ENVIRONMENTAL CLEARANCE

PARIVESH

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Government of India
Ministry of Environment, Forest and Climate Change
(Impact Assessment Division)

To,

The Director

SHOGUN ORGANICS LIMITED

Plot No D-18, Kurkumbh MIDC, Taluka Daund, District Pune,,Pune,Maharashtra-413802

Subject: Grant of Environmental Clearance (EC) to the proposed Project Activity under the provision of EIA Notification 2006-regarding

Sir/Madam,

This is in reference to your application for Environmental Clearance (EC) in respect of project submitted to the Ministry vide proposal number IA/MH/IND3/260306/2017 dated 05 Apr 2022. The particulars of the environmental clearance granted to the project are as below.

1.	**EC Identification No.**	**EC22A017MH117397**
2.	**File No.**	J-11011/241/2017-IA II(I)
3.	**Project Type**	Expansion
4.	**Category**	A
5.	**Project/Activity including Schedule No.**	5(b) Pesticides industry and pesticide specific intermediates (excluding formulations)
6.	**Name of Project**	Proposed expansion project for manufacturing of pesticides and specific pesticide intermediates at Plot No.: D-18, MIDC Kurkumbh, Dist. Pune, Maharashtra. by Shogun Organics Limited
7.	**Name of Company/Organization**	SHOGUN ORGANICS LIMITED
8.	**Location of Project**	Maharashtra
9.	**TOR Date**	23 Jan 2018

The project details along with terms and conditions are appended herewith from page no 2 onwards.

Date: 01/06/2022

(e-signed)
Mr. Motipalli Ramesh
Scientist E
IA - (Industrial Projects - 3 sector)

Note: A valid environmental clearance shall be one that has EC identification number & E-Sign generated from PARIVESH.Please quote identification number in all future correspondence.

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File No. IA-J-11011/241/2017-IA-II(I)
Government of India
Ministry of Environment, Forest and Climate Change
(Impact Assessment Division)
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Indira Paryavaran Bhawan
Jorbagh Road
New Delhi - 110003

Dated: 31st May, 2022

To

M/s Shogun Organics Limited,
Plot No D-18, Kurkumbh MIDC,
Taluka Daund, District Pune,
Maharashtra-413802.
Email: 1961hmv@gmail.com

Project: Proposed expansion for manufacturing of pesticides and specific pesticide intermediates with production capacity of 4211.80 TPA located at plot no. D-18, MIDC Kurkumbh, Dist. Pune, Maharashtra by M/s Shogun Organics Limited - Environmental Clearance

Sir,

This has reference to your proposal No. IA/MH/IND3/260306/2017, dated 05.04.2022, on the above subject matter.

2. The Ministry of Environment, Forest and Climate Change has examined the proposal for proposed expansion for manufacturing of pesticides and specific pesticide intermediates with production capacity of 4211.80 TPA located at plot no. D-18, MIDC Kurkumbh, Dist. Pune, Maharashtra by M/s Shogun Organics Ltd.

3. The details of products and capacity are as under:

Sr. No.	Name of the Products	CAS No.	Existing Qty. (TPA)	Additional Proposed Qty. (TPA)	Total Qty. (TPA)	Uses
	Group 1: Pyrethroid					
1	D-Allethrin	584-79-2	681.00	200.00	881.00	Insecticides Used in control of Mosquitoes, cockroaches, fleas and other indoor pests at home, Hospitals etc.
2	Bifenthrin	82657-04-3				
3	Cypermethrin	52315-07-8				
4	Diethyl Toluamide Technical (DEET)	134-62-3				
5	Deltamethrin	52918-63-5				
6	Dimefluthrin	271241-14-6				
7	D-Trans Allethrin	28434-00-6				
8	Fipronil	120068-37-3				

Sr. No.	Name of the Products	CAS No.	Existing Qty. (TPA)	Additional Proposed Qty. (TPA)	Total Qty. (TPA)	Uses
9	Imidacloprid	138261-41-3				
10	Permethrin	52645-53-1				
11	Prallethrin	23031-36-9				
12	Renofluthrin	352271-52-4				
13	Transfluthrin	118712-89-3				
14	Chrysanthemic Acid Chloride	14297-81-5				Intermediates for Insecticide Actives
15	Cypermethric Acid Chloride	52314-67-7				
16	R-Cypermethric Acid	59042-50-8				
17	Alphamethrin	67375-30-8	00.00			Insecticides For Use in Control of Mosquitoes and variety of insects
18	Metofluthrin	240494-70-6				
19	Beta Cyfluthrin	1820573-27-0				
20	Cyfluthrin	68359-37-5				
	Note: “For group 1 total plant capacity i.e. 881 MT/A, we confirm that we will not exceed the same. For the purpose of byproducts, we have assumed a typical scenario of production of maximum 200 MT/A of product no. 2: Bifenthrin, product no. 3: Cypermethrin, product no. 13: Transfluthrin and maximum 100 MT/A of remaining 17 products. You may note that this may individually would add up to 2300 T/A. Thus building safety, byproducts, raw material requirement, hazardous waste which actually could be much lower as a cumulative production with maximum 881 MT/A”					
	Group 2: Herbicide Plant 1					
1	Bispyribac Sodium	125401-92-5	00.00	900.00	900.00	Herbicides Used for the control of grasses and shrubs
2	Clodinafop Propargyl	105512-06-9				
3	Metribuzin	21087-64-9				
4	Pyrazosulfuran Ethyl	93697-74-6				
5	Cyhalofop Butyl	122008-85-9				
6	Fenoxaprop P Ethyl	71283-80-2				
7	Mesotrione	104206-82-8				
8	Penoxsulam	219714-96-2				

Sr. No.	Name of the Products	CAS No.	Existing Qty. (TPA)	Additional Proposed Qty. (TPA)	Total Qty. (TPA)	Uses
9	Propaquizafop	111479-05-1				
10	Quizalofop Ethyl	100646-51-3				
11	Sulfosulfuron	141776-32-1				
12	Tembotrione	335104-84-2				
13	Cloquintocet Mexyl	99607-70-2				
14	Ametryn	834-12-8				
	Note: “For group 2 total plant capacity i.e. 900 MT/A, we confirm that we will not exceed the same. For the purpose of byproducts, we have assumed a typical scenario of production of maximum 200 MT/A of product no. 2: Clodinafop Propargyl, product no. 3: Metribuzin, product no. 5: Cyhalofop Butyl, product no. 8: Penoxsulam and maximum 100 MT/A of remaining 10 products. You may note that this may individually would add up to 1800 T/A. Thus building safety, byproducts, raw material requirement, hazardous waste which actually could be much lower as a cumulative production with maximum 900 MT/A”					
	Group 3: Insecticide					
1	Lambda Cyhalothrin	91465-08-6	00.00	900.00	900.00	Insecticides Used in controls sucking and chewing insects, including aphids, whitefly, thrips, rice hoppers, rice bugs etc.
2	Thiamethoxam	153719-23-4				
3	Acetamiprid	135410-20-7				
4	Dinotefuran	165252-70-0				
5	Pymetrozine	123312-89-0				
6	Pyriproxyfen	95737-68-1				
7	Tebuconazole	107534-96-3				Fungicides Used to control fungi, bacteria, and viruses affecting plants
8	Difenoconazole	119446-68-3				
9	Pyraclostrobin	175013-18-0				
10	Tricyclazole	41814-78-2				
11	Trifloxystrobin	141517-21-7				
12	Chlorantraniliprole	500008-45-7				Insecticides Used in controls insects, including aphids,
13	Flonicamid	158062-67-0				
14	Clothianidin	210880-92-5				

Sr. No.	Name of the Products	CAS No.	Existing Qty. (TPA)	Additional Proposed Qty. (TPA)	Total Qty. (TPA)	Uses
15	Diafenthiuron	80060-09-9				whitefly, thrips, rice hoppers, rice bugs, turf grasses, etc.
16	Ethiprole	181587-01-9				
17	Fenpyroximate	134098-61-6				
18	Indoxacarb	173584-44-6				
19	Novaluron	116714-46-6				
20	Spiromesifen	283594-90-1				
21	Thiacloprid	111988-49-9				
22	Thiodicarb	59669-26-0				
23	Tolfenpyrad	59669-26-0				
24	Azoxystrobin	131860-33-8				Fungicides used to control plant diseases
25	Boscalid	188425-85-6				
26	Cyazofamid	120116-88-3				
27	Cyproconazole	94361-06-5				
28	Epoxiconazole	135319-73-2				
29	Hexaconazole	79983-71-4				
30	Isoprothiolane	50512-35-1				
31	Krexosim Methyl	143390-89-0				
32	Metalaxyl	57837-19-1				
33	Metalaxyl- M	70630-17-0				
34	Paclobutrazol	76738-62-0				
35	Penconazole	66246-88-6				
36	Picoxystrobin	117428-22-5				
37	Propiconazole	60207-90-1				
38	Tetraconazole	112281-77-3				

Sr. No.	Name of the Products	CAS No.	Existing Qty. (TPA)	Additional Proposed Qty. (TPA)	Total Qty. (TPA)	Uses
	Note: “For group 3 total plant capacity i.e. 900 MT/A, we confirm that we will not exceed the same. For the purpose of byproducts, we have assumed a typical scenario of production of maximum 150 MT/A of product no. 1: Lambda Cyhalothrin, maximum 300 MT/A of product no. 2: Thiamethoxam, maximum 200 MT/A of product no. 7: Tebuconazole and maximum 100 MT/A of remaining 35 products. You may note that this may individually would add up to 4150 T/A. Thus building safety, byproducts, raw material requirement, hazardous waste which actually could be much lower as a cumulative production with maximum 900 MT/A”					
	Group 4: Herbicide Plant 2					
1	Acifluorfen	50594-66-6	00.00	900.00	900.00	Herbicides used to control a wide spectrum of broadleaf weeds and woody plants.
2	Bentazone	25057-89-0				
3	Bensulfuron Methyl	83055-99-6				
4	Carfentrazone Ethyl	128639-02-1				
5	Clethodim	99129-21-2				
6	Dicamba	1918-00-9				
7	Diclosulam	145701-21-9				
8	Halosulfuron Methyl	100784-20-1				
9	Imazamox	114311-32-9				
10	Imazapic	104098-48-8				
11	Nicosulfuron	111991-09-4				
12	Pinoxaden	243973-20-8				
13	Topramezone	210631-68-8				
14	Tribenuron Methyl	101200-48-0				
15	Glufosinate Ammonium	77182-82-2				
16	Pendimethalin	40487-42-1				
	Note: “For group 4 total plant capacity i.e. 900 MT/A, we confirm that we will not exceed the same. For the purpose of byproducts, we have assumed a typical scenario of production of maximum 150 MT/A of product no. 12: Pinoxaden, maximum 150 MT/A of product no. 13: Topramezone, and maximum 100 MT/A of remaining 14 products. You may note that this may individually would add up to 1700 T/A. Thus building safety, byproducts, raw material requirement, hazardous waste which actually could be much lower as a cumulative production with maximum 900 MT/A”					

Sr. No.	Name of the Products	CAS No.	Existing Qty. (TPA)	Additional Proposed Qty. (TPA)	Total Qty. (TPA)	Uses
	Group 5: Intermediate					
1	1,2,4 Triazoles	288-88-0	00.00	600.00	600.00	Intermediate of Tebuconazole
2	2-Chloro-5-Chlori (CCMP)	70258-18-3				Intermediate of Imidacloprid
3	2-Chloro-5-Chloro (CCMT)	105827-91-6				Intermediate of Thiamethoxam
4	2,3-Difluoro-5-Chloropyridine (CDFP)	89402-43-7				Intermediate of Clodianfop Prop.
5	Cypermethric Acid Chloride (CMAC)	52314-67-7				Intermediate for Insecticide Actives
6	Meta Phenoxy Benzal (MPBD)	39515-51-0				Intermediate for Insecticide Actives
7	2-Nitroimidazole (NIIO)	527-73-1				Intermediate of Imidacloprid
8	2-(4-ydrpxyphenoxy)(RHPPA)	94050-90-5				Intermediate of Clodianfop Prop
9	Para Chloro Phenol	106-48-9				Intermediate
	Note: "For group 5 total plant capacity i.e. 600 MT/A, we confirm that we will not exceed the same. For the purpose of byproducts, we have assumed a typical scenario of production of maximum 200 MT/A of 09 products. You may note that this may individually would add up to 1800 T/A. Thus building safety, byproducts, raw material requirement, hazardous waste which actually could be much lower as a cumulative production with maximum 600 MT/A"					
1	Acetic acid (100% basis) (Generated from manufacturing of Pymetrozine)	64-19-7	00.00	30.80	30.80	Various uses to chemical industrie, chemicals laboratories etc.
		Total	**681.00**	**3530.80**	**4211.80**	

4. The PP reported that Ministry had issued EC earlier vide F. No. J-11011/241/2017-IA II (I) dated 23.09.2020 to the existing project for pesticides manufacturing in favour of M/s Shogun Organics Limited. In certified compliance report IRO report dated 15.09.2021 had listed 4 conditions of EC as partially complied. PP have complied all the EC conditions including 4 listed partially complied conditions and same was communicated to IRO, Nagpur dated 25.09.2021 and also to MoEF&CC Delhi dated 13.12.2021. The EAC deliberated the action plan and found in order.

5. The project/activities are covered under category 'A' of item 5(b) of Schedule of Environment Impact Assessment (EIA) Notification and requires appraisal at Central Level by Expert Appraisal Committee (EAC) in the Ministry. Standard ToR for the proposed expansion was issued on 28.10.2021. As the project is located within the notified industrial

area of MIDC Kurkumbh and as per OM dated 27th April 2018 of MoEF&CC, the project is exempted from public hearing.

6. The PP reported that existing land area is 106384 m^2, additional land will not be required for proposed expansion. Industry has already developed greenbelt in an area of 33.01 % i.e., 35124.76 m2 out of total area of the project. The estimated project cost is Rs. 210 Cr. including existing investment of Rs. 15.58 Cr. Total capital cost earmarked towards environmental pollution control measures is Rs. 974.10 Lacs. (including CER cost of 146.0 Lacs.) and the total recurring cost (operation and maintenance) will be about Rs. 1737.95 Lacs. per annum. Total Employment will be 400 persons during operational phase and 100 persons during construction phase. Industry proposes to allocate Rs 1.46 Cr @ 0.75 % of the expansion cost i.e. 194.42 Cr. towards CER.

7. The PP reported that there are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. Bhima River is flowing at a distance of 9.5 Km is in North direction. Water bodies like Patas Lake is located at distance of 4.8 Km in NW direction.

8. The PP reported that the ambient air quality monitoring was carried out at 8 locations during December 2020 to February 2021 and the baseline data indicates the ranges of concentrations as: PM_{10} (32.2-60.2 µg/m^3), PM2.5 (14.2-32.1 µg/m^3), SO2 (12.4-32.5 µg/m^3) and NOx (17.9-47.1 µg/m^3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed expansion project would be 1.25 µg/m^3, 0.83 µg/m^3, 3.79 µg/$m^3$and 0.13 µg/m^3 with respect to PM_{10}, $PM_{2.5}$, SO_2 and NOX. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

9. The PP reported that the total water requirement is 994.43 m^3/day of which fresh water requirement will be 674.35 m^3/day and will be met from MIDC Kurkumbh. Effluent of 259.28 CMD quantity will be treated through existing single effect evaporator, new MEE, conventional ETP comprising of primary, secondary, tertiary followed by RO. The plant will be based on Zero Liquid Discharge (ZLD) system. High TDS/COD stream will be evaporated in MEE. Condensate of MEE will be treated along with low TDS streams in conventional ETP comprising of primary, secondary, tertiary followed by RO. RO permeate will be recycled in utilities while RO reject will be fed to MEE. Unit is complete Zero Liquid Discharge (ZLD) and after proposed expansion also it will remain as ZLD only. Domestic wastewater will be treated in proposed STP of 30 CMD. Treated wastewater will be reused for Gardening during non-monsoon season and in utilities during monsoon season.

10. The PP reported that total power requirement after expansion will be 4070 KW (Connected load) including existing 270 KW & 2600 KW (Operating load) including existing 200 KW and will be met from Maharashtra State Electricity Distribution Company Limited (MSEDCL). Existing unit has DG Set of 320 KVA (1 no.) capacity, additionally of 1500 KVA (1 no.) DG sets are used as standby during power failure. Stack (30m.) will be provided as per CPCB norms to the proposed DG sets.

11. The PP reported that Existing unit has 1.25 TPH (1 no.) fired boiler & 2 Lac kcal/hr. (1 no.) Thermopac. Additionally, 7 TPH (1 no.) & 3 TPH (1 no.) briquette fired boilers & 1 Lac kcal/hr. (1 no.) Thermopac will be installed. Multi cyclone followed by bag filter & stack of height of 30 m will be installed for controlling the particulate emissions within the statutory limit of 115 mg/Nm^3 for the proposed boilers.

12. **Details of Process emissions generation and its management:**

Parameters	Existing Process Emissions (2 Numbers)
Pollutant	HCl & SO_2
Scrubbing media / Adsorber	Caustic solution
Packing type	Pall Ring 2"Dia
APC equipment's	Scrubber & Stack
Temp	30^0C
Diameter	0.5 m
MOC	PP/FRP
Shape	Cylindrical
Height	7 m
Duty	Continuous

Description	Proposed Process Emissions			
Pollutant	Ammonia	HBr	SO_2	HCl
Scrubbing media	Water	Potassium hydroxide (KOH) solution / Caustic solution / Water	Caustic solution	Water
Packing type	Pall Ring 2"Dia	Pall Ring 2"Dia	Pall Ring 2"Dia	Pall Ring 2"Dia
APC equipment's	Scrubber & Stack	Scrubber & Stack	Scrubber & Stack	Scrubber & Stack
Temp	30^0C	30^0C	30^0C	30^0C
Diameter	0.5 m	0.5 m	0.5 m	0.5 m
MOC	PP/FRP	PP/FRP	PP/FRP	PP/FRP
Shape	Cylindrical	Cylindrical	Cylindrical	Cylindrical
Height	15 m	15 m	15 m	15 m
Duty	Continuous	Continuous	Continuous	Continuous

Emissions from utility

	Boiler			Thermopack		D.G Stack	
	Additional Proposed	**Additional Proposed**	**Existing**	**Existing**	**Additional Proposed**	**Existing**	**Additional Proposed**
	7 TPH	**3 TPH**	**1.25 TPH**	**2 Lac kcal/hr.**	**1 Lac kcal/hr.**	**320 KVA**	**1500 KVA**
Fuel type	Briquette		LDO/ Biodiesel	LDO	LDO/ Biodiesel	HSD	HSD

Fuel quantity	33.00 TPD	15.00 TPD	1.55 TPD*	0.45 TPD*	LDO: 0.225 TPD / Biodiesel: 00.25 TPD	12.5 lit/hr.	400.00 lit/hr.
Diameter (m)	0.6	0.6	0.8		0.6	0.08	0.2
Stack Height m (above ground level)	30 m	30 m	20 m combined		30 m	3 m above enclosure	30 m
Type of Pollutant	Particulate Matter	Particulate Matter	SO_2	SO_2	SO_2	SO_2	SO_2
Control Equipment	Multicyclone followed by bag filter & Stack	Multicyclone followed by bag filter & Stack	Stack	Stack	Stack	Stack	Stack
*LDO quantities mentioned in above table has been considered on the basis of requirement of fuel after expansion project. Earlier consented total quantity of LDO was 611 lit/day for existing boiler & thermopack.							

13. **Details of Solid waste/ Hazardous waste generation and management:**

Sr. No.	Category No. as per HW rule,2016	Type of Waste	Unit	Existing	Additional proposed	Total	Disposal
1.	35.3	ETP Sludge	TPA	210.00	390.00	600.00	CHWTSDF
2.	35.3	Spent Carbon from ETP	TPA	00.00	185.00	185.00	CHWTSDF
3.	35.3	MEE Salts	TPA	00.00	9400.00	9400.00	CHWTSDF
4.	20.2	Mixed solvents from stripper	TPA	00.00	1030.00	1030.00	Sale to authorized party /CHWTSDF
5.	33.1	Empty barrels / containers / liners contaminated with hazardous chemicals / waste	Nos./A	480.00	1520.00	2000.00	Sale to authorized party /CHWTSDF

Sr. No.	Category No. as per HW rule,2016	Type of Waste	Unit	Existing	Additional proposed	Total	Disposal
6.	29.6	Spent acid* (S-Cypermethric acid)	TPA	84.00	59.00	143.00	In house consumption / Sale to authorized party / CHWTSDF
7.	29.6	Spent acid* (Hydrochloric acid)	TPA	22.80	812.20	835.00	In house consumption / Sale to authorized party / CHWTSDF
8.	29.1	Process waste or residues* (Sodium sulfite)	TPA	58.8	1216.20	1275.00	In house consumption / Sale to authorized party / CHWTSDF
9.	29.1	Process waste or residues* (Potassium Sulphate)	TPA	00.00	52.30	52.30	In house consumption / Sale to authorized party / CHWTSDF
10.	29.1	Process waste or residues* (Potassium bromide)	TPA	00.00	37.80	37.80	In house consumption / Sale to authorized party / CHWTSDF
11.	29.4	Spent solvents (Phenol)	TPA	00.00	53.50	53.50	In house consumption / Sale to authorized party / CHWTSDF
12.	29.1	Process waste or residues* (Hydrogen Bromide)	TPA	00.00	415.60	415.60	In house consumption / Sale to authorized party / CHWTSDF
13.	29.1	Process waste or residues* (Sodium bromide)	TPA	00.00	43.30	43.30	In house consumption / Sale to authorized party / CHWTSDF
14.	29.1	Process waste or residues* (Methyl hydrogen)	TPA	00.00	38.00	38.00	In house consumption / Sale to authorized party / CHWTSDF
15.	29.1	Process waste or residues* (Copper Chloride)	TPA	00.00	15.00	15.00	In house consumption / Sale to authorized party / CHWTSDF

Sr. No.	Category No. as per HW rule,2016	Type of Waste	Unit	Existing	Additional proposed	Total	Disposal
16.	29.1	Process waste or residues* (Ammonia solution)	TPA	00.00	291.10	291.10	In house consumption / Sale to authorized party / CHWTSDF
17.	29.1	Process waste or residues* (Pottasium salt)	TPA	00.00	343.50	343.50	In house consumption / Sale to authorized party / CHWTSDF
18.	29.4	Spent solvents (Ethanol)	TPA	00.00	12.50	12.50	In house consumption / Sale to authorized party / CHWTSDF
19.	29.4	Spent solvents (Methanol)	TPA	00.00	27.00	27.00	In house consumption / Sale to authorized party / CHWTSDF
20.	29.1	Process waste or residues* (Potassium bicarbonate)	TPA	00.00	44.10	44.10	In house consumption / Sale to authorized party / CHWTSDF
21.	20.3	Distillation residue	TPA	00.00	256.00	256.00	CHWTSDF/Sale to authorized party
22.	29.4	Mix / Spent solvents from process	TPA	00.00	271.00	271.00	CHWTSDF/Sale to authorized party
23.	29.2	Sludge containing residue pesticides	TPA	15.00	35.00	50.00	Sale to authorized party /CHWTSDF
Note: * Sale to authorized party having permission under rule 9 of H&W rule.							

Non-Hazardous Waste Generation and management

S. No.	Description	Unit	Existing	Additional proposed	Total	Disposal
1.	STP Sludge	TPA	00.00	05.00	05.00	Used as manure for Gardening
2.	Scrap & Paper	TPA	15.00	35.00	50.00	Sale to authorized party
3.	Ash from Briquette	TPA	00.00	1750.00	1750.00	Sale to brick manufacturer

14. Details of solid waste/hazardous waste disposal and process emissions generation and its management are as per the plan provided in the EIA & EMP report and as deliberated in the EAC. The project documents are available on PARIVESH portal which can be accessed at http://parivesh.nic.in.

15. The PP reported that they had already provided 33% green cover within the factory premises as per regulations. A total number of 8785 nos. of trees are planted and as per calculation approximate 481.36 Kg of CO_2 per day will be sequestered. The PP also reported the mitigation measures to reduce electricity consumption by use of Variable Frequency Drives (VFD) & IE-3 Motors and reduction in CO2 emission will be obtained by using Solar power, 260 KWp electricity will be generated.

16. The proposal was considered in the 30th Expert Appraisal Committee (Industry-3 sector) meeting held on 26-27, April 2022 in the Ministry through video conferencing, wherein Project Proponent and their accredited Consultant, M/s. Goldfinch Engineering Systems Private Limited with Accreditation Number NABET/EIA/1922/RA0145 valid till 8.12.2022., presented the EIA/EMP report. The minutes of the meeting and all the project documents are available on PARIVESH portal which can be accessed at **http://parivesh.nic.in**.

The EAC, constituted under the provision of the EIA Notification, 2006 comprising Expert Members/domain experts in various fields, examined the proposal submitted by the Project Proponent in desired format along with EIA/EMP reports prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

The EAC noted that the Project Proponent has given an undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP reports. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP reports are in compliance of the ToR issued for the project, reflecting the present environmental status and the projected scenario for all the environmental components. The Committee deliberated on the proposed mitigation measure towards Air, Water, Noise and Soil pollutions. The Committee suggested that the storage of toxic/explosive raw materials/products shall be undertaken with utmost precautions and following the safety norms and best practices.

The Committee deliberated on the details of process emissions generation and its management also. The Committee also deliberated on Certified Compliance report and found that remediation plan and community resource augmentation plan is under process.

The Committee deliberated on the water balance data submitted by PP and found it satisfactory. The Committee deliberated on the action plan and budget allocation for green belt development and noted that as committed by the PP the green belt development shall be completed within one year. The Committee suggested that the greenbelt development shall be taken up actively by the PP and trees shall be planted considered 2m x 2m ratio, accordingly, no. of trees should be increased. The Committee deliberated on Action plan for reduction of environmental toxicology, Life cycle analysis study of Pesticide products, details of carbon foot prints and carbon sequestration study w.r.t. proposed project and found satisfactory.

The Committee noted as committed by PP, that there will be no incremental pollution load from wastewater generation as generated wastewater will not be discharged in the environment and will be treated in MEE, ETP & RO and treated wastewater will be reused (ZLD).

The Committee deliberated the Onsite and Offsite Emergency plan and various mitigation measures to be proposed during implementation of the project and advised the PP to implement the provisions of the Rules and guidelines issued under the Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989, as amended time to time, and the Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996.

The EAC deliberated on the proposal with due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC found the proposal in order and recommended for grant of environmental clearance.

17. The environmental clearance granted to the project/activity is strictly under the provisions of the EIA Notification 2006 and its subsequent amendments. It does not tantamount/construe to approvals/consent/permissions etc. required to be obtained or standards/conditions to be followed under any other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project. The project proponent shall obtain necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.

18. Based on the proposal submitted by the project proponent and recommendations of the EAC (Industry-3 Sector), Ministry of Environment, Forest and Climate change hereby accords **Environmental Clearance for *"*Proposed expansion for manufacturing of pesticides and specific pesticide intermediates with production capacity of 4211.80 TPA located at Plot No.: D-18, MIDC Kurkumbh, Dist. Pune, Maharashtra by M/s Shogun Organics Limited.,*"*** under the provisions of the EIA Notification, 2006, subject to the compliance of terms and conditions as under: -

A. Specific Conditions:

(i). The Unit shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.

(ii). All the specific and general conditions, remediation plan and mitigation measures, as stipulated in the earlier EC letter dated 23.09.2020, shall be complied.

(iii). No banned pesticide shall be manufactured by the project proponent. No banned raw materials shall be used in the unit. The project proponent shall adhere to the notifications/guidelines of the Government in this regard.

(iv). The project proponent shall utilize modern technologies for capturing of carbon emitted and shall also develop carbon sink/carbon sequestration resources capable of capturing more than emitted. The implementation report shall be submitted to the IRO, MoEF&CC in this regard.

(v). The specie specific conservation plan of Schedule-I species shall be implemented within time limit and as per the approval of the Chief Wildlife Warden of the State Government.

(vi). The project proponent shall comply with the environment norms for 'Pesticide Industry' as notified by the Ministry of Environment, Forest and Climate Change, vide GSR 446 (E), dated 13th June 2011 under the provisions of the Environment (Protection) Rules, 1986.

(vii). All necessary precautions shall be taken to avoid accidents and action plan shall be implemented for avoiding accidents. The Project proponent shall implement the onsite/offsite emergency plan/mock drill etc. and mitigation measures as prescribed under the rules and guidelines issued in the Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989, as amended time to time, and the Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996.

(viii). The volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.97 % with effective chillers/modern technology. Regular monitoring of VOCs shall be carried out.

(ix). The project proponent shall explore possibilities for recycling and reusing of treated water in the unit to reduce the fresh water demand and waste disposal. Treated effluent shall be reused in the process/utilities. Treated Industrial effluent shall not be used for gardening/greenbelt development/horticulture.

(x). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

(xi). The storage of toxic/hazardous raw material shall be bare minimum with respect to quantity and inventory. Quantity and days of storage shall be submitted to the Regional Office of Ministry and SPCB along with the compliance report.

(xii). The occupational health centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.

(xiii). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees. Action plan for mitigation measures shall be properly implemented based on the safety and risk assessment studies.

(xiv). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms.

(xv). The solvent management shall be carried out as follows: (a) Reactor shall be connected to chilled brine condenser system. (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages. (c) Solvents shall be stored in a separate space specified with all safety measures. (d) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done. (e) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses. (f) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.

(xvi). Total fresh water requirement, sourced from GIDC water Supply, shall not exceed 674.35 KLD. Prior permission in this regard shall be obtained from the concerned regulatory authority/CGWA and renewed from time to time.

(xvii). The storm water from the roof top shall be channelized through pipes to the storage tank constructed for harvesting of rain water in the premises and harvested water shall be used for various industrial processes in the unit. No recharge shall be permitted within the premises. Process effluent/ any wastewater shall not be allowed to mix with storm water.

(xviii). The PP shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high-pressure hoses for equipment clearing to reduce wastewater generation.

(xix). The green belt of at least 5-10 m width shall be developed in at least 33% of the total project area (@2500 Tress per ha), mainly along the plant periphery/ additional land. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map. The Trees have to be planted with spacing of 2m x 2m ratio and as in first year itself and subsequent years the green belt shall be monitored. Further, as committed by PP, additionally 1000 nos. of trees will be developing inside and 1000 nos. of trees will be developing outside premises. The plant species can be selected that will give better carbon sequestration.

(xx). The activities and the action plan proposed by the project proponent to address the socio-economic issues in the study area shall be completed as per the schedule presented before the Committee and as described in the EIA/ EMP report in letter and spirit.

(xxi). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.

B. General Conditions: The grant of environmental clearance is further subject to compliance of other general conditions as under: -

(i) No further expansion or modifications in the plant, other than mentioned in the EIA Notification, 2006 and its amendments, shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change/SEIAA, as applicable. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry/SEIAA, as applicable, to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.

(ii) The Project proponent shall strictly comply with the rules and guidelines issued under the Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989, as amended time to time, the Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996, and Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016 and other rules notified under various Acts.

(iii) The energy source for lighting purpose shall be preferably LED based, or advanced having preference in energy conservation and environment betterment.

(iv) The overall noise levels in and around the plant area 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 conform to the standards prescribed under the Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).

(v) The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. The activities shall be undertaken by involving local villages and administration. The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.

(vi) The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management/ pollution control measures shall not be diverted for any other purpose.

(vii) A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zilla Parishad/Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.

(viii) The project proponent shall also upload/submit six monthly reports on Parivesh Portal on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data to the respective Integrated Regional Office of MoEF&CC, the respective Zonal Office of CPCB and SPCB. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.

(ix) The environmental statement for each financial year ending 31st March in Form-V as is mandated shall be submitted 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 environmental clearance conditions and shall also be sent to the respective Integrated Regional Office of MoEF&CC by e-mail.

(x) The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry and at https://parivesh.nic.in/. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.

(xi) The project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.

(xii) This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.

19. The Ministry reserves the right to stipulate additional conditions, if found necessary at subsequent stages and the project proponent shall implement all the said conditions in a

time bound manner. The Ministry may revoke or suspend the environmental clearance, if implementation of any of the above conditions is not found satisfactory.

20. Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of the Environment (Protection) Act, 1986.

21. Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

22. The above conditions shall be enforced, *inter-alia* under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

This issues with approval of the competent authority.

Ramesh

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Copy to: -

1. The Deputy DGF (C), MoEF&CC Regional Office(WCZ), Ground Floor, East Wing, New Secretariat Building, Civil Line, Nagpur - 1
2. The Secretary, Environment Department, Government of Maharashtra, 15th Floor, New Administrative Building, Mantralaya, Mumbai - 32
3. The Member Secretary, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi - 32
4. The Member Secretary, Maharashtra Pollution Control Board, Kalpataru Point, 3rd and 4th Floor, Opp. Cine Planet, Sion Circle, Mumbai – 22
5. The Member Secretary, Central Ground Water Authority, Jamnagar House, 18/11, Man Singh Road Area, New Delhi, Delhi 110001
6. The District Collector, District Pune, Maharashtra
7. Guard File/Monitoring File/Website/Record File/Parivesh portal

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