

Six Monthly EC Compliance Report of Herbal Extraction Unit, IGL Dehradun

Chakresh Pathak

Tue 11/30/2021 7:28 PM

To: moef.ddn@gov.in <moef.ddn@gov.in>;

Cc: Dr.Ashutosh Gautam <ashutosh.gautam@indiaglycols.com>; Jitendra K Jawla <jitendra.k.jawla@indiaglycols.com>;

📎 3 attachments

Six Monthly Compliance report for the period April, 2021 to September, 2021 - EC 206.9(7)2013 dated 21 October, 2013..pdf; Six Monthly Compliance report for the period April, 2021 to September, 2021 -EC- 7-9(03)2018 dated 01 February, 2019..pdf; Six Monthly Compliance for the period April, 2021 to September, 2021, EC- 545 –9(24)2014, dated 20 August, 2014..pdf;

Sir,

Please find attached herewith the **Six Monthly Compliance Report of Environmental Clearance** of Herbal Extraction Unit of M/s India Glycols Limited at Plot No. 02 – 05, Pharma City, “SIIDCUL”, Selaqui Industrial Area, Dehradun, Uttarakhand for the Period of **April, 2021 – September, 2021.**

Herbal Extraction Unit IGL, Dehradun Plant:-

Environmental Clearance Details:

1. **Expansion of Existing Herbal Extraction Unit based on Super Critical Fluid Extraction (SCFE) Technology to Produce Natural Health Products by Processing of Spices & Herbs** vide EC No. **206.9(7)/2013 dated 21 October, 2013 granted by SEIAA, Uttarakhand.**

<https://drive.google.com/file/d/1tWgXtVNii7ruG56aFKg7Cc01SfMMujNk/view?usp=sharing>

2. **Proposed Modernization for replacement of existing HSD Fired Boiler (4.0 MT/Hr) with New Biomass Fired Boiler (5.0 MT/Hr) in the existing Complex** vide EC No. **545 –9(24)/2014, dated 20 August, 2014 granted by SEIAA, Uttarakhand.**

<https://drive.google.com/file/d/1eJME2E-PZO7Cx-vMBqx8z9myrwtKrkPQ/view?usp=sharing>

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3. **Proposed modernization & expansion of existing Herbal Extraction Unit based on Super Critical Fluid Extraction (SCFE), Green Solvent Extraction and proposed Biotransformation Technology (value addition) to Produce Natural Health Products** vide EC No. **7-9(03)/2018 dated 01 February, 2019 granted by SEIAA, Uttarakhand.**

<https://drive.google.com/file/d/1E6kkM3ny6jSSfg2iqvt4TlorsB20zqSY/view?usp=sharing>

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

With Regards

Dr. Chakresh Pathak
Environment Management Division
M/s India Glycols Limited
Kashipur



Works :- Plot No. 2 - 5, Pharmacy, Selaqui, 248197, Dehradun (Uttarakhand) INDIA, Telephone : +91 135 2698620, Fax : +91 135 2698939
Email : ennature@indiaglycols.com, Website : www.indiaglycols.com, CIN : L24111UR1983PLC009097

Ref: AG/SEIAA/EC Comp/SCFE/2021/02

Dated: 30.11.2021

To,

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

Subject: Submission of Six-Monthly Compliance report of the conditions stipulated in Environmental Clearance of Herbal Extraction unit based on Super Critical Fluid Extraction (SCFE) Technology in the Existing Complex by M/s India Glycols Limited.

Reference: EC No. 206.9(7)/2013 dated 21 October, 2013 granted by SEIAA, Uttarakhand

Sir,

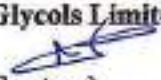
Please find enclosed herewith the compliance report of the conditions stipulated in Environmental Clearance for Expansion of Existing Herbal Extraction unit based on Super Critical Fluid Extraction (SCFE) Technology to Produce Natural Health Products by Processing of Spices & Herbs at Plot No. 02-05, Pharma City, "SIIDCUL" Selaqui Industrial Area, Dehradun by M/s India Glycols Limited for the period of April, 2021 to September, 2021 along with dully filled Data Sheet.

We are adhering all the safety measures at work place along with the guidelines to implement strict distancing and isolation to contain the spread of COVID-19 and complying all the conditions in the EC.

Thanking you,

Yours Faithfully

For M/s India Glycols Limited


(Dr. Ashutosh Gautam)
Head (Environment)

Encl.: Compliance report for the period of April, 2021 to September, 2021.

Copy to:

- **The Member Secretary, State Level Environment Impact Assessment Authority (SEIAA), 653, Indira Nagar, Seemadwar Road, Dehradun**
- **Uttarakhand Pollution Control Board, "Gour Devi Paryavaran Bhawan", 46-B, I.T. Park, Sahastradhara Road, Dehradun - 248001**

Period of Compliance: April, 2021 to September, 2021

ANNEXURE – 1

M/s INDIA GLYCOLS LIMITED (HERBAL EXTRACTION UNIT)

Compliance Report of Stipulated Conditions of Environmental Clearance

Project Name: Expansion of existing Herbal Extraction Unit based on SCFE Technology to produce Natural Health Products at Plot No. 02-05, “SIIDCUL”, Selaqui Industrial Area, Pharma City, Dehradun

Environmental Clearance No. : 206.9(7)/2013 dated 21 October, 2013

Period of Compliance: April, 2021 to September, 2021

S. No.	Conditions	: Compliance Status
1.	The Environmental Clearance is being granted for the expansion Super Critical Fluid Extraction (SCFE) unit for the production of natural health products with enhanced production capacity of 2050 Kg per Day.	: Agreed, The Environmental Clearance is granted for the expansion of Herbal Extraction Unit based on Super Critical Fluid Extraction (SCFE) for the production of natural health products.
2.	Any further expansion or modification in the process formulation shall require fresh Environmental Clearance.	: Agreed & accepted.
3.	Consent to Establish/Consent to Operate shall be obtained from Uttarakhand Environment Protection and Pollution Control Board under relevant provisions of Central. Air Act and Central Water Act before starting up of any construction activity at the site.	: Yes, Consent to Establish and Consent to Operate has been obtained from Uttarakhand Environment Protection and Pollution Control Board (UEPPCB) under relevant provisions of Central. Air Act and Central Water Act. Consolidated Consent to Operate & Authorization (CCA) is valid upto 31 March 2022. (Annexure – I)
4.	The construction of new unit and installation of additional equipment's /machineries shall be done in the part vacant land lying in the plant premises.	: Agreed, additional equipment's i.e. Rotary Extractors, WFE, SS Reactor, Pumps, Solvent drums, Storage shed, Cooling tower has been installed in the part vacant land.
5.	The Site Lay out Plan and Building Plan should be approved by the concerned Department/Agency of the State Government before work start up at the construction site. The structural design and other aspects of the building shall comply with guidelines of National	: Industry is situated in “SIIDCUL” Selaqui industrial area & Site Lay out Plan has been duly approved by competent authority. Photocopy of Site Lay Out Plan is enclosed as – Annexure – II.



	Building Code. This shall be ensured by concerned Department of State Government/Accredited Agencies.		
6.	During any type of construction in the existing land area, the topsoil excavated shall be used for backfilling/landscape development/green belt development. The same shall not be disposed off outside the boundaries of project site without approval of Competent Authority.	:	During the construction phase, top soil so excavated was used for landscape /green belt development.
7.	The water requirement during construction phase shall be met from regular water supply/tankers . Construction work requiring water shall not be carried out during 30 th April to 15 th June in the year.	:	Agreed and Accepted.
8.	The use of groundwater from tube wells shall be restricted to emergency purposes/additional requirement as approved by Competent Authority. The use of ground water shall be allowed after approval of Central Ground Water Board.	:	Permission from Central Ground Water Board Authority (CGWA) has been obtained. Piezometer has been installed.
9.	The soil and ground water samples shall be tested from accredited labs and it shall be ensured that test results comply with CPCB standards so as to ensure that there is no threat to groundwater quality by leaching of heavy metals and toxic contaminants.	:	This is a Herbal Extraction Unit and no use of hazardous chemicals. So there is no possibility of leaching of heavy metals and other toxic contaminants in to the ground water. Analysis Report are enclosed as per Annexure – III .
10.	The plant premises shall adopt suitable surface as well as roof top rain water harvesting measures to harvest the runoff water for recharge of ground water. Methods shall be adopted for the conservation of water through and recycling and reusing 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 Annexure – IV . Treated water from STP cum ETP is being reused in green belt & cooling tower.
11.	Boiler of capacity 2000 Kg/Hr will be installed. DG set of capacity 500 KVA	:	Proposal for installing 2000 kg/hr boiler was dropped and only DG set of



	will be installed. No captive power plant shall be installed.		capacity 500 KVA was installed.
12.	Acoustic enclosures shall be provided with all machineries and DG sets on site complying with Noise Levels of CPCB standards.	:	Green insulated DG Set has been installed with Acoustic enclosures. Existing Green belt is being strengthened within the project boundary to reduce the noise escape in surroundings area. Ambient Noise Level Monitoring Reports are enclosed as - Annexure – V.
13.	Stacks of proper height and adequate pollution control equipments shall be provided to the boiler and DG sets to control gaseous emissions within the parameter limits of CPCB. Scrubbers shall be provided to scrub the gases.	:	Stack height has been provided to the boiler and DG sets as per CPCB standards (42 m & 15 m AGL respectively). Stacks emission report is attached as Annexure – VI.
14.	The raw materials used shall be procured from authorized dealers. Any raw material categorized as endemic/rare by the State Biodiversity Board shall be procured from dealers after obtaining authorization certificate from the State Biodiversity Board.	:	Raw materials are purchased from authorized dealers. As per Biological diversity Act, 2002 and Biological diversity Rules, 2004, no any species of plants which are on the verge of extinction will be used the production process. Only those Herbs which are commercially grown are utilized for proposed production of Natural Health products.
15.	All solvents used during aqueous alcoholic extraction process shall be recycled and reused after recovering through evaporation and condensation process.	:	All the Solvents used for Extraction process are recycled back to the next batch after recovering through Evaporation and Condensation Process.
16.	No waste water shall be discharged outside the plant boundary and Zero discharge shall be ensured. Domestic effluent shall be treated in the STP and treated water shall be used for green belt, road washing and other miscellaneous purposes.	:	No waste water generation takes place from the production process. Sewage is being treated through STP cum ETP (10.0 KLPD) & treated effluent is being utilized as make up water for Cooling Tower. We have installed initially 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. Analysis Report of STP cum ETP O/L



			is attached as Annexure – VII.
17.	All solid waste generated shall be used as manure after bio-composting process and shall not be disposed off outside the premises.	:	Solid Herbal Parts (Flowers/ Roots/ Leaves/Stems) remains after extraction process is being used in briquette formation & utilized as a fuel in the existing boiler.
18.	All the residue and wastes arising from this formulation including cleaning residue process shall be either sent to TSDF for land filling or for incineration. Hazardous chemicals shall be stored in tanks in tank farms, drums, carboys etc. Flame arresters shall be provided at desired points like flares and Solvent transfer shall be done by pumps such kind. Regular monitoring of HC and VOC shall be carried out in solvent storage areas at all vents, in work zone area and in the ambient air at probable locations in and around the plant.	:	Since its a herbal extraction unit there is no generation of any type of Hazardous chemicals. During Aqueous – Alcoholic Extraction Process some quantity of Methanol, Hexane, Acetone, Ethyl Acetate and IPA are being used. All the above are recycled after recovering through evaporation and condensation process. Empty barrels Spent Solvent and Used oil are being sold to the Authorized Recyclers of UKPCB only. Work zone monitoring is being carried out regularly.
20.	The hazardous chemicals used shall have separate storage areas and handling units. It should be placed in isolated conditions with proper air conditioning and ventilation. Disposal of the barrels shall be done through authorized TSDF dealers.	:	Agreed.
21.	The gaseous emissions (SO _x , NO _x , CO, VOC and HC) and particulate matter along with RSPM levels from various process units shall conform to the standards prescribed by the concerned authorities from time to time. At no time, the emission levels shall go beyond the stipulated standards. In the event of failure of pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency.	:	Ambient air quality, work zone monitoring is being done regularly from accredited laboratory of NABL /MoEF approved and copy of reports are enclosed as - Annexure – VIII.
22.	The project authorities shall strictly comply with the rules and guidelines	:	Agreed, Since its a Herbal Extraction Unit & no any Hazardous Chemicals



	under Manufacture, Storages and Import of Hazardous Chemicals Rules, 1989, as amended from time to time. Authorization from the UEPPCB shall be obtained for collection, treatment, storage, and disposal of hazardous wastes.		are used to produce Herbal products. Hence applicability of MSHIC Rule is not evident. Hazardous waste authorization has been obtained from UKPCB & complied accordingly.
23.	All liquid raw materials shall be stored in storage tanks and drums. Closed handling systems for chemicals and solvents shall be provided. Magnetic seals shall be provided for pumps/agitators for reactors for reductions of fugitive emissions. Solvents traps shall be installed wherever necessary. Reactor generation solvent vapours will be connected to condensers with receivers.	:	Respective measures viz. raw materials storage in storage tanks and drums, Closed handling systems for chemicals and solvents are being followed for handling/storage of all the raw materials. Solvents recovery system of advanced technology is in place.
24.	All venting equipment shall have vapour recovery system. All the pumps and other equipments where there is a likelihood of Hydrocarbon leakages shall be provided with Leak Detection and Repair (LDAR) system and LEL indicators and Hydrocarbon detector. Provision for immediate isolation of such equipment, in case of a leakage shall also be made. The company shall provide a well defined Leak Detection and Repair (LDAR) program for quantification and control of fugitive emissions.	:	All the mitigation measures are adopted & SOP/Guidelines are being followed to prevent exposure to avoid any hazard. NOC of Safety department is attached as Annexure – XI .
25.	The vehicles used at the factory site should comply with emission norms and noise level standards of CPCB and State Transport Department. They should be operated only during non peak hours.	:	It is being ensured.
26.	All necessary efforts shall be made to ensure safety and hygiene of workforce. Safety kit shall be provided to the workforce. First Aid facility shall be established and trained manpower to deal with emergency cases shall be	:	On-site Emergency Preparedness Plan has been prepared, All safety measures are being adopted & adequate PPE'S are being provided to the workers. Training is being provided to the workers regularly for first aid measures in case of accident. Training /



Period of Compliance: April, 2021 to September, 2021

	engaged. The labour force engaged on site shall be screened for health from time to time.		Awareness program on Safety is being conducted on regular basis.
27.	Adequate drinking water and sanitation facility shall be provided on site for the workforce. Provision shall be made for supply of domestic fuel to the workforce so that they do not remain dependent on adjoining forest areas for fuel wood.	:	Drinking water and sanitation facility has been provided at plant site for the workforce.
28.	Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre- employment and routine periodical medical examinations for all employees shall be undertaken on regular basis.	:	Training/awareness on safety & health aspects is being conducted regularly. Periodical medical examinations for all employees are being done also.
29.	The project authority shall also comply with all the environment protection measures and safeguards proposed in the EIA/EMP report. All the recommendations made in respect of environmental management and risk mitigation measures relating to the project shall be implemented.	:	Agreed and Accepted.
30.	If the area falls within 10 km radial distance from National Park/Sanctuary, then prior approval from National Board of Wild Life is required before work startup.	:	Not Applicable
31.	A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zilla Parishad/Municipal Corporation, Urban local body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.	:	Complied.
32.	The project proponent should advertise in at least two local Newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded environmental clearance and	:	Complied, Copy of advertisement are enclosed as - Annexure – X.



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	copies of clearance letters are available in the office of SEIAA, Uttarakhand. The advertisement should be made within 7 days from the day of issue of the clearance letter.		
33.	The SEIAA Uttarakhand reserves the right to withdraw the Environmental Clearance subject to any change in the Government policy as may be applicable to this project.	:	Agreed
34.	If this Environmental Clearance is transferred then fresh Environment Clearance is to be obtained under EIA notification dated 14.09.2006. However, no activity shall be undertaken till the Environment Clearance is transferred in his name and he is lawfully bound to Comply with the conditions of the Environmental Clearance.	:	Agreed and Accepted
35.	Any appeal against this Environment Clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under section of the National Green Tribunal Act, 2010.	:	Agreed

