Government of Maharashtra

SEAC-2013/CR-548/TC-2 Environment department Room No. 217, 2nd floor, Mantralaya Annex, Mumbai- 400 032. Dated: 1st April, 2015

To,

Mr. Ranjeetsingh H.Naik Nimbalkar A/p. Nimbhore, Tal. Phaltan, Dist. Satara- 415523

Subject: Environment Clearance for Proposed 19.5 MW bagasse based co generation power plant at vill Upalve Tal Phaltan Satara by M/s. Swaraj India Agro Ltd (SIAI)

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 96th meeting and decided to 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 83rd meeting.

2. It is noted that the proposal is considered by SEAC-I under screening category 1(d) B1 as per EIA Notification 2006.

Brief Information of the project submitted by Project Proponent is as:

Name of Project	19.5 MW Bagasse Based Co-generation Power Plant by						
·	M/s Swaraj India Agro Ltd. (SIAL)						
Project Proponent	Mr. Ranjeetsingh H.Naik Nimbalkar						
Consultant	MITCON Consultancy & Engineering Servi	ices Ltd.					
New Project / Expansion	New Project						
Activity schedule in the	1(d)						
EIA Notification							
Area Details	Total plot area (Acre.): 63 (Karkhana Area)						
	• Industrial Activity area (Acre.): 33	•					
Estimated capital cost of							
the Project (including cost	Total Project Cost	Cogen Power					
for land, building, plant		(Rs. in Lakh)					
and machinery	Land & Site Development	325.00					
separately)	Civil works & Buildings	1320.00					
	Indigenous Plant and Machinery	8593.00					
	Miscellaneous Fixed Assets	250.00					
	Preliminary & Pre-Op.Expenses	833.00					
	Contingencies	113.00					

	Margin on Working Capital 37.00								
Location details of the project :	 Total 11471.00 Latitude : 17°50'4.82"N Longitude : 74°23'10.98"E Location : Gat No. 332/B/2 At Village – Upalve, Tal – Phaltan, Dist. Satara Elevation above Mean Sea Level: 724 meter 								
Raw materials (including process chemicals, catalysts, & additives).	List of raw materials to be used	'Physical and chemical nature of raw material	'Q (to ye pro	a Level. 7 uantity onnes/ ar) full oduction pacity	Sour of mate	ce	Mea trans (Sou stora site) justi	spor irce ige wit	tation to h
	Bagasse	Fibrous material	(10 : 16 T Of sea	ason 60 days) 2355M ff- ason (55 ays): 927MT	Suga Fact	ory		ose	onveyor with d sheet
Production details	Name of Pr By product Intermedia Products	s and		Existing (T/Year)) ac (n m	roposed etivity ew/ odernizati spansion) '/Year)		Tot (T/	al Year)
	Main Products: (Power)	Season (160 Days) Off- Season (55 Day	s)	0		19.5 MW			
	By- Products Intermedia e Products:	Season		0		3247 MT 858 MT		410	05 MT
Process details / manufacturing details	In power generation scheme, chemical energy of fuel is first converted into thermal energy (during combustion), which is then converted into mechanical energy (through a turbine) and finally into electrical energy (through a generator).								
Rain Water Harvesting (RWH)	In the factory premises roof top area will be determined and subsequently rain water harvesting potential will be calculated. However detailed design and engineering of the RWH system will be undertaken during implementation stage.								

Total Water Requirement	Tota	l water require	ement:				
Total Water Hoganismen	• Fresh water (CMD): 509 & Source: Banganga Dam						
	Use of the water:						
		ticulars		Requirement (CMD)			
	⊢—	cess		10			
	Cooling water			102			
	DM Water			370			
	Dust Suppression			35			
		inking		27			
		een belt		44			
		e service		5			
, Annual Control of the Control of t	}	ners		3	***		
Stama vyotav dvoinaga		per storm wate	er drainage lii	_	he provided t	o mainta	in the
Storm water drainage		ral flow of sto		110 11111	bo provided (.0 111011110	
Courses consention and		ount of sewag		(CMD	1.22		
Sewage generation and treatment	• Alli	posed treatmen	e generation) .22 Sanarated ceu	age will	he
treatment = \ \ \ \ \ \				age.	Jenerated sew	age wiii	.00
		ted in package		fannli	aabla): 25		
77.00		acity of the S'			Outlet effluent	Efflu	ont
Effluent characteristic		Parameters	Inlet effluer Characteris		Dutiet effluent Characteristics		harge
	no			iie C	. Haracteristics		dards
			S			(CPC	1
			4.01	+7	7.25		
		pH TDC (m o/l)	1912	422		5.5 -	
	3	TDS (mg/l)	236	30		200	
		TSS(mg/l)			22		
	4	BOD(mg/l)	6486		. <u></u> 66	100	
	5	COD(mg/l)	2500			10	
	6	Oil &	28	16	,	10	
	7	Grease(mg/l Chlorides	306	1 2	32	<u> </u>	
	'		300		12	İ	
	0	(mg/l)	161		22		
	8	Sulphates	101	4	22		
TOTAL 1		(mg/l)		(C) (T	N . 79		1
ETP details		ount of efflue			J): 78		
		acity of the E					
	• Ame	ount of treated	l effluent recy	ycled (CMD): 140		
Note on ETP technology	Activ	ated Sludge pr	rocess				
to be used		0 1					
Disposal of the ETP	Gener	ated ETP sluc	lge used for g	green b	elt developm	ent and l	oio-
sludge (If applicable)		osting purpose		-	-		
Solid waste Management	Sr.	Source	Qty	Fon	m	Compo	sition
3	No		(TPM)	(Slu	idge / Dry /		
			(1 `	ry etc.)	<u></u>	
	2.	ETP	3		Sludge	NF	YK
	3.	Process	Ash-609		Dry	Sil	ica
Atmospheric Emissions	Sr.	Pollutant	Source		Emission	Concer	1
(Flue gas characteristics	No.		of		rate	in flu	
SPM , SO_2 , NO_X , CO , etc.)			Emission		(kg/hr)	(g/s	ec)

2 3 4 Plan Sec & u	N C	O ₂ O _X CO		Stack Stack Stack	ζ	Concen	tration	in flu	11.6 e gas v	
4 Plan Sec	nt tion	CO	•			Concen		in flu	e gas v	vill be
Plan Sec	nt tion			Stacl		Concentration in f		ng/N		
Sec	tion	Sta			(N.			NA	
Sec	tion	Sta								
		No	ack	Heigl from grour level (m)		Internal Diameter (Top)(m)	Rate		Exh Gas	
1 1		1 st		82		3.8	850		150	
Po	ollutant	ts	Stan Limi	dard it	L	imit				
ı —			150							
S	O_2				0.	.964 T/Da	y 7	T/D:	ay	
Poll	utant	Sta	ndard		Cor	ncentration	I	Remarks		
PM ₁₀		PM ₁₀ 100 21.02		Due to proposed						
PM ₂	5		60			18	increase in pollutio		lution	
SO ₂			80			20.8	mi	tigate	by	
NO;	ζ		80			27.5	cor suc sugre & gre the	control equipments such as ESP & dust suppression method & by developing green belt around the factory and		nents dust ethod ng und
Sr. No	Fuel		(TPI	D/KLE) ^		Calorit value	fic	% Ash	% Sulphu r
1	urce of	fue	l: Pro	posed	Sea 101 Off Sea 780	ason: 15 f- ason: 0	-	-		0.05
	110 Boi: Poll	Pollutant SPM SO2 Pollutant PM ₁₀ PM _{2.5} SO ₂ NO _X Sr. Fuel No 7 Bagas	110 TPH Boiler Pollutants SPM SO2 Pollutant Per Sta µg/ PM10 PM2.5 SO2 NOx Sr. Fuel No 7 Bagasse	110 TPH 1st Boiler Pollutants Emis Stan Limi (mg/sq. spm 150 SO2 SO2 Source of fuel: Pro	Pollutants Emission Standard Limit (mg/Nm³) SPM 150 SO2 Pollutant Permissible Standard µg/m³ PM10 100 PM2.5 60 SO2 80 NOx 80 Sr. Fuel Daily Cons (TPD/KLD Existing 7 Bagasse	Pollutants Emission Standard Limit (mg/Nm³) SPM 150 60 SO2 00 Pollutant Permissible Standard µg/m³ (in PM10 100 PM2.5 60 SO2 80 NOx 80 Sr. Fuel Daily Consump (TPD/KLD) Existing Program Text Text Proposed sugar Sequence Text Text	Sr. Fuel Daily Consumption TPD/KLD Sustaing Proposed Proposed	Pollutants	Pollutants Emission Standard Limit SPM 150 6 mg/Nm³ 150 m STandard Limit (mg/Nm³) SPM 150 0.964 T/Day 7 T/Day	Pollutants Emission Standard Limit Limit (mg/Nm³) SPM 150 6 mg/Nm³ 150 mg/Nm³ SO₂ 0.964 T/Day 7 T/Day

Energy Green Belt Development	Power supply: • Existing power requirement: • Proposed power requirement: • Number and capacity DG sets to be used (existing and proposed) Details of the non-conventional renewable energy proposed to be used: Yes Bagasse will be used: Season (160 Days) – 162355 MT Off-Season (55 Days) – 42927 MT • Green belt area (Acre.): 18 • Number and species of trees to be planted: 6000						
Details of Pollution Control Systems:	• N Sr. No.	Air Wate Noise	T	Existing pollution control system	Proposed to be installed ESP ETP Acoustic Encurrence will be provided it will be use composting	closures ded	
Environmental Management plan Budgetary Allocation	• 0	&M cost	(With brea truction Pha			DID	
		Sr. No	Nam Sanitation	e of Activity	Cost in Lal	1	
		2	***	ter requirement		2.00	
		3	Health Car	e, Safety	3	3.00	
			Total	. DL agr	7	7.00	
			ng Operation				
	 -	No.	Particulars			NR, Crore	
	One Time Installation Cost (Capital Cost Air Pollution Control System (ESP, Stack)			m	4.0		
		2	· · · · · · · · · · · · · · · · · · ·	trol Systems	1	.25	
		3	Green Bel	Development	C	0.08	
		4	Environme	ental Lab	0).75	

	5	Water Pollution Control System - ETP, Package STP	1.25	
	6	Occupational Health & Safety	1.5	
	:	Total	8.83	
	Recurrin	ng Cost		
	1	Environmental Monitoring /APH Maintenance	0.25	
	2	General Maintenance of ETP, Package STP	0.03	
	3	Greenbelt maintenance	0.008	
		Noise Pollution Control	0.02	
	4	Occupational Health & Safety	1.3	
	Total		1.61	
EIA Submitted (If yes then submit the salient features)	prescribe in	s prepared as per Model TOR & EIA notification 2006 Cata collected: 1st March 2014		

• Details of the primary data collection (i.e. location of the sample collection, number of visit etc.).

Location Code	Station Name	Distance From Project Site (km)	Direction	Upwind/ Downwin d
AAQ-1	Project Site	-	-	
AAQ-2	Gadewad i	1.6	SE	Downwin d
AAQ-3	Kulakjai	3.8	S	Crosswind
AAQ-4	Palwan	3.7	E	Downwin d
AAQ-5	Upalve	3.5	N	Cross Wind
AAQ-6	Veloshi	2.8	W	Upwind

3. The proposal has been considered by SEIAA in its $83^{\rm rd}$ 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:

- (i) No additional land shall be used /acquired for any activity of the project without obtaining proper permission.
- (ii) For controlling fugitive natural dust, regular sprinkling of water & wind shields at appropriate distances in vulnerable areas of the plant shall be ensured.
- (iii) Regular monitoring of the air quality, including SPM & SO2 levels both in work zone and ambient air shall be carried out in and around the power plant and records shall be maintained. The location of monitoring stations and frequency of monitoring shall be decided in consultation with Maharashtra Pollution Control Board (MPCB) & submit report accordingly to MPCB.
- (iv) Necessary arrangement shall be made to adequate safety and ventilation arrangement in furnace area.
- (v) Proper Housekeeping programmes 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) Leq of 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) The company shall undertake following Waste Minimization Measures:
 - Metering of quantities of active ingredients to minimize waste.
 - Reuse of by- products from the process as raw materials or as raw material substitutes in other process.
 - Maximizing Recoveries.
 - Use of automated material transfer system to minimize spillage.

- (xix) 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.
- (xx) A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.
- (xxi) Transportation of ash will be through closed containers and all measures should be taken to prevent spilling of the ash.
- (xxii) Separate silos will be provided for collecting and storing bottom ash and fly ash.
- (xxiii) 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
- (xxiv) 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
- (xxv) 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.
- (xxvi) 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.
- (xxvii) 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 sectoral 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.
- (xxviii)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.
- (xxix) 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. The Environment department reserves the right 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.
- 6. **Validity of Environment Clearance**: The environmental clearance accorded shall be valid for a period of 5 years to start of production operations.
- 7. 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.
- 8. 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.
- 9. Any appeal against this environmental clearance shall lie with the National Green Tribunal (Western Zone Bench, Pune), New Administrative Building, 1st Floor, D-, Wing, Opposite Council Hall, Pune, if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

(Ajoy Mehta)
Principal Secretary,
Environment department &
MS, SEIAA.

Copy to:

- 1. Shri. R. C. Joshi, IAS (Retd.), Chairman, SEIAA, Flat No. 26, Belvedere, Bhulabhai desai road, Breach candy, Mumbai- 400026.
- 2. Shri T. C. Benjamin, IAS (Retired), Chairman, SEAC-I, 602, PECAN, Marigold, Behind Gold Adlabs, Kalyani Nagar, Pune 411014.
- 3. Additional Secretary, MoEF & CC, Indira Paryavaran Bhavan, Jorbagh Road, Aliganj, New Delhi-110003.
- 4. Member Secretary, Maharashtra Pollution Control Board, with request to display a copy of the clearance.
- 5. The CCF, Regional Office, Ministry of Environment and Forest (Regional Office, Western Region, Kendriya Paryavaran Bhavan, Link Road No- 3, E-5, Ravi-Shankar Nagar, Bhopal- 462 016). (MP).
- 6. Regional Office, MPCB, Pune.
- 7. Collector, Satara

- 8. IA- Division, Monitoring Cell, MoEF & CC, Indira Paryavaran Bhavan, Jorbagh Road, Aliganj, New Delhi-110003.
- 9. Select file (TC-3)

(EC uploaded on 4/4/2015)