardous glycol. Hence, the project proponent has to re-design/revise the ETP components based on the characteristics of the effluent generated in the process. 2. Among the raw materials used, some are hazardous and some are explosive in character. The proponent should adopt appropriate management measures including occupational safety and health for managing these chemicals.

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3. The EIA should cover the VOC emissions likely from the plant room and raw material storage area.
4. The EIA should propose appropriate management measures for hazardous waste (10 kg / day) and fly ash from boiler (150 kg/day).
5. As per the MoEF & CC guidelines 33% of the total area should be covered by green belt. As per the pre-feasibility report, 16420sq.ft has been provided for green belt. The proponent is directed to revise the site plan so as to accommodate 35964.39 sq.ft (33%) under green belt. The following local species may be planted under green belt.
    i. Syzygium cumini (Naval),
    ii. Mimusops elangi (Mahilam),
    iii. Ficus retusa (Athi),
    iv. Ficus religiosa (Arasa maram),
    v. Alstonia scholaris (Palai),
    vi. Derris indica (Pungan),
    vii. Azadirachta indica (Neem)
    viii. Thespesia populnea
    ix. Terminalia bellarica
6. The EIA report should cover appropriate CSR activities.

The SEAC recommends to SEIAA the proposal for the proposed expansion of resin manufacturing plant by M/s. Aypols Polymers Private Limited at Plot No. B12, SIPCOT Industrial Growth Centre, S.F.No. 165(pt), 186 (pt) of Perundurai Village, Perundurai Taluk, Erode District, Tamil Nadu for consideration for the issue of ToR for preparing EIA report. Public hearing is exempted as per section 7(i), (iii) stage (3), Para (i) (b) of EIA Notification, 2006, and request to submit the EIA/EMP report to the SEIAA for grant of Environment Clearance to the conditions mentioned above in addition to the normal conditions. The recommendation of SEAC was placed in the SEIAA meeting and Terms Of

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Reference was issued vide SEIAAA letter dated 02.04.2018.

Based on the ToR, the proponent submitted the EIA report on 25.07.2018 to SEIAA-TN. The EIA report was placed in the 118th SEAC meeting held on 02.08.2018.

The salient features of the project are as follows:

1. The existing unit produces 1000 T/month of unsaturated polyester resin by blending operation.
2. Consent to Establishment & Consent to Operate have been granted by TNPCB for the existing process.
3. The existing production process is blending of base resin and the solvent to produce polyester resin of 1000 T/month. In expansion, the proponent desires to produce base resin in the same plant by using appropriate chemicals and solvents & then the produced base resin will be blended with solvent to produce the polyester resin. The future production capacity will be 3000 T/month. Thus, both process modification and production increase are applicable in the expansion.
4. For the proposed expansion additional reactor and fluid heater will be installed within the plant facility.
5. The details of raw material are as follows:
   - i. Mono Ethylene Glycol
   - ii. Di Ethylene Glycol
   - iii. Propylene Glycol
   - iv. Neo Pentyl Glycol
   - v. Maleic Anhydride
   - vi. Phthalic Anhydride
   - vii. Styrene Monomer
   - viii. Pet Flake
   - ix. IPA/PTA
   - x. Pentaerythritol

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xi. Soya Bean Oil

6. There is no water requirement for existing process. However for domestic purpose 1.3 KLD of water will be used which will produce 1 KLD of sewage that will be disposed to septic tank followed by soak pit. In future this will remain the same.
7. In future, for process 1 KLD of water is used. The produced effluent will be treated in a 2 KLD capacity ETP.
8. For gardening purpose, 11.7 KLD will be used to raise green belt as per the norms.
9. The Existing product is unsaturated polyester Resins by blending while the future product will be unsaturated and saturated Polyester Resins by chemical process/ reactions and blending.

The proposal was placed in the 118th SEAC Meeting held on 03.08.2018. Based on the presentation made by the proponent and the documents furnished, the SEAC noted the following critical Environmental issues related to the project:

1. The source of water (9.5 KLD) will be supplied by SIPCOT and supplemented by ETP treated water.
2. In effluent generation (10 KLD) will be treated in ETP / ZLD system. Part of the treated effluent will be used for gardening.
3. The industry has potential to cause environmental problems in terms of Air emission, Effluent generation, hazardous waste generation and Municipal solid waste generation.
4. The comparison of the existing and proposed pollution control measures for expansion are as follows:

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Project Components	Existing Operations		Proposed Expansion	
	Description	Environmental Management / Pollution Control Measures	Description	Environmental Management / Pollution Control Measures
Liquid Waste Management				
Trade Effluent	Nil	Nil	Glycol mixed with water - 10 KLD	ETP Comprising of Heating Chamber, Heat Exchanger, Vapor Separator, , Condensor and Chimney
Sewage	Domestic sewage from working population (9 Employees) - 400 Lts/day	Septic tank with soak pit arrangement.	Domestic sewage from working population (18 Employees) - 750 Lts/day	Septic tank with soak pit arrangement.
Solid Waste Management				
Non Hazardous Waste	Paper based Packing material, polyethene covers - 5 Kgs/day and plastic drums (reused).	Sent back to supplier / recyclers.	Paper based Packing material, polyethene covers -15 Kgs/day and plastic drums (reused).	Sent back to supplier / recyclers.

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	Hazardous Waste	Used oil from DG set - 100 L/Annum	Used oil handed over to TNPCB authorized recyclers.	➢ Discarded Containers/ Barrels from raw material purchase, Cotton waste from cleaning of spills - raw material storage area - 10 Kg/day ➢ Fly ash - 150 Kg/day ➢ Used oil from DG set - 200 L/Annum	➢ Containers / Barrels to be disposed through supplier / authorized recyclers. ➢ Fly ash proposed to be handed over to nearby brick manufacturing unit. ➢ Used oil handed to be over to TNPCB authorized recyclers.
	Air Emissions & Control Measures				
	DG sets	1 no. of 250 KVA	Stack - 6m	2 nos. of 250 KVA	Stack - 6m
	Process	Nil	Air Handling System comprising of mechanical ventilators and louvers.	VOCs (In the event of valve malfunction and leaks/spills due to damages/loose connections in pipe lines)	➢ Thermal / VOC Sensors are proposed to be installed within the plant area. ➢ Nondispersive Infrared (NDIR) Sensors will be installed in raw materials storage area and finished goods area

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					– Centrally monitored in the PLC Control room. ➢ Air Handling System comprising mechanical ventilators and louvers.

The SEAC decided to recommend the proposal of the Expansion of resin manufacturing plant by M/s. Aypols Polymers Private Limited at Plot No. B12, SIPCOT Industrial Growth Centre, S.F.No. 165(pt), 186 (pt) of Perundurai Village, Perundurai Taluk, Erode District, Tamil Nadu to SEIAA-TN for the grant of Environmental Clearance subject to the fulfilment of the commitments made in the original proposals and the Environmental management measures committed in the additional proposals . Also the following conditions must be complied with:

1. Green belt for 33% of the plot area should be developed and maintained with indigenous species of trees listed below:

Pongamia glabra	Pungan
Thespesia populnea	Poovarasu
Ficus religiosa	Arasu
Azadirachta indica	Vembu
Terminalia arjuna	Neermarudhu
Michelia champaka	Chenbagam
Syzygium cumini	Naval
Madhuca longifolia	Ilippai
Mimusops elengi	Magilam

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	2. For CER, 2% of the profit should be utilised every year for infrastructure such as buildings, water supply, toilets, sports facilities, for govt. Schools in the nearby locality.

S.No	Name	Designation	Signature
1	Dr. K. Thanasekaran	Member	
2	Dr.K.Valivittan	Member	
3	Dr.Indumathi M. Nambi	Member	
4	Dr. G. S. Vijayalakshmi	Member	
5	Dr. M. Jayaprakash	Member	
6	Shri V. Sivasubramanian	Member	
7	Shri V. Shanmugasundaram	Member	
8	Shri B. Sugirtharaj Koilpillai	Member	
9	Shri. P. Balamadeswaran	Co-opt Member	
10	Shri. M.S. Jayaram	Co-opt Member	

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