



INDIA GLYCOLS LIMITED



Works & Registered Office : A-1, Industrial Area, Bazpur Road, Kashipur - 244713, Distt. Udham Singh Nagar (Uttarakhand)
Phone : +91 5947 269000 / 269500, Fax : +91 5947 275315, 269535
Website : www.indiaglycols.com

Ref: AG/MoEF & CC/EC Comp-Ethanol/2021/01

Dated: May 28th, 2021

To,

**Dr. Krishnendu Mondal, Scientist 'C', GOI
Ministry of Environment, Forests & Climate Change
Regional Office (North-Central Zone)
25, Subhash Road, Dehradun – 248001**

Subject: Six Monthly Compliance Report of the Conditions of Environmental Clearance for Expansion of Distillery Unit by M/s India Glycols Limited at A – 1, Industrial Area Bazpur Road, Kashipur, District Udham Singh Nagar, Uttarakhand.

Dear Sir,

Please find enclosed herewith the Compliance Report of the Conditions of Environmental Clearance for the Expansion of Distillery Unit at A – 1, Industrial Area, Bazpur Road, Kashipur, District – Udham Singh Nagar, Uttarakhand by M/s India Glycols Limited for the Period **October, 2020 to March, 2021** along with dully filled Data – Sheet.


We assure that we are adhering all the safety measures at work place alongwith the guidelines to implement strict social distancing and isolation measures to contain the spread of COVID-19 and complying with all the conditions as stipulated in the EC granted by Ministry of Environment & Forests, GOI, New Delhi.

We hope that the given data would be sufficient to meet the requirement.

Thanking You,

Yours Faithfully

For M/s INDIA GLYCOLS LIMITED


(Dr. Ashutosh Gautam)
Head (Environment)

Encl.: Compliance Report for the Period of October, 2020 to March, 2021

**CC: CPCB, Zonal Office (North), PICUP Bhawan, Vibhuti Khand, Gomti Nagar, Lucknow
226010
UKPCB, "Goura Devi Paryavaran Bhawan", 46 B, I.T. Park, Sahastradhara Road
Dehradun – 248001**

Jitendra K Jawla

From: Jitendra K Jawla
Sent: 31 May 2021 21:04
To: 'moef.ddn@gov.in'
Cc: Dr.Ashutosh Gautam; Girish Lamba
Subject: Six Monthly EC Compliance Reports of Ethanol, Chemical & Lignocellulosic Biomass based Pilot Plant of IGL Kashipur and IGL Herbal Extraction Unit, Dehradun
Attachments: 3) IGL_KSP_Ligno cellulosic Biomass based Pilot Plant_EC Compliance_October 2020 to March 2021.pdf; 1) IGL_Ethanol Plant_EC Compliance _October 2020 to March 2021.pdf; 2) IGL_KSP_Chemical Plant_EC Compliance_October 2020 to March 2021.pdf; 1. IGL_DDN_Herbal Extraction_2008 EC Compliance_October 2020 to March 2021.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Tracking:	Recipient	Delivery	Read
	'moef.ddn@gov.in'		
	Dr.Ashutosh Gautam	Delivered: 31-05-2021 21:05	Read: 31-05-2021 21:21
	Girish Lamba	Delivered: 31-05-2021 21:05	

Dear Sir,
Greetings of the Day....!!

Please find attached herewith the **Six Monthly Compliance Report of Environmental Clearance** of M/s India Glycols Limited (Ethanol Plant Chemical Plant & Lignocellulosic Biomass based Pilot Plant) at A1 Industrial Area, Bazpur Road, Kashipur, District U.S. Nagar, Uttarakhand for the Period of **October 2020 - March 2021**.

IGL, Kashipur Plant:-

Environmental Clearance Details:

1. Expansion of **Distillery Unit** vide **MoEF Clearance Letter No. J-11011/219/2003-IA II Dated 24.06.2004 & J-11011/219/2003-IA11 (1) Dated 11.07.2006.**
2. **Expansion and Modernization of existing Chemicals Manufacturing Unit and 21 MW of Captive Power Generation** vide **MoEF Clearance Letter No. J – 11011/121/2008 – IA II (1) Dated 13.05.2009.**
3. Installation of **Lignocellulosic Biomass Processing Pilot Plant** for taking trials to Produce Ethanol vide **MoEF Clearance Letter No. J – 11011/488/2010-IA II (I) Dated 22.03.2013.**

Since File size is large, therefore please refer the below mentioned Google Drive Link for Compliance Report alongwith the Annexures

Encls:

1. **Compliance Report of Ethanol Plant alongwith Pertinent Annexures:**
https://drive.google.com/file/d/1MoCLL-5ezx0Wt_1SX_VLCAQldh-KVEhA/view?usp=sharing
2. **Compliance Report of Chemical Plant alongwith Pertinent Annexures:**
<https://drive.google.com/file/d/1qTiv9lyZry6s55KC793xWA5IJdTt0-tH/view?usp=sharing>
3. **Compliance Report of Lignocellulosic Biomass Processing Pilot Plant:**
<https://drive.google.com/file/d/1mvGiBD0Z7hpF-3m59coqcpXYtK9PG2VU/view?usp=sharing>

Herbal Extraction Unit IGL, Dehradun Plant:-

Environmental Clearance Details:

1. Expansion of Super Critical Fluid Extraction (SCFE) Unit for production of Natural Health Product (150 to 1050 kg/day) vide MoEF EC No. J-11011/770/2007-IA II (I), Dated 12.03.2008.

Encls:

**Compliance Reports of Herbal Extraction Unit alongwith Pertinent Annexures:
<https://drive.google.com/file/d/1g0HnH02ic8gbhpK941Emq9Bq5j0JNOV4/view?usp=sharing>**

Thanks & Regards

**Jitendra K Jawla
IGL, Kashipur**

SIX MONTHLY COMPLIANCE REPORT
OF
THE CONDITIONS
OF
ENVIRONMENTAL CLEARANCE
FOR
EXPANSION OF DISTILLERY UNIT
AT
A – 1, INDUSTRIAL AREA BAZPUR ROAD,
KASHIPUR, DISTRICT UDHAM SINGH
NAGAR, UTTARAKHAND
ENVIRONMENTAL CLEARANCE
J-11011/219/2003-IA.II DATED 24.06.2004 &
J-11011/219/2003-IA11 (1) DATED 11.07.2006
Period of Compliance: October 2020 to March 2021



M/S INDIA GLYCOLS LIMITED

Name of the Project: Ethanol Plant (Capacity - 425 KL/Day) of M/s India Glycols Limited.

Clearance Letter No: J-11011/219/2003-IA.II DATED 24.06.2004 & J-11011/219/2003-IA11 (1) DATED 11.07.2006

Period of Compliance Report: October, 2020 to March, 2021

Production Capacities as per Sr. No. 2 of EC & Present status as per CCA

Production Capacities as per EC		:	Present Status	
The Company has obtained the Environmental Clearance vide Letter No: F. No. J-11011/219/2003-IA-II, dated 24.06.2004 and revision of ETP scheme for achieving ZLD vide Letter No. J-11011/219/2003-IA II (I), dated 11 th July 2006.		:	The Company has obtained “ No increase in Pollution Load Certificate ” from the Committee constituted for change in product mix as per amended EIA Notification. S.O. 3518 (E) dated 23.11.2016 As per Notification further CCA was revised & amended CCA granted by UKPCB vide Letter No. UEPPCB/HO/Con/I-8/2019/853 dated 28.09.2020. CCA further renewed for the year 2021-22. The revised product mix with capacities is given in the as under:	
Products	Capacity	:	Products	Capacity
Rectified Sprit (RS)/Extra Neutral Alcohol (ENA)	Installed – 425.0 KLPD (as per EC) Operational – 240.0 KLPD (as per CCA) i.e. 7200 KL/Month	:	Rectified Sprit/Extra Neutral Alcohol/ Absolute Alcohol	240 KLD (7200 KL/Month) Rectified Sprit/ENA Or 228 KLD (6840 KL/Month) Absolute Alcohol (One Product will be produced at one time)
			The procedure for amendment in CCA has been carried out as per the procedure defined in the Notification S.O. 3518 (E) dated 23.11.2016 issued by MoEF & CC. Therefore, this intimation is being submitted to MoEF & CC through Six Monthly Compliance Report of Environmental Clearance granted by MoEF & CC vide Letter No. F. No. J-11011/219/2003-IA-II, dated 24.06.2004 and J-11011/219/2003-IA II (I), dated 11 th July 2006 as amendment of EIA Notification 2006 for para 7(ii).	



A. Specific conditions w.r.t. the Environment Clearance for revision of ETP Scheme (J-11011/219/2003-IA11 (1) DATED 11.07.2006) for achieving zero discharge (Capacity 425.0 KLPD):

S. No.	CONDITIONS	COMPLIANCE STATUS
i).	<p>Out of 425 KLPD Distillery Unit, capacity for the Molasses based is 325 KLPD and Cane Juice based is 100 KLPD.</p>	<p>India Glycols Limited had established & commissioned a stand-alone 120.0 KLPD molasses based Distillery Plant in the year 1988-89. Due to increasing demand of alcohol IGL expanded distillery capacity from 120.0 KLPD to 205.0 KLPD in the year 1999 and 205.0 KLPD to 425.0 KLPD in the year 2004. NOC for establishing 120.0 KLPD distillery plant was granted vide letter no. 3944/NOC/India Glycols Ltd./87 dated 13.03.1987 by Uttar Pradesh Pollution Control Board, Lucknow. (Annexure - A1) thereafter NOC for expansion of distillery capacity by 85.0 KLPD was granted vide letter no. G/98/7/C-5/3(N.O.C.)/6/46 dated 13.08.1999 by Uttar Pradesh Pollution Control Board. (Annexure - A2). IGL expanded distillery capacity from 205.0 KLPD to 425.0 KLPD in the year 2004. The Environment Clearance (EC) for 220.0 KLPD distillery (120.0 KLPD from Molasses route and 100.0 KLPD from Cane Juice) was issued by Ministry of Environment & Forest (MoEF), Govt. of India, vide Letter No. J-11011/219/2003 - IA II (I), dated 24th June 2004 and Environment Clearance for revision of ETP scheme for achieving zero discharge (capacity - 425.0 KLPD) was issued vide Letter No. J-11011/219/2003 - IA II (I), dated 11th July 2006 and both are enclosed as Annexure-A3 & Annexure-A3.1. Distillery based on Cane juice (capacity - 100 KLD) was operated for the period January 2006 to January 2010 along with</p>



		<p>Molasses based (325.0 KLD) (Cane juice stream was stopped due to viability of product).</p> <p>Production Data October 2020 to March 2021: Alcohol production from Molasses – 129.87 KLPD (Average) Details of Month wise production is enclosed as <u>Annexure – I.</u></p>
ii).	<p>Total effluent generation with the approved scheme without reboiler is 4600 m³/d, of which 3900 m³/d is from the molasses based route and 700 m³/d from cane juice process. Effluent generation after installation of RO plant is 3880 m³/d. Out of 3880 m³/d of effluent generation, 1960 m³/d are utilized for ferti-irrigation and remaining 1920 m³/d are composted with press mud. With the present approved scheme, 51% of effluent is treated by ferti-irrigation and 49% by bio-composting.</p>	<p>: Presently it is not applicable due to implementation of Zero Liquid Discharge (ZLD). Ferti irrigation was started from January 2003 to utilize treated distillery effluent as per CPCB Protocol and remain in practice till June 2009. Bio composting was started in April 2003 and remain operational till June 2016. Bio composting operation was stopped w.r.t. ZLD Direction of CPCB/UEPPCB.</p>
iii).	<p>Effluent generation after reboiler from the molasses based operation will be 3250 instead of 3900 m³/d. The effluent from the cane juice based will be 700 m³/d, thus total effluent generation after installation of re-boiler will be 3950 m³/d. Total effluent generation after installation of RO will be 3650 m³/d. With the revised effluent treatment scheme, total effluent generation from molasses and cane juice would be 3650 m³/d i.e. 2950 m³/d from molasses based route and 700 m³/d from cane juice based route. Out of 3650 m³/d of effluent generation, 1800 m³/d will be concentrated in evaporator, 1100 m³/d will be used for ferti-irrigation and 750 m³/d for bio-composting. The revised scheme envisages evaporation of spent wash (49%), utilization of effluent for ferti-irrigation (30%) and bio-composting of spent wash (21%).</p>	<p>: ETP (Biogas Plant) was installed in the year 1989. Total 12 Nos. of bio-digesters were installed for treatment of raw spent wash in phase manner alongwith Secondary Treatment Plant. Reverse Osmosis Plant was installed in September 2006. However, at present, only two digester are in operation. Biogas is used in production of some value added chemicals at IGL. Therefore, for supply of biogas to chemical plant IGL is operating only two digester. Remaining 10 Nos. of digesters are not in operation & being dismantling. Operation of Multi-effect Evaporator started in December 2007. Ethanol Plant is achieving zero liquid discharge through MEE (Falling Film-03, Forced Circulation-02 & Falling Film-02 as standby) for enhancing the existing capacity) followed by well-designed</p>



		<p>slop boiler.</p> <p>Since Ferti irrigation & Bio composting were stopped in June 2009 & June 2016 respectively as per ZLD condition of Distilleries. Therefore presently only Evaporation & incineration process is in practice to achieve ZLD by concentration of Spent wash in Multi effect Evaporator (MEE) followed by Incineration in Slop fired Boiler.</p> <p>Our Bio-methanation Plant is based on Biphasic Anaerobic Technology (Acid methane segregation process) & it is being closely monitored for efficient & effective Operation. We are operating the Bio gas Plant for 240 m³/day (max.) of spent wash. Bio-methanated wash is also subjected to MEE.</p> <p>Effluent Data October 2020 to March 2021:- Average Effluent generation - 1043.99 MT/day (@8.04 MT/KL of Alcohol production) Utilization in Evaporator - 100.00 % Details as per <u>Annexure - II</u></p> <p>Brief Summary:</p> <p><u>Distillery operation (425.0 KLPD) for the period of 2004 to 2013</u></p> <p>Initially IGL has Four routes for treatment & disposal of spent wash; (i) Biomethanation followed by biocomposting, (ii) Biomethanation, Membrane filtration (RO) followed by biocomposting, (iii) Biomethanation, Evaporation (MEE) and incineration, and (iv) Biomethanation, Aeration followed by Ferti-irrigation for spent wash generated from cane juice</p>
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processing.

W.r.t. the CPCB Direction dated 30.06.2006 under Section 5 of the Environment (Protection) Act 1986, IGL has install the MEE followed by Incineration Boiler. After installation of Evaporator 45-50% of spent wash treated through Evaporator, 29-30% through two stage activated sludge process followed by Ferti irrigation & remaining 25-27% through RO followed by Bio composting.

IGL had stopped Rab Plant (Cane Juice) in January 2010 hence route no. (iv) not followed.

Distillery based on Cane juice (100 KLD) were operated for the period January 2006 to January 2010 (stopped due to viability of product).

Distillery operation (305.0 KLPD) for the period of 2013 to 2017

IGL had restrict the production capacity to 305.0 KLD equivalent to the installed capacity of spent wash concentration & incineration system (207 KLD) plus bio-composting facilities through bio methanation followed by RO system (98 KLD) (ref CPCB Direction under Section 5 of the Environment (Protection) Act, 1986, dated 09.05.2013)

IGL had augment the MEE by Forced Circulation system at 4th & 5th Calandria's so that MEE Plant is adequate equivalent to 240.0 KLD of alcohol production Capacity.

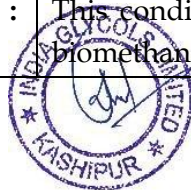


		<p>Bio-composting facilities through bio methanation followed by RO system (equivalent to 98.0 KLD distillery capacity) was stopped in Jan 2017.</p> <p><u>Distillery operation (240.0 KLPD) for the period of 2017 to till date</u></p> <p>February 2017 onwards our distillery is being operated on 240.0 KLD distillery capacity as per CPCB/UEPPCB Direction for achieving ZLD through MEE and burning in specially designed boilers.</p> <p><u>Distillery operation for Change in Product mix i.e. 240 KLD (7200 KL/Month) Rectified Sprit/ENA</u></p> <p><u>Or</u></p> <p><u>228 KLD (6840 KL/Month) Absolute Alcohol</u></p> <p>The Company has obtained “No increase in Pollution Load Certificate” from the Committee constituted for change in product mix as per amended EIA Notification S.O. 3518 (E) dated 23.11.2016.</p> <p>As per Notification further CCA was revised & amended CCA granted by UKPCB vide Letter No. UEPPCB/HO/Con/I-8/2019/853 dated 28.09.2020. CCA further renewed for the year 2021-22.</p>
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B. Specific conditions w.r.t. the Environment Clearance (J-11011/219/2003-IA.II DATED 24.06.2004) for Expansion of Distillery Unit (Capacity 425.0 KLPD):

i).	The Industry should ensure that the treated effluent and stack emissions from the unit are within the norms stipulated under EPA rules or SPCB, which is more stringent. In case of process disturbance / failure of pollution control equipments adopted by the unit, the respective unit should be shut down and should not be restarted until the control measures are rectified to achieve the desired efficiency.	: Steam is being sourced from Slop fired Boiler (Installed Capacity- 55.0 TPH) equipped with ESP. Online continuous emission monitoring system (OCEMS) has been installed also to monitor the Particulate matter (PM) concentration & being accessed through link as under:- URL:PM_CEMS http://epdms.forbesmarshall.in:8080/enviroconnect Flow Meter & Web Cameras are installed to monitor operational activities and its connectivity is being accessed at CPCB/UKPCB through link as: http://tpro.telsys.in/account/password-reset We are achieving ZLD through MEE & Incineration Boiler. Stack emission monitoring report is attached as Annexure - III
ii).	The company shall adopt batch type and continuous fermentation technology. Out of the expanded capacity of 220 KLD, 120 KLD shall be manufactured from molasses and 100 KLD from cane juice.	: Out of the expanded capacity 220.0 KLPD distillery (120.0 KLPD from Molasses route and 100.0 KLPD from Cane Juice). We have adopted Fed Batch Fermentation technology for 325.0 KLD of Molasses based capacity. However our Distillery is operated @240 KLD production capacity as per UKPCB Consent.
iii).	The quantity of spent wash generated from expanded capacity of 220 KLD shall not exceed 2140 m ³ /d (1440 m ³ /d from	: This condition was complied w.r.t. the treatment facility viz. biomethanation, reverse osmosis & biocomposting. Relevant



	<p>manufacture of 120 KLD of alcohol from molasses, and 700 m³/d from manufacture of 100 KLD of alcohol from cane juice). Out of the 2140 m³/d of effluent generated, 1440 m³/d of effluent after primary treatment (biomethanation), shall be processed through reverse osmosis, and 50 % of the clear effluent recovered (i.e. 720 m³/d) shall be recycled to the process. The remaining 720 m³/d from reverse osmosis shall be stored in a dedicated storage lagoon for RO reject and used for biocomposting. Spentwash storage shall not be for more than 30 days. The entire effluent from cane juice process (i.e. 700 m³/d which is equivalent to 59 KLD of molasses based distillery) shall be treated by secondary aerobic treatment. The treated effluent shall be stored in a separate lagoon, and used for ferti-irrigation.</p>		<p>details are explain in Sr. No. A-iii of revised scheme of ETP.</p>
iv).	<p>The company shall achieve zero discharge for the existing distillery capacity of 205 KLD by December 2005, by under taking ferti-irrigation and bio composting, in accordance with the action plan submitted in the affidavit by the company on 22.4.04 to this ministry.</p>	:	<p>This condition was complied accordingly. Presently Zero discharge achieved through MEE & Incineration as per ZLD direction of Distilleries issued by CPCB. Relevant details are explain in Sr. No. A-iii of revised scheme of ETP.</p>
v).	<p>The company shall earmark a separate area of 40 acres of land for existing capacity and 21 acres for augmented capacity, for bio composting on the basis of 1250 MT/press mud/acre/cycle, as per the action plan submitted in the affidavit. The quality of manure produced shall meet the CPCB norms.</p>	:	<p>Bio composting was in practice since April 2003 and remain operational till June 2016. Bio composting operation was stopped w.r.t. ZLD Direction of CPCB/UEPPCB.</p>
vi).	<p>The company shall follow CPCB protocol for ferti-irrigation, and shall accordingly arrange for land requirement of 2344 acres for existing capacity, and 1317 acres for expanded capacity, for ferti-</p>	:	<p>Ferti irrigation was started from January 2003 to utilize treated distillery effluent as per CPCB Protocol and remain in practice till June 2009.</p>



	irrigation, as per the action plan submitted in the affidavit. The effluent to be used for ferti-irrigation shall meet the CPCB norms of BOD < 100 mg/L and TDS < 2100 mg/L.		Company has stopped controlled land application.
vii).	The company shall monitor the soil and ground water quality in the compost and project area on a regular basis and submitted half-yearly reports to SPCB and the Ministry.	:	Soil & Ground water quality is being monitored regularly. The analysis reports are being submitted regularly. (Annexure - IV)
viii).	The distillery shall not be operated for more than 330 days for molasses route, and 240 days for cane juice process, considering that alcohol is produced for captive consumption for production of specialty chemicals.	:	The distillery is being operated as per the directions.
ix).	In the event of non-availability/less availability of press mud for bio composting, the company shall ensure zero discharge by adopting either of these measures (a) installing additional RO units; (b) by increasing alcohol production from cane juice process and reducing alcohol production from molasses route; and (c) by increasing ferti-irrigation only for cane juice process. If the company is unable to achieve zero discharge by adopting these measures, the company shall reduce alcohol production proportionately.	:	Presently, we are achieving zero liquid discharge through Evaporation (MEE) and Incineration Boiler (equivalent to 240.0 KLPD distillery capacity).
x).	The company shall modify the existing anaerobic digesters and rectify the shortfalls in secondary treatment plant. 	:	Total 12 Nos. of bio-digesters were installed for treatment of raw spent wash in phase manner alongwith Secondary Treatment Plant. Reverse Osmosis Plant was installed in September 2006. However, at present, only two digester are in operation. Biogas is used in production of some value added chemicals at IGL. Therefore, for supply of biogas to chemical plant IGL is operating only two digester. Remaining 10 Nos.



			digesters are not in operation & under dismantling. Anaerobic Digesters are operated on a low feed rate (8-10 m ³ /hr). Biogas is being used as blast gas in Chemical plant (MEG) process.
xi).	As reflected in the EIA/EMP, green belt of adequate width and density shall be provided to mitigate the effects of fugitive emissions all around the plant as per the CPCB guidelines in consultation with the local DFO.	:	Green belt has been developed more than 33% of the land area & it being strengthened regularly by planting new saplings. Approx. 100000 plants have been planted in existing land. The species planted are as per directions of local DFO. No fugitive emissions from the plant. We are regularly assessing the survival rate of the planted saplings & are planting new saplings on regularly basis in consultation with local DFO. Survival rate of the Plants is observed as 80 - 90%. <u>(Annexure - V)</u>
xii).	Occupational health surveillance programme shall be undertaken as a regular exercise for all the employees and their medical records maintained.	:	Occupational health surveillance programme is under practice. Two Internal Audits per year and Two External Audits in a year (by certification body DNV-GL). Additional audits are also conducted, as and when required, for customer demand/ requirements. Details are attached as <u>Annexure -VI.</u>
xiii).	The company shall not commence production for the expanded capacity till a Sub-Committee visits the unit to ensure that all systems, as stipulated to achieve zero discharge, are in place.		A Sub-Committee comprising Sh. R.K. Garg, Dr. P.L. Ahujarai, Sh. B.P. Shukla & Sh. Purshotam Sakhare visited the site on 26-27 May 2006 to ensure that all systems, as stipulated to achieve zero discharge, are in place.




GENERAL CONDITIONS:

S. No.	CONDITIONS	:	COMPLIANCE STATUS
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i).	The project authorities must strictly adhere to the stipulations made by the Uttaranchal Pollution Control Board and the State Government.	:	<p>IGL is strictly following the stipulations made by UKPCB. Air/Water consent for Ethanol plant for the period April 2021 – March 2022 was granted by UKPCB, Dehradun. We are submitting the CCA compliance report on quarterly basis. <u>(Annexure - VII).</u></p> <p>We are adhering all the safety measures at work place alongwith the guidelines to implement strict social distancing and isolation measures to contain the spread of COVID-19 and complying with all the directions as stipulated by the State Govt.</p>
ii).	No further expansion or modifications in the plant should be carried out with out prior approval of the Ministry of Environment and Forests.	:	Noted, No further expansion will be carried out without prior approval of MoEF & CC.
iii).	Ambient Air Quality Monitoring Station should be set up in the down wind directions as well as where maximum ground level concentration of SPM, SO ₂ , NO _x are anticipated in consultation with the State Pollution Control Board	:	<p>Ambient Air Quality Monitoring Stations (05 Locations as Bio Gas Plant – Behind Laboratory, Coal Yard near Slop 2 Control Room, Fire Station, IGL Colony Near STP & Near Main Gate Security Office) are set up in consultation with the State Pollution Control Board and monitoring is being carried out on quarterly basis by NABL/MoEF & CC accredited laboratory. <u>(Details are attached as Annexure - VIII).</u></p>
iv).	Adequate Number of influent and effluent quality monitoring stations should be set up in consultation with State Pollution Control Board. Regular monitoring should be carried out for relevant parameters.	:	<p>We are achieving ZLD. Flow Meter & Web Cameras are installed to monitor operational activities and its connectivity is being accessed at CPCB/UKPCB through link. Refer Specific conditions details given in Sr. No. B(i).</p>



v).	The overall noise levels in and around the plant area should be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures, etc. on all the sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA rules, 1989 viz. 75 Dba (day time) and 70 dBA (night time).	: All the measures have been implemented to keep noise levels in and around factory premises within the permissible norms. Noise monitoring is being done regularly by EMD/F&S. <u>(Annexure - IX)</u>
vi).	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA report.	: All the environmental protection measures and safeguards recommended in the EIA Report have been implemented. <u>(Details are attached as Annexure - X)</u>
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. The project authorities will provide adequate funds both recurring and non recurring to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so provided should not be diverted for any purpose. 	: Separate Environment Management Division is already in functional. <u>(Annexure - XI)</u> . So far ₹ 140.57 Crores spent as capital expenditure to implement the stipulated conditions. In addition recurring funds are allocated every year to meet the requirement of running plant effectively. Wherever funds required, are easily available. Environment management cell has setup objective agenda for training of plant personnel on Hazardous waste management & review the same for its progress. Its progress report will be provided with compliance report. Recurring cost for environmental management and monitoring functions i.e. Continuous Emission Monitoring System (PM _CEMS) & Data Connectivity Camera-Flow Meters -AMC is Rs. 2.30 Lac/Annum. Public liability insurance is attached as per <u>(Annexure - XII)</u>



viii).	The implementation of the project vis-à-vis environmental action plans will be monitored by Ministry's Regional Office at Lucknow/ State Pollution Control Board, Central Pollution control Board. A six monthly compliance status report along with the monitoring data should be submitted to the monitoring agencies.	:	Last Site inspection was carried out on 24 th August, 2020 by Dr. A. Bhardwaj, Scientist C, GOI, MoEF & CC, Regional Office North-Central Zone, 25, Subhash Road, Dehradun. Regular compliance status report is being submitted to RO, MoEF & CC.
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 State Pollution Control Board/Committee and may also be seen at website of the Ministry of Environment & Forests 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 Regional Office.	:	Already Complied.
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 land development work.	:	Financial closure of the project was occurred in December 2007. We have already informed to the concerned authorities with the relevant informations.

