



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/HERBAL/2021/01

Dated: May 28th, 2021

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

Sub: Six Monthly Compliance Report of the Conditions of Environmental Clearance for Expansion of Super Critical Fluid Extraction (SCFE) Unit for production of Natural Health Product (150 to 1050 kg/day).

Ref: EC No: F. No. J- 11011/770/2007 – IA II (I), Dated 12.03.2008

Dear Sir,

Please find enclosed herewith the Compliance Report of the Conditions of Environmental Clearance of *Expansion of Super Critical Fluid Extraction (SCFE) Unit for production of Natural Health Product (150 to 1050 kg/day)* at Plot No 03 – 04, Pharma City, "SIIDCUL", Selaqui Industrial Area, Dehradun 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.

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

With best regards,

Yours faithfully

For M/s INDIA GLYCOLS LIMITED


(Dr. Ashutosh Gautam)

Head (Environment)

Encl: Point wise 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, Uttarakhand

CORPORATE OFFICE : 3A, Shakespeare Sarani, Kolkata - 700071, Phone : +91 33 22823585, 22823586

HEAD OFFICE : Plot No. 2-B, Sector -126, NOIDA-201304, Distt. Gautam Budh Nagar, Uttar Pradesh, Tel. : +91 120 6860000, 3090100, 3090200
Fax : +91 120 3090111, 3090211 E-mail : iglho@indiaglycols.com

CIN : L24111UR1983PLC009097

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 SUPER CRITICAL FLUID
EXTRACTION (SCFE) UNIT FOR
PRODUCTION OF NATURAL HEALTH
PRODUCT (150 TO 1050 KG/DAY)
AT**

**PLOT NO 02 – 04, PHARMA CITY,
“SIIDCUL”, SELAQUI INDUSTRIAL AREA,
DEHRADUN**

ENVIRONMENTAL CLEARANCE

J – 11011/770/2007 – IA II (I)

Dated 12th March, 2008

Period of Compliance: October 2020 to March 2021



**M/S INDIA GLYCOLS LIMITED
HERBAL EXTRACTION UNIT**

ANNEXURE – 1

M/s INDIA GLYCOLS LIMITED

Name of the Project: Expansion of Super Critical Fluid Extraction (SCFE) Unit for the production of Natural Health Production (150 to 1050 kg/day) at Plot No. 03 – 04, Pharma City, SIIDCUL, Selaqui Industrial Area, Dehradun, Uttarakhand.

Clearance Letter No: – J-11011/770/2007 – IA II (I), Dated 12.03.2008

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

A. SPECIFIC CONDITIONS	
CONDITIONS	COMPLIANCE STATUS
i. Stack of proper height and adequate pollution control equipment's shall be provided to the Boiler and DG sets to control gaseous emissions within the permissible limits prescribed by Uttaranchal Environment Protection and Pollution Control Board (UEP&PCB) and reports submitted to the Ministry's Regional Office at Lucknow, CPCB and UEP&PCB.	: Stack height of the Boiler and DG sets is kept as per the Norms of UKPCB (42 m & 15 m AGL respectively). Emissions are well within the Norms. Boiler & DG Stack emission monitoring reports (Month of March 2021) is attached as <u>Annexure – I</u> . We are regularly submitting Six Monthly Compliance Report well within the due course to the respective Offices.
ii. All the Solvents used during Aqueous Alcoholic Extraction Process viz. Methanol, Hexane, Acetone and IPA shall be recycled and reused after recovering through evaporation and condensation process. Spray driers shall be provided for the recovery of solvents.	: All the Solvents used for Extraction process are recycled back to the next batch after recovering through Evaporation and Condensation Process of Super Critical Fluid Extraction.
iii. Total ground water requirement shall not exceed 251 m ³ / day and prior permission for the drawl of ground water shall be obtained from the State Ground Water Board / Central Ground Water Board Authority (SGWB/CGWA). All the waste water shall be recycled and reused as make up water for Cooling Towers or as steam	: Ground water is being extracted from existing bore well and the NOC from Central Ground Water Board Authority (CGWA) has been obtained. A copy of the same is attached as <u>Annexure – II</u> . Water is being used for Domestic purpose is 4.0 KL / day. Domestic



	<p>condensate in the Boiler or for Green belt development. No effluent shall be discharged outside the premises and “Zero” discharge shall be strictly adopted.</p>	<p>effluent is subjected to existing STP cum ETP.</p> <p>Net Water requirement for Production of Natural Health Products (Concentrate Syrup/Powder) is 23.90 KLD.</p> <p>We have installed 10.0 KLD capacity of STP cum ETP (further augmented with 50.0 KLD) of advance technology for recovery of treated water in a scientific manner. The major advantage in this Plant is that it can treat sewage in one common unit for final utilization as make up water for Cooling Towers. STP cum ETP Mass Balance & Analysis report of STP cum ETP O/L is attached as <u><i>Annexure – III.</i></u></p> <p>No effluent generation from the Process, all the water from Aqueous Alcoholic Extraction Process, SCFE Process, Semi Mechanized, and Steam Distillation Process is being recycled back to Cooling Towers and steam condensate is being recycled back to the Boiler. Photographs showing Recycling/reuse of water are attached as <u><i>Annexure – IV.</i></u></p>
<p>iv.</p>	<p>All the solid waste generated shall be used as manure after Bio – composting process and shall not be disposed off outside the premises. All the packaging material shall be disposed off in the environment – friendly manner.</p>	<p>: Solid Herbal Parts (Flowers/ Roots/ Leaves/Stems) obtained after extraction process is being used in briquette formation & utilized as a fuel in the existing boiler.</p> <p>Packaging material is being sold to the respective vendors.</p>
<p>v.</p>	<p>Green belt shall be developed in 33% area with suitable species of the plants as per the CPCB guidelines to mitigate the effects of fugitive emissions.</p>	<p>: A number of Trees suitable to the local condition have been planted in vacant space under Green belt development in such a fashion, to create an effective barrier between the Plant and the surroundings, and regular practice is</p>



			being continued for strengthened the Green-belt. <u>Annexure – V.</u>
vi.	No Captive Power Plant shall be installed without prior approval of the Ministry.	:	No Captive Power Plant will be installed without getting the prior approval of the MoEF& CC, New Delhi.
vii.	Acoustic enclosures shall be provided around the DG set (750 KW x 02) to control noise level within the permissible limits.	:	Green insulated DG sets are installed and operated whenever there is a Power failure from UPCL. Acoustic enclosure is provided for DG set therefore noise level is well below the permissible limits. Ambient Noise monitoring reports are attached as <u>Annexure – VI.</u>

B.GENERAL CONDITIONS

CONDITIONS		:	COMPLIANCE STATUS
i.	The Project authorities must strictly adhere to the stipulations made by the Uttaranchal Environmental Protection and Pollution Control Board (UEP&PCB) and the State Government.	:	Agreed. Company is complying with all the stipulations made by the UKPCB and the State Government. CCA is valid upto 31 March 2022. Copy of CCA & receiving copy of its compliance report are attached as per <u>Annexure – VII.</u>
ii.	No further Expansion / Modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests.	:	Further Expansion & Modification work will not be carried out without prior approval of the MoEF& CC, New Delhi. Further Expansion of the plant (1050 kg/d to 2050 kg/d) was carried out vide EC no. 206.9(7)/2013 dated 21 October 2013 granted by SEIAA, modernization for replacement of existing HSD Boiler with new Biomass fired Boiler vide EC no. 545-9(24)/2014, dated 20 August 2014 granted by SEIAA and further modernization for value addition of products alongwith enhancing the existing utilities vide EC no. 7-9(03)/2018 dated 01 February 2019 granted by SEIAA, Uttarakhand.



iii.	Ambient Air quality monitoring Stations shall be set up in the down wind direction as well as where maximum ground level concentration are anticipated in consultation with the UEP&PCB and report submitted to UEP&PCB.	: Facilities for Ambient Air Quality Monitoring have been provided to monitor PM _{2.5} , PM ₁₀ , SO ₂ , NO _x , in the down wind direction as well as where maximum ground level concentration are anticipated. (AAQ Monitoring reports are attached as per <u>Annexure-VIII</u>).
iv.	Fugitive emissions in the work zone environment, product and raw materials storage area shall be regularly monitored. The emissions shall confirm to the limits imposed by the UEP&PCB.	: No fugitive emission is takes place. Work zone monitoring is attached also.
v.	The Company shall adopt suitable surface as well as roof top rain water harvesting measures to harvest the run off water for recharge of ground water. Methods shall also be adopted for the conservation of water through and recycling and reusing the treated waste water.	: Roof top Rain water harvesting scheme has been implemented within the premises by providing 04 Nos. of recharge pits. Approx. 5000 Cum/Annum of Rain Water is available for Recharge. Photo's are attached as <u>Annexure – IX</u> . Recycling / reuse of Condensate water / Boiler blow down are being adopted. Treated water from STP cum ETP is being reused in green belt & cooling tower.
vi.	Occupational Health Surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	: Regular checkup of the employee's health is being done and record is maintained.
vii.	The Company shall undertake eco – developmental measures including community welfare measures in the project area for the overall improvement of the Environment. The project proponent shall also comply with safeguards recommended in the EIA/ EMP Report.	: Company is already engaging to undertake various eco – developmental measures and community welfare activities. EIA/EMP measures are implemented & being followed decently.
viii.	The Project authorities shall set up a separate Environmental Management Cell for effective implementation of all the	: A Panel of experienced Technical Personnel & qualified Chemists are engaged for Environment Management



	above stipulations under control of Senior Executive.		Division. Enclosed as per <u>Annexure – X.</u>
ix.	Adequate funds shall be kept towards Capital Cost and Recurring Cost/Annum for Environmental pollution control measures and used to implement the conditions stipulated by the Ministry of Environment and Forest as well as the State Government. The funds so provided shall not be diverted for any other purposes.	:	Recurring and non-recurring fund are arranged by the management as per the requirement to implement the conditions stipulated by MoEF & CC and SPCB.

