STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

Environment department,
Room No. 217, 2nd floor,
Mantralaya, Annexe,
Mumbai- 400 032.
Date:May 12, 2017

To,
Mr. Pradip Yelave
at D - 122

Subject: Environment Clearance for Proposed Greenfield project of R&D, Pilot plant for food and non-food additives

Sir,

This has reference to your communication on the above mentioned subject. The proposal was considered as per the EIA Notification - 2006, by the State Level Expert Appraisal Committee-I, Maharashtra in its th meeting and recommend the project for prior environmental clearance to SEIAA. Information submitted by you has been considered by State Level Environment Impact Assessment Authority in its Meeting Number 111th meetings.

2. It is noted that the proposal is considered by SEAC-I under screening category 5 (f) as per EIA Notification 2006.

Brief Information of the project submitted by you is as below :-

1.Name of Project	Privi Biotechnologies Private Limited
2.Type of institution	Private
3.Name of Project Proponent	Mr. Pradip Yelave
4.Name of Consultant	Goldfinch Engineering Systems Private Limited
5.Type of project	Not applicable
6.New project/expansion in existing project/modernization/diversification in existing project	New Project
7.If expansion/diversification, whether environmental clearance has been obtained for existing project	Not applicable
8.Location of the project	D - 122
9.Taluka	Thane
10.Village	Nerul
11.Whether in Corporation / Municipal / other area	Navi Mumbai
12.IOD/IOA/Concession/Plan Approval Number	Not applicable
	IOD/IOA/Concession/Plan Approval Number: Not applicable
	Approved Built-up Area: 1104
13.Note on the initiated work (If applicable)	Not applicable
14.LOI / NOC / IOD from MHADA/ Other approvals (If applicable)	Not applicable
15.Total Plot Area (sq. m.)	2100 Sq.m.
16.Deductions	Not applicable
17.Net Plot area	Not applicable
18 (a).Proposed Built-up Area (FSI & Non-FSI)	**FSI area (sq. m.):** Not applicable
	Non FSI area (sq. m.): Not applicable
	Total BUA area (sq. m.): Not applicable
18 (b).Approved Built up area as per DCR	**Approved FSI area (sq. m.):**
	Approved Non FSI area (sq. m.):
	Date of Approval:
19.Total ground coverage (m2)	Not applicable

20.Ground-coverage Percentage (%) (Note: Percentage of plot not open to sky)	Not applicable
21.Estimated cost of the project	130000000

22.Production Details

Serial Number	Product	Existing (MT/M)	Proposed (MT/M)	Total (MT/M)
1	Flavors & fragrances like a. Vanillin b. Flavor esters	NA	20 kg/batch	20 kg/batch
2	Food additives and nutraceuticals like a. Xylitol b. Fatty Acids c. Mono & diglycerides etc.	NA	50 kg/batch	50 kg/batch
3	Biopolymers	NA	50 kg/batch	50 kg/batch

23.Total Water Requirement

Dry season:	**Source of water**	Not applicable
	Fresh water (CMD):	Not applicable
	Recycled water - Flushing (CMD):	Not applicable
	Recycled water - Gardening (CMD):	Not applicable
	Swimming pool make up (Cum):	Not applicable
	Total Water Requirement (CMD) :	Not applicable
	Fire fighting - Underground water tank(CMD):	Not applicable
	Fire fighting - Overhead water tank(CMD):	Not applicable
	Excess treated water	Not applicable
Wet season:	**Source of water**	Not applicable
	Fresh water (CMD):	Not applicable
	Recycled water - Flushing (CMD):	Not applicable
	Recycled water - Gardening (CMD):	Not applicable
	Swimming pool make up (Cum):	Not applicable
	Total Water Requirement (CMD) :	Not applicable
	Fire fighting - Underground water tank(CMD):	Not applicable
	Fire fighting - Overhead water tank(CMD):	Not applicable
	Excess treated water	Not applicable
Details of Swimming pool (If any)	Not applicable	

24.Details of Total water consumed

Particulars	Consumption (CMD)			Loss (CMD)			Effluent (CMD)		
Water Requirement	Existing	Proposed	Total	Existing	Proposed	Total	Existing	Proposed	Total
Domestic	0	4	4	0	1	1	0	3	3
Industrial Process	0	9	9	0	1	1	0	8	8
Cooling tower & thermopack	0	76.2	76.2	0	71(29 CMD)	71(29 CMD)	0	5.20	5.20
Gardening	0	4	4	0	4	4	0	0	0
Fresh water requirement	0	93.2	93.2	0	77	77	0	16.2	16.2

25.Rain Water Harvesting (RWH)	**Level of the Ground water table:**	Not Applicable
	Size and no of RWH tank(s) and Quantity:	Not Applicable
	Location of the RWH tank(s):	Not Applicable
	Quantity of recharge pits:	Not Applicable
	Size of recharge pits :	Not Applicable
	Budgetary allocation (Capital cost) :	Not Applicable
	Budgetary allocation (O & M cost) :	Not Applicable
	Details of UGT tanks if any :	Not Applicable

26.Storm water drainage	**Natural water drainage pattern:**	Proper and separate storm water drains available, as per natural slope
	Quantity of storm water:	Not Applicable
	Size of SWD:	Not Applicable

27.Sewage and Waste water	**Sewage generation in KLD:**	3 KLD
	STP technology:	treat in combine ETP
	Capacity of STP (CMD):	Not Applicable
	Location & area of the STP:	Not Applicable
	Budgetary allocation (Capital cost):	Not Applicable
	Budgetary allocation (O & M cost):	Not Applicable

28.Solid waste Management

Waste generation in the Pre Construction and Construction phase:	**Waste generation:**	Not Applicable
	Disposal of the construction waste debris:	Not Applicable
Waste generation in the operation Phase:	**Dry waste:**	E -waste
	Wet waste:	Empty barrels, bottles and containers Solid waste from process Solid waste from con. technique Solid adsorbent resins
	Hazardous waste:	Not Applicable
	Biomedical waste (If applicable):	Not Applicable
	STP Sludge (Dry sludge):	Not Applicable
	Others if any:	Not Applicable
Mode of Disposal of waste:	**Dry waste:**	Not Applicable
	Wet waste:	Send to MWML and Sold to authorized recyclers
	Hazardous waste:	Not Applicable
	Biomedical waste (If applicable):	Not Applicable
	STP Sludge (Dry sludge):	Not Applicable
	Others if any:	Not Applicable
Area requirement:	**Location(s):**	Building Area
	Area for the storage of waste & other material:	Not Applicable
	Area for machinery:	1104 Sq. Mt.
Budgetary allocation (Capital cost and O&M cost):	**Capital cost:**	5.5 Cr.
	O & M cost:	Not Applicable

29.Effluent Charecterestics

Serial Number	Parameters	Unit	Inlet Effluent Charecterestics	Outlet Effluent Charecterestics	Effluent discharge standards (MPCB)
1	pH	--	6-7	6-7	6 - 9
2	COD	mg/lit	4500 - 7500	200 - 250	< 250
3	BOD	mg/lit	1500 - 3500	80 - 100	< 100
4	TDS	mg/lit	5000 - 7000	5000 - 7000	< 2100
5	TSS	mg/lit	80 - 120	10 - 20	< 100

Amount of effluent generation (CMD):	16.20 CMD
Capacity of the ETP:	21 CMD
Amount of treated effluent recycled :	45 CMD
Amount of water send to the CETP:	Its Zero Liquid Discharge
Membership of CETP (if require):	Yes
Note on ETP technology to be used	Liquid effluents will be treated in effluent treatment plant of capacity 21 CMD, fed to RO and evaporator to achieve Zero Liquid Discharge (ZLD)
Disposal of the ETP sludge	Not Applicable

30.Hazardous Waste Details

Serial Number	Description	Cat	UOM	Existing	Proposed	Total	Method of Disposal
1	Empty barrels, bottles and containers	NA	Nos. / year	NA	500	500	Sold to authorized recyclers
2	E -waste	NA	Kg / year	NA	100	100	Sold to authorized recyclers
3	Solid waste from process	NA	Kg / year	NA	7200	7200	Used as manure / send to authorized recyclers
4	Solid waste from con. technique	NA	Kg / year	NA	3000	3000	Send to MWML, Taloja
5	Solid adsorbent resins	NA	Kg / year	NA	800	800	Send to incineration

31.Stacks emission Details

Serial Number	Section & units	Fuel Used with Quantity	Stack No.	Height from ground level (m)	Internal diameter (m)	Temp. of Exhaust Gases
1	Boiler (Non IBR) Kg/hr	CNG = 109.68 SCM/hr or FO = 96.26 Kg/hr or LDO = 86.23 Kg/hr	1	30	0.40	275 deg. cel.
2	Thermic Fluid Heater (Non IBR)	CNG= 6.68 SCM/hr, LDO = 6 Kg/hr, Biofuel = 6 Kg/hr	1	30	0.40	275 deg. cel.
3	DG KVA	LDO = 60 Kg/hr	1	3.5	0.40	150 deg. cel.

32.Details of Fuel to be used

Serial Number	Type of Fuel	Existing	Proposed	Total
1	CNG or	00	109.68 SCM/hr	109.68 SCM/hr
2	FO or	00	90.26 Kg/hr	90.26 Kg/hr
3	LDO	00	86.23 Kg/hr	86.23 Kg/hr
4	LDO for DG set	00	60 Kg/hr	60 Kg/hr
Source of Fuel		From market/ out Sider fuel companies		
Mode of Transportation of fuel to site		By Road		

33.Energy

Power requirement:	**Source of power supply :**	MSEDCL
	During Construction Phase: (Demand Load)	NA
	DG set as Power back-up during construction phase	NA
	During Operation phase (Connected load):	427 KW
	During Operation phase (Demand load):	382 KW
	Transformer:	500 KVA
	DG set as Power back-up during operation phase:	315 KVA
	Fuel used:	LDO
	Details of high tension line passing through the plot if any:	NA

34.Energy saving by non-conventional method:

NA

36.Detail calculations & % of saving:

Serial Number	Energy Conservation Measures	Saving %
1	NA	NA

37.Details of pollution control Systems

Source	Existing pollution control system	Proposed to be installed
Boiler (1500 kg/hr.)	NA	Stack of 30 m. height
Thermopack (50,000 kcal/hr.)	NA	Stack of 30 m. height
D G Set (315 KVA)	NA	Stack of 3.5 m height, acoustic enclosure

Budgetary allocation (Capital cost and O&M cost):	**Capital cost:**	NA
	O & M cost:	NA

38.Environmental Management plan Budgetary Allocation

a) Construction phase (with Break-up):

Serial Number	Attributes	Parameter	Total Cost per annum (Rs. In Lacs)
1	NA	NA	NA

b) Operation Phase (with Break-up):

Serial Number	Component	Description	Capital cost Rs. In Lacs	Operational and Maintenance cost (Rs. in Lacs/yr)
1	Air pollution control	Stack	2.00	0.14
2	Water Pollution control	ETP, MEE & RO	102.00	12.00
3	Noise pollution control, Env. Monitoring	Acostic enclosure to 325 KVA D G set	1.8	3.4
4	Occupational health	First aid rooms	7.60	2.0
5	Green belt	Green belt development	2.00	0.30
6	Non-hazardous waste storage & Disposal	Transport and disposal	0.20	23.00
7	Hazardous waste storage & disposal	Transport and disposal	2.00	4.60
8	CSR activity	Education, healthcare, infrastructure development	NA	35.00

39.Storage of chemicals (inflamable/explosive/hazardous/toxic substances)

Description	Status	Location	Storage Capacity in MT	Maximum Quantity of Storage at any point of time in MT	Consumption / Month in MT	Source of Supply	Means of transportation
Alcohol water	Liquid	Barrel	5000 kg	5000 kg	840 kg/batch	Local	By Road
Sulfuric acid (30 %)	Liquid	Barrel	200 kg	200 kg	11.5 (70%) kg/batch	Local	By Road
Nitric Acid (70%)	Liquid	Barrel	200 kg	200 kg	11.5 (70%) kg/batch	Local	By Road
Hydrochloric acid	Liquid	Barrel	200 kg	200 kg	11.5 (70%) kg/batch	Local	By Road
Sodium Hydroxide	Liquid	Barrel	500 kg	500 kg	32 kg/batch	Local	By Road
Sodium carbonate	Liquid	Barrel	500 kg	500 kg	32 kg/batch	Local	By Road

Potassium hydroxide	Liquid	Barrel	500 kg	500 kg	32 kg/batch	Local	By Road

40.Any Other Information

No Information Available

	CRZ/ RRZ clearance obtain, if any:	Not Applicable
	Distance from Protected Areas / Critically Polluted areas / Eco-sensitive areas/ inter-State boundaries	Not Applicable
	Category as per schedule of EIA Notification sheet	5 (f)
	Court cases pending if any	Not Applicable
	Other Relevant Informations	Not Applicable
	Have you previously submitted Application online on MOEF Website.	Yes
	Date of online submission	25-08-2016

3. The proposal has been considered by SEIAA in its Meeting Number 111th meeting & decided to accord environmental clearance to the said project under the provisions of Environment Impact Assessment Notification, 2006 subject to implementation of the following terms and conditions:

Specific Conditions:

General Conditions:

I	(i)PP to achieve Zero Liquid Discharge ; PP shall ensure that there is no increase in the effluent load to CETP.
II	73 TPH boiler should have stack height of 68m and flue gases shall be passed through an ESP of 99.9% efficiency before being led into the 68 m stack.
III	No additional land shall be used /acquired for any activity of the project without obtaining proper permission.
IV	PP to take utmost precaution for the health and safety of the people working in the unit as also for protecting the environment.
V	Proper Housekeeping programmers shall be implemented.
VI	In the event of the failure of any pollution control system adopted by the unit, the unit shall be immediately put out of operation and shall not be restarted until the desired efficiency has been achieve.
VII	A stack of adequate height based on DG set capacity shall be provided for control and dispersion of pollutant from DG set. (If applicable).
VIII	A detailed scheme for rainwater harvesting shall be prepared and implemented to recharge ground water.
IX	Arrangement shall be made that effluent and storm water does not get mixed.
X	Periodic monitoring of ground water shall be undertaken and results analyzed to ascertain any change in the quality of water. Results shall be regularly submitted to the Maharashtra Pollution Control Board.
XI	Noise level shall be maintained as per standards. For people working in the high noise area, requisite personal protective equipment like earplugs etc. shall be provided.
XII	The overall noise levels in and around the plant are shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures, etc. on all sources of noise generation. The ambient noise levels shall confirm to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989.
XIII	Green belt shall be developed & maintained around the plant periphery. Green Belt Development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the local DFO/ Agriculture Dept.
XIV	Adequate safety measures shall be provided to limit the risk zone within the plant boundary, in case of an accident. Leak detection devices shall also be installed at strategic places for early detection and warning.
XV	Occupational health surveillance of the workers shall be done on a regular basis and record maintained as per Factories Act.
XVI	(The company shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling.
XVII	The project authorities must strictly comply with the rules and regulations with regard to handling and disposal of hazardous wastes in accordance with the Hazardous Waste (Management and Handling) Rules, 2003 (amended). Authorization from the MPCB shall be obtained for collections/treatment/storage/disposal of hazardous wastes.
XVIII	Regular mock drills for the on-site emergency management plan shall be carried out. Implementation of changes / improvements required, if any, in the on-site management plan shall be ensured.
XIX	A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.

XX	Separate funds shall be allocated for implementation of environmental protection measures/EMP along with item-wise breaks-up. These cost shall be included as part of the project cost. The funds earmarked for the environment protection measures shall not be diverted for other purposes and year-wise expenditure should reported to the MPCB & this department
XXI	The project management shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the marathi language of the local concerned within seven days of issue of this letter, informing that the project has been accorded environmental clearance and copies of clearance letter are available with the Maharashtra Pollution Control Board and may also be seen at Website at http://ec.maharashtra.gov.in
XXII	Project management should submit half yearly compliance reports in respect of the stipulated prior environment clearance terms and conditions in hard & soft copies to the MPCB & this department, on 1st June & 1st December of each calendar year.
XXIII	A copy of the clearance letter shall be sent by proponent to the concerned Municipal Corporation and the local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.
XXIV	The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM. SO2, NOx (ambient levels as well as stack emissions) or critical sectorai parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
XXV	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.
XXVI	The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.

4. The environmental clearance is being issued without prejudice to the action initiated under EP Act or any court case pending in the court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision under EP Act or of the Hon'ble court will be binding on the project proponent. Hence this clearance does not give immunity to the project proponent in the case filed against him, if any or action initiated under EP Act.

5. In case of submission of false document and non-compliance of stipulated conditions, Authority/ Environment Department will revoke or suspend the Environment clearance without any intimation and initiate appropriate legal action under Environmental Protection Act, 1986.

6. The Environment department reserves the right to add any stringent condition or to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the department or for that matter, for any other administrative reason.

7. Validity of Environment Clearance: The environmental clearance accorded shall be valid as per EIA Notification, 2006, and amendments by MoEF&CC Notification dated 29th April, 2015.

8. In case of any deviation or alteration in the project proposed from those submitted to this department for clearance, a fresh reference should be made to the department to assess the adequacy of the condition(s) imposed and to incorporate additional environmental protection measures required, if any.

9. The above stipulations would be enforced among others under the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and rules there under, Hazardous Wastes (Management and Handling) Rules, 1989 and its amendments, the public Liability Insurance Act, 1991 and its amendments.

10. Any appeal against this Environment clearance shall lie with the National Green Tribunal (Western Zone Bench, Pune),New Administrative Building, 1stFloor, D-, Wing, Opposite Council Hall, Pune, if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

Shri. Anil Diggikar (Member Secretary SEIAA)

Copy to:

1. SECRETARY MOEF & CC
2. IA- DIVISION MOEF & CC
3. MEMBER SECRETARY MAHARASHTRA POLLUTION CONTROL BOARD MUMBAI
4. REGIONAL OFFICE MOEF & CC NAGPUR
5. MUNICIPAL COMMISSIONER THANE
6. MUNICIPAL COMMISSIONER BHIVANDI-NIZAMPUR
7. MUNICIPAL COMMISSIONER KALYAN-DOMBIVALI
8. REGIONAL OFFICE MPCB KALYAN
9. REGIONAL OFFICE MPCB THANE
10. REGIONAL OFFICE MIDC AMBERNATH
11. REGIONAL OFFICE MIDC THANE
12. MAHARASHTRA STATE ELECTRICITY DISTRIBUTION CO. LTD
13. COLLECTOR OFFICE THANE