







Works: Plot No. 2 - 5, Pharmacity, Selaqui, 248197, Dehradun (Uttarakhand) INDIA, Telephone: +91 135 2698620, Fax: +91 135 2698939 Email: ennature@indiaglycols.com, Website: www.indiaglycols.com, CIN: L24111UR1983PLC000007

Ref: SEIAA/EC Comp/SCFE/2022/02

Dated: 25.11,2022

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 for Expansion 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 from April, 2022 to September, 2022.

Thanking you,

Yours Faithfully

For M/s India Glycols Limited

(Authorized Signatory)

Encl.: Compliance report for the period of April, 2022 to September, 2022.

Pranau

Copy to:

 The Member Secretary, State Level Environment Impact Assessment Authority (SEIAA), 653, Indira Nagar, Seemadwar Road, Dehradun

Uttarakhand Pollution Control Board, "Goura Devi Paryavaran Bhawan", 46-B, I.T.
 Park, Sahastradhara Road, Dehradun - 248001

Chakresh Pathak

From: Chakresh Pathak

Sent: 29 November 2022 12:06
To: moef.ddn@gov.in
Cc: Jitendra K Jawla

Subject:Six Monthly EC Compliance Report of Herbal Extraction Unit, IGL DehradunAttachments:Six Monthly compliance report for Expansion of Herbal Extraction Unit based on

SCFE Technology IGL DDN_compressed.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 from <u>April</u>, 2022 to September, 2022.

Environmental Clearance Details:

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.

With Regards

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

Six Monthly Compliance report of the Conditions of Environmental Clearance for Expansion of Existing Herbal Extraction unit based on SCFE Technology in the Existing complex

At

Plot No. 02- 05, Pharma City
"SIIDCUL" Selaqui Industrial Area,
Dehradun

Environmental Clearance No.

206.9(7), dated 21 October, 2013

Compliance Period:

April, 2022 to September, 2022



M/s India Glycols Limited (Herbal Extraction Unit)

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 (Annexure -I).

Period of Compliance: April, 2022 to September, 2022

S.	Conditions	:	Compliance Status
No.			
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.	•	Agreed, Latest copy of CCA is attached as Annexure – II.
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 plant premises.
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 Building Code. This shall be ensured by concerned Department of State	:	Industry is situated in "SIIDCUL" Selaqui industrial area & Site Lay out Plan has been duly approved by competent authority.



	Covernment / A caredited A garajes		
	Government/Accredited Agencies.		Design the construction of the state of
6.	During any type of construction in the	:	During the construction phase, top soil
	existing land area, the topsoil excavated		so excavated was used for landscape
	shall be used for backfilling/landscape		/green belt development.
	development/green belt development.		
	The same shall not be disposed off		
	outside the boundaries of project site		
	without approval of Competent		
	Authority.		
7.	The water requirement during	:	Agreed and Accepted.
	construction phase shall be met from		
	regular water supply/tankers.		
	Construction work requiring water shall		
	not be carried out during 30th April to		
	15 th June in the year.		
8.	The use of groundwater from tube wells	:	Permission from Central Ground
	shall be restricted to emergency		Water Board Authority (CGWA) has
	purposes/additional requirement as		been obtained.
	approved by Competent Authority. The		
	use of ground water shall be allowed		
	after approval of Central Ground Water		
	Board.		
9.	The soil and ground water samples shall	:	This is an Herbal Extraction Unit and
	be tested from accredited labs and it		no use of hazardous chemicals. So
	shall be ensured that test results comply		there is no possibility of leaching of
	with CPCB standards so as to ensure		heavy metals and other toxic
	that there is no threat to groundwater		contaminants in to the ground water.
	quality by leaching of heavy metals and		Ground water Quality Report is
	toxic contaminants.		enclosed Annexure – III .
10.	The plant premises shall adopt suitable	:	Roof top Rain water harvesting scheme
	surface as well as roof top rain water		has been implemented within the
	harvesting measures to harvest the		premises. Photographs of Rain water
	runoff water for recharge of ground		harvesting pits are attached as
	water. Methods shall be adopted for the		Annexure –IV.
	conservation of water through and		Treated water from STP cum ETP is
	recycling and reusing treated waste		being reused in green belt & cooling
	water.		tower.
11.	Boiler of capacity 2000 Kg/Hr will be	:	Proposal for installing 2000 kg/hr
	installed. DG set of capacity 500 KVA	•	boiler was dropped and only DG set of
	will be installed. No captive power plant		capacity 500 KVA was installed.
	shall be installed.		capacity 500 12111 was instance.
12.	Acoustic enclosures shall be provided	:	Green insulated DG Set has been
12.	with all machineries and DG sets on site	•	installed with Acoustic enclosures.
1	with an machineries and DG sets off site	1	motaned with Acoustic effelosules.



	complying with Noise Levels of CPCB standards.		Ambient Noise Level Monitoring Reports are enclosed as Annexure – III.
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. Stacks emission report is attached as Annexure – III.
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 & treated effluent is being utilized as make up water for Cooling Tower. Analysis Report of STP cum ETP O/L is attached as Annexure – III.
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	•	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



	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.		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 (SOx, NOx, 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 and copy of reports are enclosed as Annexure – III.
22.	The project authorities shall strictly comply with the rules and guidelines 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.	:	Unit & no any Hazardous Chemicals 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.	•	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.



24.	Solvents traps shall be installed wherever necessary. Reactor generation solvent vapours will be connected to condensers with receivers. All venting equipment shall have vapour recovery system. All the pumps and	•	All the mitigation measures are adopted & SOP/Guidelines are being
	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.		followed to prevent exposure to avoid any hazard. NOC from Fire department is attached as Annexure – V .
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 engaged. The labour force engaged on site shall be screened for health from time to time.	:	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 / 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	•	Training/awareness on safety & health aspects is being conducted regularly. Periodical medical examinations for all employees are being done also.



	undertaken on regular basis.		
29.	The project authority shall also comply	:	Agreed and Accepted.
	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.		
30.	If the area falls within 10 km radial	:	Not Applicable
	distance from National Park/Sanctuary,		
	then prior approval from National Board		
	of Wild Life is required before work		
	startup.		
31.	A copy of the clearance letter shall be	:	Complied.
	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.		
32.	1 3 1 1	:	Copy of advertisement are enclosed as -
	in at least two local Newspapers widely		Annexure – VI.
	circulated in the region, one of which		
	shall be in the vernacular language		
	informing that the project has been		
	accorded environmental clearance and		
	copies of clearance letters are available		
	in the office of SEIAA,Uttarakhand. The		
	advertisement should be made within 7		
33.	days from the day of issue of the clearance letter.		
34.	The SEIAA Uttarakhand reserves the	:	Agreed
	right to withdraw the Environmental		
	Clearance subject to any change in the		
	Government policy as may be applicable		
	to this project.		
35.	If this Environmental Clearance is	:	Agreed and Accepted
	transferred then fresh Environment		
	Clearance is to be obtained under EIA		
	notification dated 14.09.2006. However,		
	no activity shall be undertaken till the		



Period of Compliance: April, 2022 to September, 2022

	Environment Clearance is transferred in		
	his name and he is lawfully bound to		
	Comply with the conditions of the		
	Environmental Clearance.		
36.	Any appeal against this Environment	:	Agreed
	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.		

