Monitoring the Implementation of Environment Safeguards
Ministry of Environment & Forest
Western Region, Regional Office, Bhopal
MONITORING REPORT
PART-1
DATA SHEET

Sr. No.	Particular	Reply
1	Project type: River valley/Mining/Industry/Thermal/Nuclear/Other (specify)	Industrial Project (Pesticide Unit)
2	Name of the Project	M/s. GSP Crop Science P. Ltd.
3	Clearance letter (s)/OM No. & date	F.No. J-11011/44/2002-IA II (I) dated October 17, 2005
4	Location: a) District (s) b) State (s) c) Location Latitude/Longitude	a) Ahmedabad b) Gujarat c) The longitude and latitude of the projects are 72° 39' 06.68"E and 23° 01' 14.30" N
5	Address for Correspondence a) Address for the concerned project chief engineer (with pin code & telephone/telex/fax numbers) b) Address for executive project engineer/manager	**Address for Correspondence** **M/s. GSP Crop Science P. Ltd.** Plot No.: 100, 101, 102 & 103, GVMM, GIDC Odhav, Ahmedabad-382415, Gujarat. Mr. Rohit Bhut (Chief Engineer) M/s. GSP Crop Science P. Ltd. Plot No.: 100, 101, 102 & 103, GVMM, GIDC Odhav, Ahmedabad-382415, Gujarat. Phone : 079-26466580.079-26449936 Fax : 079-26448875 Mr. Jayesh Visavadia General Manager Plot No.: 100, 101, 102 & 103, GVMM, GIDC Odhav, Ahmedabad-382415, Gujarat- 382415. Phone : 079-26466580.079-26449936 Fax : 079-26448875
6	Salient features a) Of the project b) Of the EMP	Main features are… a) Totally closed loop system available to produce Acephate. Process of Acephate developed by inhouse R&D. No Effluent generated from the process. Total Plot Area: 11,000 m^2, Project Cost of Existing :Rs. 4.0 Crore, b) Under Water Act: No effluent generation from the process. Effluent is generated only boilers blow down will be treated in ETP & finally sent CETP. Under Air Act: Bag Filter & Scrubber are provided with Steam boiler (1.5 TPH).

<table>
<tr><td></td><td></td><td>Company has installed incinerator to incinerate the Toxic Waste. Wet Scrubber is provided as APCM.
Under Haz. Waste Rule:
Unit is member of TSDF Site (M/s. NEPL) for solid waste (ETP Sludge & Incineration Ash).
Unit is meber of CHWIF (M/s. RSPL-Panoli, Bharuch) for incineration of process waste.
Used Oil & Discarded Drums are being sold to authorised recyclers/re refiners.
Green Belt Area: 3600 m^2 (33%) out of total area 11000 m^2</td></tr>
<tr><td>7</td><td>Breakup of the project area
a) Submergence area: forest & non-forest

b) Others</td><td>a) No forest land is acquired, so there is no submerged area of forest land and non-forest land.
b) Break up of project area is given below:
<table>
<tr><th>Sr. No.</th><th>Particular</th><th>Area (m^2)</th></tr>
<tr><td>1.</td><td>Plant area</td><td>2000</td></tr>
<tr><td>2.</td><td>Storage</td><td>500</td></tr>
<tr><td>3.</td><td>Utility</td><td>500</td></tr>
<tr><td>4.</td><td>ETP + incinerator area</td><td>500</td></tr>
<tr><td>5.</td><td>Office building</td><td>1000</td></tr>
<tr><td>6.</td><td>Green belt</td><td>3600</td></tr>
<tr><td>7.</td><td>Road</td><td>1000</td></tr>
<tr><td>8.</td><td>Open area</td><td>1900</td></tr>
<tr><td colspan="2">TOTAL</td><td>11000</td></tr>
</table></td></tr>
<tr><td>8</td><td>Breakup of the project affected population with enumeration of those loosing house/dwelling units only agricultural land only both dwelling units & agricultural land & landless laborers/artisans:
a) SC, ST/Adivasi
b) Others
(Please indicate whether these figures are based on any scientific and systematic survey carried out or only provisional figures, if a survey is carried out give details & year of survey)</td><td>Company acquired the land for project from Odhav Industrial Estate but Odhav Industrial Estate acquired land from farmer (Agricultural Land).

a) Land Looser were not SC, ST/Adivasi
b) No Any Other</td></tr>
<tr><td>9</td><td>Financial details:
a) Project cost as originally planned and subsequent revised estimates and the year of price reference

b) Allocation made for EMP with item wise and year wise break-up</td><td>a) Project cost as originally planned = Rs. 4.0 Crore (Year 2005)
Subsequent revised estimates = Rs. 5.5 Crore
The year of price reference -2006
b) Allocation made for EMP with item wise
Year wise break-up
<table>
<tr><th>Year</th><th>Rupees in Lakh</th></tr>
<tr><td>2006</td><td>8.5</td></tr>
<tr><td>2007</td><td>12.4</td></tr>
<tr><td>2008</td><td>13.0</td></tr>
<tr><td>2009</td><td>16.5</td></tr>
<tr><td>2010</td><td>18.0</td></tr>
<tr><td>2011</td><td>20.0</td></tr>
</table></td></tr>
</table>

	c) BC ratio/IRR and the year of assessment d) Whether (c) includes the cost of EM as shown in above e) Actual expenditure incurred on project so far f) Actual expenditure incurred on EMP so far	c) BC (Benefit Cost) ratio/IRR = Rs. 9 crore (15%) The year of assessment = 2016 d) Yes e) Actual expenditure incurred on project so far = Rs.5.5 Crore f) Actual expenditure incurred on EMP so far = Rs. 0.30 Crore
10	Forest land requirement a) The status of approval for diversion of forest land for non-forestry use b) The status of clearing felling c) The status of CA (Compensatory Allowance), if any d) Comments on viability & sustainability of CA program in the light of actual field experience so far	a) This is not forest land of project area. Company acquired the land for project from Odhav Industrial Estate. b) There was no clearing felling by the company. c) No any CA (Compensatory Allowance) d) No comments
11	The status of the clear felling in the non-forest areas (such as submergence area or reservoir, approach roads) if any with quantitative information required	There was no clearing felling by the company.
12	Status of construction (Actual &/or planned) a) Date of commencement (Actual &/or planned) b) Date of completion (Actual &/or planned)	a) Date of commencement (Actual &/or planned) = January, 2006. b) Date of completion (Actual &/or planned) = March, 2006.
13	Reason for delay if project is yet to start	There was no delay.
14	Dates of site visits a. The dates on which the project was monitored by the RO on previous occasions, if any b. Date of site visits by RO, MoEF&CC Bhopal, for this monitoring report	03.07. 2017

PART-II & III

DESCRIPTIVE REPORT ON STATUS OF COMPLIANCE FOR THE PERIOD OF JANUARY-2017 TO JUN -2017, TO CONDITIONS OF ENVIRONMENTAL CLEARANCE AND ENVIRONMENTAL MANAGEMENT

EC NO. J-11011/44/2002-IA II (I) Dated 17.10.2005

<table>
<tr><th>SR. NO.</th><th>CONDITIONS</th><th>STATUS</th></tr>
<tr><td>A.</td><td colspan="2">SPECIFIC CONDITIONS</td></tr>
<tr><td>i</td><td>The gaseous emissions (SO_2, NOx, HCl & CL2) and particulate matter from various process units shall conform to the standards prescribed by the concerned authorities from time to time.</td><td>PP submitted that "Complied – The gaseous emissions (PM, SO_2, NOx) and particulate matter from various process units is confirmed to the prescribed standards.
Note: COMPANY DOES NOT USE RAW MATERIAL THAT CAN NOT EMIT EITHER HCL OR CL2 GAS. THEREFORE, THESE TWO PARAMETERS ARE NOT MONITORED. RESULTS OF THREE PARAMETERS ARE WITHIN GPCB STANDARDS.
Company carries out the monitoring Monthly basis by third party-M/s.Entech Laboratories, 33, 34, Kushal Estate, Saket Ind. Estate, Village: Moraiya, Tal-Sanand, Dist: Ahmedabad, Gujarat – GPCB Recognized Schedule –II Environmental Auditor and No. GPCB/EA-293/404685 dated: 20/02/2017 and valid upto 31/12/2018. Certificate is attached as Annexure-A.
Detailed Analysis of monitoring results is placed at Annexure-B. Summary of gaseous emissions (SO_2, NOx, PM) and particulate matter from various process units are as Below:
June, 2017 (22/06/2017)
1) Stack attached to Boiler
<table>
<tr><th>Sr. No.</th><th>Parameter</th><th>GPCB Norms</th><th>Avg.</th></tr>
<tr><td>1</td><td>PM (mg/Nm^3)</td><td>150</td><td>50.1</td></tr>
<tr><td>2</td><td>SO2(ppm)</td><td>100</td><td>11.4</td></tr>
<tr><td>3</td><td>NOx(ppm)</td><td>50</td><td>13.5</td></tr>
</table>
2) Stack attached to D G Set
<table>
<tr><th>Sr. No.</th><th>Parameter</th><th>GPCB Norms</th><th>Avg.</th></tr>
<tr><td>1</td><td>PM (mg/Nm^3)</td><td>150</td><td>22.7</td></tr>
<tr><td>2</td><td>SO2(ppm)</td><td>100</td><td>9.8</td></tr>
<tr><td>3</td><td>NOx(ppm)</td><td>50</td><td>14.7</td></tr>
</table>
May, 2017 (25/05/2017)
1) Stack attached to Boiler
<table>
<tr><th>Sr. No.</th><th>Parameter</th><th>GPCB Norms</th><th>Avg.</th></tr>
<tr><td>1</td><td>PM (mg/Nm^3)</td><td>150</td><td>53.2</td></tr>
<tr><td>2</td><td>SO2(ppm)</td><td>100</td><td>12.9</td></tr>
<tr><td>3</td><td>NOx(ppm)</td><td>50</td><td>18.0</td></tr>
</table>
2) Stack attached to D G Set
<table>
<tr><th>Sr. No.</th><th>Parameter</th><th>GPCB Norms</th><th>Avg.</th></tr>
<tr><td>1</td><td>PM (mg/Nm^3)</td><td>150</td><td>23.5</td></tr>
<tr><td>2</td><td>SO2(ppm)</td><td>100</td><td>10.5</td></tr>
</table>
</td></tr>
</table>

3	NOx(ppm)	50	15.2

April, 2017 (20/04/2017)

1) Stack attached to Boiler

Sr. No.	Parameter	GPCB Norms	Avg.
1	PM (mg/Nm^3)	150	52.8
2	SO2(ppm)	100	12.1
3	NOx(ppm)	50	18.0

2) Stack attached to D G Set

Sr. No.	Parameter	GPCB Norms	Avg.
1	PM (mg/Nm^3)	150	22.3
2	SO2(ppm)	100	9.8
3	NOx(ppm)	50	13.8

March, 2017 (24/03/2017):

1) Stack attached to Boiler

Sr. No.	Parameter	GPCB Norms	Avg.
1	PM (mg/Nm^3)	150	51.7
2	SO2(ppm)	100	10.2
3	NOx(ppm)	50	19.8

2) Stack attached to D G Set

Sr. No.	Parameter	GPCB Norms	Avg.
1	PM (mg/Nm^3)	150	19
2	SO2(ppm)	100	6.4
3	NOx(ppm)	50	14

February, 2017 (16/02/2017):

1) Stack attached to Boiler

Sr. No.	Parameter	GPCB Norms	Avg.
1	PM (mg/Nm^3)	150	54.2
2	SO2(ppm)	100	10.4
3	NOx(ppm)	50	17.5

2) Stack attached to D G Set

Sr. No.	Parameter	GPCB Norms	Avg.
1	PM (mg/Nm^3)	150	17.8
2	SO2(ppm)	100	7.9
3	NOx(ppm)	50	12.8

January, 2017 (19/01/2017):

1) Stack attached to Boiler

Sr. No.	Parameter	GPCB Norms	Avg.
1	PM (mg/Nm^3)	150	52.3
2	SO2(ppm)	100	9.8
3	NOx(ppm)	50	18.2

2) Stack attached to D G Set

Sr. No.	Parameter	GPCB Norms	Avg.
1	PM (mg/Nm^3)	150	18.0

2	SO2(ppm)	**100**	6.1	
3	NOx(ppm)	**50**	13.1	

Max, Min and Avg. gaseous emissions (PM, SO_2, NOx) and particulate matter from various process units of March, 2017 is given below table:

Sr. No.	Parameter	GPCB Norms	Max.	Min.
1	PM (mg/Nm^3)	**150**	53.2	17.8
2	SO2(ppm)	**100**	12.9	6.1
3	NOx(ppm)	**50**	19.8	12.8

It no time, the emission levels shall go beyond the stipulated standards.

In the event of failure of pollution control system(s) adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency.

It may be seen that during the reporting period, Emission never exceeded the stipulated Standards.

Such situation did not arise. If it will happen, company will not be restarted until the control measures are rectified to achieve the desired efficiency.
In view of the above submissions, condition may be considered **complied.**
Complied.

li Fugitive emissions in the workplace environment, product, raw material storage areas must be regularly monitored.

PP Submitted "**Complied** – Company carries out the Fugitive emissions monitoring in workplace environment, product, raw material storage areas on regular basis.
Result of workplace environment is given below and monitoring done by **Prakruti Environmental Engineers, Vadodara.**

Sr. No.	Location / Operation	Identified Contaminants	Sampling Instrument	Average	TWA Conc.
1	Acephate Plant (Ground floor near ANF Nutch Agitator)	Ammonia	Hand y Sam pler	3.87	35 ppm
		Ethyl Acetate		12.74	400 ppm
		Methylene Chloirde		6.03	50 ppm
		Acid Fumes as H2SO4		0.28	1 mg/m^3
2	Acephate Plant (First floor near CR3 & CR4)	Ammonia	Hand y Sam pler	2.45	35 ppm
		Ethyl Acetate		10.03	400 ppm
		Methylene Chloirde		4.05	50 ppm
		Acid Fumes as H2SO4		0.14	1 mg/m^3
3	Acephate Plant (Near staircase)	Ammonia	Hand y Sam pler	2.84	35 ppm
		Ethyl Acetate		9.39	400 ppm
		Methylene Chloirde		3.47	50 ppm
		Acid Fumes as H2SO4		0.20	1 mg/m^3
4	Acephate Formulation (Near SFD	PM10	PM2.5 & PM10 Dust	0.724 mg/m^3	5 mg/m^3
		PM2.5		0.078 mg/m^3	

		Area)		Sampler		
5	SP Plant (Nr. Silo)	PM10	PM2.5 & PM10 Dust Sampler	1.062 mg/m³	5 mg/	
		PM2.5		0.104 mg/m³		

Reports attached here as **Annexure-C."**

	The flue gas emissions shall conform to the standards prescribed by the Gujarat Pollution Control Board.	PP Submitted "The flue gas emissions are confirmed to the standards prescribed by the Gujarat Pollution Control Board time by time. Every time, results found within the norms." **Complied subject to comparison of emissions level with GPCB Standard.**
Iii	As reflected in the ETA /EMP report, effluent generation shall not exceed 1.86 m^3/d.	PP Submitted that **"Complied** – Effluent generation is not exceeding 1.86 m^3/day. Data of effluent generation of last six month is given below: January,2017 = 0.766m^3/day February,2017 = 0.9 m^3/day March,2017 = 0.9 m^3/day April,2017 = 0.43 m^3/day May,2017 = 0.4 m^3/day June,2017 = 0.4 m^3/day
	The effluent shall be segregated into various streams. The waste streams shall be segregated into high COD waste, toxic waste, low COD waste, and inorganic waste etc.	Company is segregating the effluent stream into Low COD (Boiler & Cooling Blow down, washing) and Aqueous& Residue stream (Process). Data of segregation the effluent stream of Low COD (Boiler & Cooling Blow down, washing) and Aqueous Residue stream (Toxic Waste) is given below:

Month 2017	Wastewater generation from Low COD (KL/Month)	Aqueous Residue waste from process (KL/Month)
January	23	51.245
February	27	61.38
March	27	72.22
April	13	74.355
May	12	61.53
June	12	78.32

	The domestic effluent after primary treatment in ETP shall be disposed through pipeline into the CETP for further treatment.	The low COD waste and the domestic effluent after primary treatment in ETP is disposed through pipeline into the CETP for further treatment. **Annexure –D (CETP Letter)**
	The quality of the treated effluent shall conform to the standards prescribed by SPCB /EPA Rules.	The quality of the treated effluent is confirmed to the standards prescribed by CETP norms because of company is sending the treated effluent to CETP for further treatment. CETP is given their inlet norms to all member industries as per SPCB /EPA Rules.
	The hazardous stream shall be evaporated in solar evaporation pan and concentrated waste water shall be evaporated in the incinerator.	Company is not evaporated the hazardous stream in solar evaporation pan due to air pollution but company is incinerated the hazardous stream. The concentrated waste water incinerated in the captive incinerator but last six month, company has

		became membership of M/s. RSPL for Co-processing aqueous residue stream.
	The company shall achieve zero discharge of effluent by following the above method of treatment of effluent.	Company has been achieved zero discharge of effluent for toxic waste/High COD stream. Incinerator is Self shut down condition since last 6 months, Now company is sending the hazardous waste/toxic wastes (Calorific Value: 1500-2000) to M/s. RSPL for Co-Processing. **Complied subject to comparison of effluent concentrations with GPCB Standard. Also amendment may have to be sought for not doing solar evaporation, for which MoEF&CC to take a view.**
iv	Spent solvents shall be recovered as far as possible & recovery shall not be less than 95 percent. During purification process, solvent vapors are emitted from purification tanks as fugitive emissions. Action shall be taken to reduce the emissions as far as possible. Use of toxic solvents like Methylene Chloride (M.C.) etc. shall be minimum. All venting equipment shall have vapor recovery system.	**PP Submitted "Complied** – Company has been recovered the solvent of Ehtyl Acetate & Methylene Dichloride. Recovery of Ethyl Acetate is minimum 97% and Recovery of Methylene Dichloride is minimum 98%. **Complied** – Purification Process is under closed loop system, So there is minor change to emit the solvent vapor. Action plan has been undertaken to reduce the emission: **1) All Chemicals and Solvent will be transferred in close loop system** **2) Distillation of solvents:** Primary Condenser HE-01 → cooling tower water will be used to condense the solvents and the non condensed vapors will be condensed in a secondary condenser Secondary Condenser HE-02 → chilled water at 6 ^{o}c will be used to condense the non condensed vapors in the secondary condenser Voc trap Condenser HE-03 → chilled brine will be used to trap any traces of solvent which is slipped from secondary condenser **3) Process Vents Control Mechanism** All solvent vapor losses from day tanks, storage tanks, receivers will be connected to brine condenser to trap all volatile vapors. All tanks/receivers will be underclosed system with breather valves, wherever required. All venting equipment have vapor recovery system." In view of the above submissions, condition may be considered complied. **Complied.**
v	The process emissions (HCl, Cl2 and NH3) Shall be scrubbed through water and caustic scrubber. The efficiency of the scrubber shall be	**PP submitted "Complied –** There is no process emission (HCl, Cl2 and NH3) from the process. So Scrubber system is not required. **Note: COMPANY DOES NOT USE RAW MATERIAL THAT CAN NOT EMIT HCL, CL2 OR NH3 GAS. THEREFORE, THESE THREE PARAMETERS ARE NOT MONITORED.** The efficiency of the scrubber is not required to

<table>
<tr><td></td><td>improved and maintained as per the best practicable technology.</td><td>improve and maintain."

Not Applicable subject to amendment of condition from MoEF&CC</td></tr>
<tr><td>vi</td><td>The company shall monitor the VOC and data submitted to the Ministry.</td><td>PP Submitted "Complied – Company is monitored VOC on regular basis.
Result of workplace environment is given below and monitoring done by Prakruti Environmental Engineers, Vadodara. Company will submit the data to the Ministry now.
<table>
<tr><th>Sr. No.</th><th>Location / Operation</th><th>Identified Contaminants</th><th>Sampling Instrument</th><th>Average</th><th>TWA Conc.</th></tr>
<tr><td rowspan="4">1</td><td rowspan="4">Acephate Plant (Ground floor near ANF Nutch Agitator)</td><td>Ammonia</td><td rowspan="4">Handy Sampler</td><td>3.87</td><td>35 ppm</td></tr>
<tr><td>Ethyl Acetate</td><td>12.74</td><td>400 ppm</td></tr>
<tr><td>Methylene Chloirde</td><td>6.03</td><td>50 ppm</td></tr>
<tr><td>Acid Fumes as H2SO4</td><td>0.28</td><td>1 mg/m^3</td></tr>
<tr><td rowspan="4">2</td><td rowspan="4">Acephate Plant (First floor near CR3 & CR4)</td><td>Ammonia</td><td rowspan="4">Handy Sampler</td><td>2.45</td><td>35 ppm</td></tr>
<tr><td>Ethyl Acetate</td><td>10.03</td><td>400 ppm</td></tr>
<tr><td>Methylene Chloirde</td><td>4.05</td><td>50 ppm</td></tr>
<tr><td>Acid Fumes as H2SO4</td><td>0.14</td><td>1 mg/m^3</td></tr>
<tr><td rowspan="4">3</td><td rowspan="4">Acephate Plant (Near staircase)</td><td>Ammonia</td><td rowspan="4">Handy Sampler</td><td>2.84</td><td>35 ppm</td></tr>
<tr><td>Ethyl Acetate</td><td>9.39</td><td>400 ppm</td></tr>
<tr><td>Methylene Chloirde</td><td>3.47</td><td>50 ppm</td></tr>
<tr><td>Acid Fumes as H2SO4</td><td>0.20</td><td>1 mg/m^3</td></tr>
<tr><td rowspan="2">4</td><td rowspan="2">Acephate Formulation (Near SFD Area)</td><td>PM10</td><td rowspan="2">PM2.5 & PM10 Dust Sampler</td><td>0.724 mg/m^3</td><td rowspan="2">5 mg/m^3</td></tr>
<tr><td>PM2.5</td><td>0.078 mg/m^3</td></tr>
<tr><td rowspan="2">5</td><td rowspan="2">SP Plant (Nr. Silo)</td><td>PM10</td><td rowspan="2">PM2.5 & PM10 Dust Sampler</td><td>1.062 mg/m^3</td><td rowspan="2">5 mg/m^3</td></tr>
<tr><td>PM2.5</td><td>0.104 mg/m^3</td></tr>
</table>
In view of the above submissions, condition may be considered complied.
Complied</td></tr>
<tr><td>vii</td><td>Solid waste will be generated in the form of ETP Sludge, process sludge, spent catalyst, incinerator ash and salts.</td><td>PP Submitted "Complied – Solid waste generates in the form of ETP Sludge, process sludge and salts.
Incinerator is self shut down condition since last 6 months, so incineration ash is not generated.
Company is not used the catalyst, so spent catalyst is</td></tr>
</table>

	All the hazardous waste/toxic wastes shall be incinerated and ash generated shall be disposed off in Naroda landfill site.	not generated from such a manufacturing process. ETP sludge (0.5 MT/Month-Avg. of last six month) and incinerated ash is disposed off in Naroda landfill site. All the hazardous waste/toxic wastes (65 MT/Month-Avg. of last six month) incinerated in the captive incinerator but Incinerator is Self shut down condition since last 6 months, company has became membership of M/s. RSPL for Co-processing aqueous residue stream since last 6 months.. Company has been achieved zero discharge of effluent for toxic waste/High COD stream. Now company is sending the hazardous waste/toxic wastes (Calorific Value: 1500-2000) to M/s. RSPL for Co-Processing. **Certificate of RSPL is attached Annexure-E."** In view of the above submissions, condition may be considered **complied.** **Complied**
viii	The destructive efficiency of the incinerator shall be assessed by an agency like the Central Pollution Control Board and a report submitted.	PP Submitted that **"Complied-** Till the date, Central Pollution Control Board is not assessed the destructive efficiency of the incinerator any time. Incinerator is Self shut down condition since last 6 months." **PP needs to pursue the GPCB for its compliance.** **Inconclusive**
ix	As per the Charter on Corporate Responsibility on Environmental Protection the bio-assay test shall be replaced by Toxicity Factor test method Developed by CPCB, Toxicity factor of four (TF-4) shall be achieved by December 2003 and TF-2 by July, 2006. Action plan in this regard shall be submitted within three Months on issue of this letter.	PP submitted that **"Complied-** Company is sending their treated effluent to CETP for final treatment and disposal and not discharge directly. The CETP is doing Bio – Assay test and conform the norms prescribed by the SPC/CPCB. Now company will do the bio-assay test." **It may be seen that TFT has not been introduced and company promises to do bio-assay test now.** **Partly complied.**
x	Green belt of adequate width and density in an, project area of 0.0395hectare shall be provided to mitigate the effect of fugitive emissions all, round the plant. The development of green belt along the boundary wall, open space- and avenue roads shall be improved in consultation, with the local DFO as per the CPCB guidelines.	PP submitted that **"Complied –** Company has been developed Green belt in project area of 0.0395 hectare to mitigate the effect of fugitive emissions all, round the plant. Company has been developed the green belt in plant premises around the boundary wall, open space- and avenue roads as per the CPCB guidelines." But during inspection, full compliance was not observed. **Partly complied.**
xi	The company shall adopt waste minimization/cleaner production techniques to reduce the pollution load and action plan, in this regard shall be submitted to the Ministry within three months.	PP submitted that **"complied –** Company has been adopted waste minimization/cleaner production techniques to reduce the pollution load. Action plan is not submitted to Ministry." **Partly complied.**

xii	The company shall undertake rainwater harvesting measures to recharge the ground water as well as reduce consumption of fresh water.	PP submitted that **"Complied** – Rain water harvesting is not possible in pesticide unit due to probability of decontamination of rain water." **Complied subject to suitable amendment of the condition by MoEF&CC.**
xiii	The project proponent will comply with the environmental protection measures and safeguards recommended in EIA/EMP/Risk assessment report. Analysis reports as well as the recommendations of the public hearing panel.	PP submitted that **"Complied**- The project proponent comply with the environmental protection measures and safeguards recommended in EIA/EMP/Risk assessment report Public hearing was not applicable because plant is located in notified industrial estate." **Details of EMP to be submitted for ensuring full compliance. Also amendment for exempting PH may have to be needed.** **Partly complied.**
xiv	The Company shall Undertake eco-development measure including-community welfare measures in the project area for the overall Improvement of the environment. The eco-development plan should be submitted to the CPCB within three months of receipt of this letter for approval.	PP submitted that **"Complied**- Company is doing the CSR activities in the project area for the overall Improvement of the environment and Report attached here. For Year 2016-2017, company has been contributed Rs. 52.03 Lac for CSR activities like Promoting Education, Erecting Hunger and Poverty, Promoting Health care including preventive health care, Assistance to Senior Citizen, Animal Welfare, Promoting Social Equality etc. For Year 2015-2016, Company has been contributed Rs. 50.50 Lac for CSR activities like Promoting Education, Erecting Hunger and Poverty, Promoting Health care including preventive health care, Assistance to Senior Citizen, Animal Welfare, Promoting Social Equality etc.. Company is not submitted eco-development plan to CPCB, now company will be submitted eco-development plan to CPCB." **As stated, now company will have to submit eco-development plan to CPCB."** **Complied subject to above.**
B	**GENERAL CONDITIONS**	
i	The project authorities must strictly adhere to the stipulations made by the Gujarat Pollution Control Board.	PP submitted that " **Complied-** The project authorities is strictly adhere to the stipulations made by the Gujarat Pollution Control Board" Detailed condition wise compliance is to be provided. **Complied subject to above.**
ii	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment & Forests. In case of deviations or alterations in the project proposal from those Submitted to	PP submitted that **"Complied** - Company is going for expansion of pesticide products, so company has applied the Environmental Clearance to MoEFCC vide file No. J-11011/362/2014-IA II (I) dated:10/03/2015. There is no deviation in the project proposal."

	this Ministry for clearance, a fresh reference should be made to the Ministry to assess adequacy of the conditions, imposed- and to add additional 'environmental protection measures required, if any.	**Complied.**
iii	The project authorities must strictly comply with the rules and regulations under the Manufacture, Storage and Import of Hazardous Chemicals Rules, 2000. Prior approvals of Chief Inspector of Factories, Chief Inspector of Explosives, Fire Safety Inspectorate etc. must be obtained.	PP submitted that **"Complied** - The project authorities is strictly complied with the rules and regulations under the Manufacture, Storage and Import of Hazardous Chemicals Rules, 2000. Company is stored the hazardous chemicals in separate storage area. Company has been obtained the approval of Chief Inspector of Factories, Chief Inspector of Explosives and Fire Safety Inspectorate." **Documentary proof of approval of CIF and CIE to be produced.** **Complied subject to above.**
iv	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 Wastes (Management Lind Handling) Rules, 2000. Authorization from the State Pollution Control Board must be obtained for collection, storage, treatment and disposal of hazardous wastes.	PP submitted that **"Complied -** The project authorities is complied with the rules and regulations with regard to handling and disposal of hazardous wastes in accordance with the Hazardous Wastes (Management Lind Handling) Rules, 2000. **Disposal of Haz. Waste:** Unit is member of TSDF Site (M/s. NEPL) for solid waste (ETP Sludge -0.5 MT/Month). Unit is member of CHWIF (M/s. RSPL- Panoli, Bharuch) for Co-Processing of process waste-65 MT/Month. Used Oil & Discarded Drums are being sold to authorised recyclers/re refiners. Company has valid consent to operate vide consent order No. AWH-63439 dated -18/07/2014 and valid upto 08/04/2019 for collection, storage, treatment and disposal of hazardous wastes." **Complied.**
V	The overall noise levels in and around the plant area shall be kept well within the standards (85dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc., on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under the Environment (P) Rules, 1939 viz. 75 (dBA (day time) and 70 dBA (night time).	PP submitted that **"Complied -** Company has been installed the acoustic hoods, silencers, enclosures etc. to control Noise and limit of noise is within the standards. The ambient noise levels is confirmed to the standards prescribed under the Environment (P) Rules, 1939 viz. 75 (dBA (day time) and 70 dBA (night time) and monitoring of ambient noise is done by **M/s. Entech Laboratories, 33, 34, Kushal Estate, Saket Ind. Estate, Village: Moraiya, Tal-Sanand, Dist: Ahmedabad, Gujarat – GPCB Recognized Schedule – II Environmental Auditor and No. GPCB/EA-293/404685 dated: 20/02/2017 and valid upto 31/12/2018.** Level of noise is given below: **June, 2017**

		Sr. No. / Location of Monitoring / Day Time Noise Level (dBA) / Night Time Noise Level (dBA) 1 – Nr. ACFT plant – 70.8 – -- GPCB Norms – 75 – 70 **May, 2017** 1 – Nr. ACFT plant – 68.5 – -- GPCB Norms – 75 – 70 **April, 2017** 1 – Nr. ACFT plant – 71.2 – -- GPCB Norms – 75 – 70 **March, 2017** 1 – Nr. ACFT plant – 72.7 – -- GPCB Norms – 75 – 70 **February, 2017** 1 – Nr. ACFT plant – 69.3 – -- GPCB Norms – 75 – 70 **January, 2017** 1 – Nr. ACFT plant – 71.5 – -- GPCB Norms – 75 – 70 In view of the above, condition may be considered as **complied.**
Vi	Occupational health surveillance programme shall be undertaken as regular exercise for all employees specifically for those engaged in handling substances. First aid facilities in the Occupational Health Care Centre should be strengthened and medical records of each employee should be maintained separately.	PP submitted that **"Complied** –Occupational health surveillance programmeis undertaken as regular exercise for all employees specifically for those engaged in handling substances. Company has been appointed Dr. Hetalbhai Shah (M.B.B.S., AFIH) G-2418 for medical checkup of all employees and workers. Medical records of each employee are maintained separately. Medical Report of workers is attached

		here" In view of the above, condition may be considered as **complied.**
Vii	A separate Environment Management Cell equipped with full fledged laboratory facilities must be set up to carry out the Environmental Management and monitoring functions.	PP submitted that **"Complied** – Environment Management Cell is given below: 1) Mr. Jayesh Visavadia General Manager (Environment) 2) Mrs. KhyatiMewada Executive (Environment) 3) Mr. Lalit and Mr. Mahendra (Operator) Laboratory facilities is equipped in factory as per requirement of EMS and monitoring function is handled by third party - **M/s. Entech Laboratories, 33, 34, Kushal Estate, Saket Ind. Estate, Village: Moraiya, Tal-Sanand, Dist: Ahmedabad, Gujarat – GPCB Recognized Schedule –II Environmental Auditor and No. GPCB/EA-293/404685 dated: 20/02/2017 and valid up to 31/12/2018."** **However, PP may appoint some personnel with environmental engineering or science.** **Complied**
Vii	The project authorities will provide requisite funds both for recurring and non-recurring expenditure to implement the conditions stipulated by the Ministry of Environment & Forests as well as the State Government along with the implementation schedule for all conditions stipulated herein. The funds shall not be diverted for any other purposes.	PP submitted that **"Complied** - The project authorities has been provided requisite funds – Rs. 40.0 Lacs both for recurring and non-recurring expenditure to implement the conditions stipulated by the Ministry of Environment & Forests as well as the State Government along with the implementation schedule for all conditions stipulated. Company is not diverted fund for any other purposes." Details have not been provided bifurcating recurring and capital costs item wise, which may be submitted. **Complied subject to above.**
viii	The implementation of the project vis-a-vis Environmental Action Plans will be monitored by Ministry's Regional Office at Bhopal/Gujarat Pollution Control Board/ Central Pollution Control Board. A six monthly compliance status report should be submitted to the monitoring agencies.	PP stated that Company submits the six monthly compliance status reports to Ministry's Regional Office at Bhopal/Gujarat Pollution Control Board since December, 2015. **It may be seen that submission is only since December, 2015, instead of regular since grant of EC.** **Partly complied.**

ix	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 at http://envfor.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.	**PP stated " Complied –** Company was received the EC letter on 25/12/2005 by post, so it was delay to publish the advertisement. **Advertisement is given below:"** **Seems published in one newspaper and beyond mandated date** **Partly complied.** / MONDAY 31 OCTOBER 2005 અમદાવાદ મ્યુનિસિપલ કોર્પોરેશન આતશબાજી નિહાળવા જાહેર નિમંત્રણ
x	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.	PP sated that **Complied. However no proof submitted.** **Not complied unless proof is submitted.**

1.0 Summary:

Out of 24 total conditions, it may be seen that 8 are fully complied, 7 are complied subject to some conditions like submission of additional input/clarification, 6 are partly complied, 1 is not complied and 1 is Not Applicable subject to amendment by MoEF&CC. These have been explained and elaborated in the foregoing compliance report against each of the conditions and 1 is inconclusive. PP needs to take further necessary and time bound action for early compliance in respect of the relevant conditions.

2.0 Court cases and show cause/closure notice

The PP has stated that there are no court cases against the Unit.

Details of show cause/closure notice issued by GPCB vis-à-vis their compliance is at **Appendix-I.**

3.0 Response of PP to RO Bhopal's letter dated 20.04.2017 and 06.07.2017 are at **Appendix-II and Appendix III respectively .**

Scientist 'G

3. Show Cause/Closure notice and it's Reply of last 3 years, as furnished by PP

Sr. No	Date	Point	Compliance
1	03.10.2017	1. Generated aqueous wastewater/ML from process is sent to the RSPL, Panoli&Geohybrid Industrial Solutions PVt. Ltd., PalsanaSurat for which you are not having permission of the Board.	Ans.: We have our own incinerator and incinerator damage and shutdown for the maintenance so we are taking the membership from RSPL for the co-process and we wrote a letter for the same to board before sending the material. In the same line we are mention in our expansion NOC also. For co-processing material we sent through online manifest. Now our incinerator is in working and in future before sending the co-process material we will take the prior permission from the board than only we send the material.
		2. You have installed one new Stream Bed Drier for the formulation of their Product as Acephate + Bifenthrin – WBG 20 which was not as per the CTE/CCA.	Ans. : We have installed new stream bed drier to replace of older stream bed drier, because older drier is not working properly so old drier removed. We are not formulation Acephate + Bifenthrin at our unit, we are doing job work from outside, after sending material in market and it is found material converted in lumps, so we take material return back at our for lumps breaking and send it back to market, during board visit lumps breaking activity was going on.
		3. You have provided Bypass Duct Line from the Cyclone separator to chimney.	Ans. : We have already putting blind in the bypass line, as per your instruction we will be remove the bypass line within month.

GSP Crop Science Private Limited

HO : 404, Lalita Complex, Opp. H.D.F.C. Bank, Mithakhali Six Road, Navrangpura, Ahmedabad-380009. Gujarat. INDIA
Phone : 26466580, 26440493, Fax : +91-79-26448872 E-mail : gspcrop@vsnl.net, Website : www.gspcrop.in

August 22, 2017

To,
Dr. H.V.C. Chari
Scientist 'D'
Ministry of Environment & Forests,
Regional Office, Western Region,
Kendriya Paryavaran Bhavan,
Link Road No. 3, Ravi Shankar Nagar,
Bhopal – 462 016 (M.P.)

SUB. : "CERTIFICATE OF MONITORING REPORT FOR EXPANSION OF PESTICIDE PRODUCT BY M/s. GSP CROP SCIENCE PVT. LTD. FORMERLY KNOWN AS M/S. GUJARAT SUPERPHOSPHATE INDUSTRIES (P) LIMITED LOCATED AT PLOT NO. 100 to 103, GVMM, GIDC ODHAV, AHMEDABAD, GUJARAT.

CATEGORY: A-5(b) (INDUSTRIAL SECTOR PROJECT)

REF.: YOUR LETTER NO. 5-137/2009(ENV)/238 DATED APRIL 20, 2017
2) MoEFCC, BHOPAL VISIT DATED: 02/07/2017

Dear Sir,

This has reference to above subject matter; we are enclosing herewith the following documents in line with your requirements.

1. **Present Status (Physical/Civil) of work progress.**
2. **Duly filled enclosed data sheet for existing EC.**
3. **Show Cause/Closure notice and it's Reply of last 2 years.**
4. **Copy of EC Letter**
5. **A Comprehensive compliance report in respect of all the conditions of EC with adequate reasoning and supporting data showing the summary of the monitored data in a tabular format within the compliance status itself.**
6. **Copy of Consent to Operate.**

We hope you would find the same in line with your requirements and oblige.

Thanking You,

Yours faithfully,

For GSP Crop Science (P) Ltd.

Jayesh Visavadiya
(General Manager)

Encl: a/a

Appendix – III

GSP Crop Science Private Limited

HO : 404, Lalita Complex, Opp. H.D.F.C. Bank, Mithakhali Six Road, Navrangpura, Ahmedabad-380009. Gujarat. INDIA
Phone : 26466580, 26440493. Fax : +91-79-26448872 E-mail : gspcrop@vsnl.net, Website : www.gspcrop.in

August 22, 2017

To,
Dr. B.B. Barman
Adviser
Ministry of Environment, Forests & Climate Change,
Regional Office, Western Region,
Kendriya Paryavaran Bhavan,
Link Road No. 3, Ravi Shankar Nagar,
Bhopal – 462 016 (M.P.)

SUB. : "CERTIFICATE OF MONITORING REPORT FOR PROPOSED EXPANSION OF PESTICIDE PRODUCT IN EXISTING UNIT AT PLOT NO. 100 to 103, GVMM, GIDC ODHAV, AHMEDABAD, GUJARAT OF M/s. GSP CROP SCIENCE PVT. LTD."

CATEGORY: A-5(f) (INDUSTRIAL SECTOR PROJECT)

REF.: YOUR LETTER NO. 5-137/2009(ENV)/422 DATED July 06, 2017

Dear Sir,

With reference to above subject matter, we are enclosing herewith the following documents in line with your requirements.

(i). A detail of Environment Management Plan (EMP) was neither provided in data sheet nor in relevant place of EC Compliance Report. EMP being a cardinal part of EIA, this must be provided item-wise with cost details and status of implementation, wherever so sought of.

Answer (i): We have filled up the data sheet properly and mentioned item-wise with cost details and status of implementation of existing unit, so please Data sheet as **Annexure-I.**

(ii). It was gathered that the Company has engaged an Agency to monitor Air, water quality, fugitive emission etc. In this regard, name, accreditations etc of the agency have to be mentioned. It is not clear as to how a frequency of once in 3 months is being followed for monitoring purpose. This may be explained.

Answer (ii): Company has engaged with M/s. Entech Laboratories, 33, 34, Kushal Estate, Saket Ind. Estate, Village: Moraiya, Tal-Sanand, Dist: Ahmedabad, Gujarat – GPCB Recognized Schedule –II Environmental Auditor and No. GPCB/EA-293/404685 dated: 20/02/2017 and valid up to 31/12/2018 for to monitor Air, water quality,

fugitive emission etc. And Monitoring frequency is once in 3 months. Certificate is attached in EC Compliance Report.

(iii). During inspection, foul smell was felt. It may be explained if VOC and fugitive emissions are not being effectively tackled which may be responsible for such smell. In any case, monitored data have to be provided for fugitive emissions.

Answer (iii): Foul smell was felt due to fugitive emissions. Result of fugitive emission is found within the limit. Monitored data of fugitive emission is given below:

Sr. No.	Location/ Operation	Identified Contaminants	Sampling Instrument	Average	TWA Conc.
1	Acephate Plant (Ground floor near ANF Nutch Agitator)	Ammonia	Handy Sampler	3.87	35 ppm
		Ethyl Acetate		12.74	400 ppm
		Methylene Chloirde		6.03	50 ppm
		Acid Fumes as H2SO4		0.28	1 mg/m^3
2	Acephate Plant (First floor near CR3 & CR4)	Ammonia	Handy Sampler	2.45	35 ppm
		Ethyl Acetate		10.03	400 ppm
		Methylene Chloirde		4.05	50 ppm
		Acid Fumes as H2SO4		0.14	1 mg/m^3
3	Acephate Plant (Near staircase)	Ammonia	Handy Sampler	2.84	35 ppm
		Ethyl Acetate		9.39	400 ppm
		Methylene Chloirde		3.47	50 ppm
		Acid Fumes as H2SO4		0.20	1 mg/m^3
4	Acephate Formulation (Near SFD Area)	PM10	PM2.5 & PM10 Dust Sampler	0.724 mg/m^3	5 mg/m^3
		PM2.5		0.078 mg/m^3	
5	SP Plant (Nr. Silo)	PM10	PM2.5 & PM10 Dust Sampler	1.062 mg/m^3	5 mg/m^3
		PM2.5		0.104 mg/m^3	

(iv) Internal drainage system was found to be unsatisfactory and inadequate. Pool of water was found with muds here and there. Pucca road was also found inadequate, which was posing difficulty in inspection.

Answer (iv): Due to heavy rain fall, it was happened. Now it is clear. Kindly find attached photographs for your reference in Annexure – II.

(v) Maintenance and upkeep of ETP was also found shabby and needs improvement.

Answer (v): We have improved housekeeping at ETP area. Kindly find attached photographs for your reference in Annexure – II.

(vi) Noise was heard coming out heavily from Ammonia/Nitrogen plant. It may be explained if noise levels are crossing permissible limits.

Answer (vi): Noise level is not crossed the permissible limits.

The ambient noise levels is confirmed to the standards prescribed under the Environment (P) Rules, 1939 viz. 75 (dBA (day time) and 70 dBA (night time) and monitoring of ambient noise is done by **M/s. Entech Laboratories, 33, 34, Kushal Estate, Saket Ind. Estate, Village: Moraiya, Tal-Sanand, Dist: Ahmedabad, Gujarat – GPCB Recognized Schedule –II Environmental Auditor and No. GPCB/EA-293/404685 dated: 20/02/2017 and valid up to 31/12/2018.**

Level of noise is given below:

Date: 15/09/2016

Sr. No.	Location of Monitoring	Day Time Noise Level (dBA)	Night Time Noise Level (dBA)
1	Nr. ACFT plant	70.3	--
GPCB Norms		75	70

Date: 29/03/2017

Sr. No.	Location of Monitoring	Day Time Noise Level (dBA)	Night Time Noise Level (dBA)
1	Nr. ACFT plant	72.7	--
GPCB Norms		75	70

(vii) Green belt was literally absent. It was learnt that the company tried to develop some green area but, was not successful. As per EC condition, 0.0395 hectare area was to be developed as green belt. But, it was seen that meager quantity of few trees were planted. This may be explained and a plan may be submitted to develop the same in a time bound manner along boundary of premises.

Answer (vii): About 11,000 sq. meter of the total land area is available and out of this the green belt area is allotted 3,600 m^2 (32.73%) to develop green belt on periphery of the plant.

GREEN BELT DEVELOPMENT PROGRAMME

YEAR	NO. OF TREES / PLANTS TO BE PLANTED IN PLANT AREA
2017-2018	100
2018-2019	100
2019-2020	100
2020-2021	100

(viii) Incinerator was reported and found non-functional. In fact, this was found defunct. This may be explained. Destructive efficiency of this incinerator was to be assessed by CPCB., which was not done. All these will have to be explained.

Answer (viii): We have self-shut down the incinerator from last six months. We have become membership of M/s. RSPL for Co-processing aqueous residue stream since last 6 months.

(ix) Waste Minimization technique has not been adopted. This needs to be explained. This is mandated vide specific condition no. (xi) and an action plan was to be submitted to Ministry within three months. This does not seem to have been complied.

Answer (ix): Company is minimized the generation of effluent (0.9 KL/Day) by R&D and vide specific condition no. (iii) - As reflected in the ETA /EMP report, effluent generation shall not exceed 1.86 m^3/d. So company has been minimized the generation of effluent (0.9 KL/Day).

(x) Rain Water Harvesting was not complied. This may be explained. (As per conditions (xii)). PP stated that this was done to team of ground water contamination. In that case, PP should have sought an amendment in condition.

Answer (x): Rain water harvesting is not possible in pesticide unit due to probability of decontamination of rain water. Therefore company is not provided the facility of rain water harvesting.

(xi) As mandated vide General Conditions No. (i), the PP needs to submit detailed Compliance of Conditions of GPCB. This has not been provided. (xii) A proper Environment Management Cell was not formed with a full fudged Laboratory. This is as per general condition no. (vii). Compliance of this condition may be provided along with officers, their qualifications etc and facilities of laboratory.

Answer (xi): Environment Management Cell is given below:

1) Mr. Jayesh Visavadia

General Manager (Environment)

2) Mrs. Khyati Mewada

Executive (Environment)

3) Mr. Lalit and Mr. Mahendra (Operator)

Laboratory facilities is equipped in factory as per requirement of EMS and monitoring function is handled by third party - **M/s. Entech Laboratories, 33, 34, Kushal Estate, Saket Ind. Estate, Village: Moraiya, Tal-Sanand, Dist: Ahmedabad, Gujarat – GPCB Recognized Schedule –II Environmental Auditor and No. GPCB/EA-293/404685 dated: 20/02/2017 and valid up to 31/12/2018.**

We hope you would find the same in line with your requirements and oblige.

Thanking You,
Yours faithfully,

For, GSP Crop Science Pvt. Ltd.

Authorised Signature
Encl: a/a