

Six Monthly EC Compliance Report of Chemical Plant of IGL, Kashipur

Chakresh Pathak

Tue 11/30/2021 4:35 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>;

Importance: LOW

 1 attachment

IGL Chemical Plant - Six Monthly Compliance report for the Period April, 2021 to September, 2021.pdf;

Sir,

Please find attached herewith the **Six-Monthly Compliance Report of Environmental Clearance** of **M/s India Glycols Limited (Chemical Plant)** at A1 Industrial Area, Bazpur Road, Kashipur, District U.S. Nagar, Uttarakhand for the Period of **April, 2021 to September, 2021.**

Environmental Clearance Details:

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.

With Regards

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



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/Chemical/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 reports of the conditions stipulated in Environmental Clearance for Expansion and Modernization of Existing Chemicals Manufacturing Unit and 21 MW Captive Power Generation.

Sir,

Please find enclosed herewith the compliance report of the conditions stipulated in Environmental Clearance for the **Expansion and Modernization of Existing Chemicals Manufacturing Unit and 21 MW Captive Power Generation** at A-1, Industrial Area, Bazpur road, Kashipur, District- Udham Singh Nagar by M/s India Glycols Limited for the period from **April, 2021 to September, 2021** along with 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 granted by Ministry of Environment & Forests, 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 April, 2021 to September, 2021.

Copy to:

- Central Pollution Control Board, Zonal Office (North), PICUP Bhawan, Vibhuti Khand, Gomti Nagar, Lucknow - 226010
- Uttarakhand Pollution Control Board, "Goura Devi Paryavaran Bhawan", 46-B, I.T. Park, Sahastradhara Road, Dehradun - 248001

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

M/s INDIA GLYCOLS LIMITED

Name of the Project: Expansion & Modernization of Existing Chemicals Manufacturing Unit and 21 MW of Captive Power Generation at A – 1 Industrial Area, Bazpur Road, Kashipur, Distt. Udham Singh Nagar, Uttarakhand.

Clearance Letter No: J – 11011/121/2008 – IA II (I) Dated: May 13, 2009

Period of Compliance Report: April, 2021 to September, 2021

Production Capacities as per EC		:	Present Status	
		:	The company obtained “No increase in Pollution Load Certificate” from the Committee constituted for change in product mix and enhancement in production capacities of changed product mix as per amended EIA Notifications. S.O. 3518 (E), Dated: 23.11.2016 S.O. 236 (E), Dated 16.01.2020 As per Notification on the recommendation of the committee UKPCB further amended the CCA of MEG Plant vide letter no UEPPCB/ HO/Con/I-9/2018/ 852 Dated: 28.09.2020. The revised product mix with capacities is given in the following table	
Products	Capacity MT per Annum	:	Products	Capacity MT per Annum
MEG	1,20,000	:	Glycols Division (MEG, DEG, TEG/HG, GE & GEA)	1, 96, 200
DEG	9, 600	:	Ethylene Oxide (EO)	80, 000
TEG	1, 200	:	EOD Division EO & PO Derivatives (Ethoxylates) and Formulation Products	90, 000
Ethylene Oxide	55, 000	:	Power (Captive Power)	27.50 MW
Ethylene Oxide Derivatives, Condensates, Sulphated, formulated,	60, 000	:		



glycol ether and glycol ether acetate								
Power	21 MW x 2 Turbines	: Further, as per the request of India Glycols Ltd. UKPCB bifurcated the amended CCA in to two units namely IGL Chemical Plant (CCA No. UKPCB/HO/ Con/ I-9/ 2021/ 1475 Dated: 03.02.2021) & IGL Bio EO Plant (CCA No. UKPCB/ HO/Con/I-9/2021/ 1474 Dated: 03.02.2021 with the following product configuration.						
		: Further CCA of IGL BioEO plant was renewed for the year 2021 -2022 (CCA No. UKPCB/ HO/Con/I-9/2021/ 05 Dated: 06.04.2021). The present CCA of IGL BioEo Plant was transferred in the name of IGL Green Chemicals Pvt. Ltd. which is a subsidiary also owned by IGL with products, land & Effluent etc. (Letter No. UKPCB/ HO/Con/I-106/2021/ 38 Dated: 16.04.2021). Now, the products of BioEo Plant are with IGL Green Chemicals Pvt. Ltd a subsidiary also owned by IGL within same premises.						
		: The procedure for amendment has been carried out as per the procedure defined in the EIA Notification 2006 as amended by Notification S.O. 3518 (E) Dated : 23.11.2016 and S.O. 236 (E) Dated : 16.01.2020. UKPCB stipulated a specific condition separately in both the plants CCA that “The unit shall comply with the conditions stipulated in EC vide F. No. J-11011/ 121/ 2008 -IA II (I) Dated: May 13, 2009. Therefore, this intimation is being submitted to MoEF & CC through the Six Monthly Compliance Report of Environmental Clearance granted by MoEF & CC vide letter No. F. No. J-11011/ 121/ 2008 -IA II (I). Dated: May 13, 2009. IGL Green Chemicals Pvt. Ltd. under gone Joint venture with CLARIANT. The name of JV has been Changed to CLARIANT – IGL Specialty Chemicals Pvt. Ltd. The intimation was given to Ministry of Environment, Forests & Climate Change, New Delhi vide letter No. IGL/Intimation/Expansion/2021/ dated 01.07.2021. Copy of the Same is attached as Annexure – I.						
		: Now the Products being made by IGL - Chemical Plant are given in the following table.						
		<table border="1"> <thead> <tr> <th colspan="2">Unit-IGL Chemical Plant</th> </tr> <tr> <th>Products</th> <th>Capacity MT per Annum</th> </tr> </thead> <tbody> <tr> <td>Glycols Division (MEG, DEG, TEG/HG, GE & GEA)</td> <td>1, 96, 200</td> </tr> </tbody> </table>	Unit-IGL Chemical Plant		Products	Capacity MT per Annum	Glycols Division (MEG, DEG, TEG/HG, GE & GEA)	1, 96, 200
Unit-IGL Chemical Plant								
Products	Capacity MT per Annum							
Glycols Division (MEG, DEG, TEG/HG, GE & GEA)	1, 96, 200							



		Ethylene Oxide (EO)	80,000
		Power (Captive Power)	27.50 MW

ENVIRONMENTAL CLEARANCE COMPLIANCE REPORT

A. SPECIFIC CONDITIONS:

S. No.	Conditions	Compliance Status
i.	There shall be no process effluent generation. The waste water (900 – 1000 m ³ /d) generated due to floor washing shall be neutralized in the existing pit and after pH correction shall be discharged into the industrial drain.	No effluent is generated from the production process. The waste water generated due to washing/condensate (540.0 m ³ /day max) is passed through Vacuum Distillation Column to remove VOC fraction and then treated in ETP having Activated Sludge Process followed by Sand filter and Activated Carbon filter & finally disposing off to industrial drain. On-line continuous effluent monitoring system (OCEMS) has been installed at discharge point & connected with CPCB/SPCB server. <u>(Details for the period April, 2021 to September, 2021 is attached as Ann – II)</u>
ii.	The process emissions in the form of HCL shall be scrubbed with scrubber and emissions shall conform to the prescribed standards. For dispersion of particulate emissions from 30 TPH biogas / bagasse / coal fired boiler shall be controlled by installation of ESP and emissions shall be dispersed through stack of adequate height as per CPCB standards.	Process emissions is being scrubbed through Process Scrubbers and emissions are well within the prescribed standards. ESP has been connected with 30 TPH Coal fired Boiler & adequate stack height (45 m AGL) has been provided. Stack monitoring is being carried out in house & NABL accredited /MoEF & CC approved laboratory regularly to ensure the emission norms as stipulated. <u>(Stack emission monitoring reports are attached as Annexure – III)</u>



iii.	The Company shall upload the status of compliance of the stipulated environmental clearance conditions, including results of monitored data on SPM, SO ₂ , NO _x and HCL on the website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the State Pollution Control Board. The VOC shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	: We have uploaded the Six-Monthly Compliance Reports of the Environmental Clearance conditions on Company Website. Work zone monitoring is being carried out quarterly at Chemical Plant. Monitoring report are attached as <u>Annexure – IV.</u> Six Monthly Compliance Report of the stipulated Environmental Clearance conditions is being regularly submitted (physical & soft copy) to the respective Offices. A Display Board with pertinent informations is provided at main gate of company.
iv.	The Company shall adopt cleaner production technology to minimize the quantity of fresh water requirement and process effluent generation.	: IGL has already taken several measures for recycling of waste water viz. boiler blow-down from the flash tank is used for cooling tower makeup water, blow down from cooling tower is used for dust suppression & green belt, DM Plant waste water is being used as make up water for F&S storage tanks, hot condensate from process is recycled back to the boilers. <ul style="list-style-type: none"> • Steam Condensate is recycled in Boiler Utility. • Steam Condensate is recycled in Cooling Tower. • Maximize the COC of Cooling Tower. • Boiler Blowdown is reused in Cooling Tower as makeup water. • CT Blowdown and Treated sewage is reused in the existing Green Belt/gardening, resultant reduction in fresh water demand.
v.	The project authorities shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 as amended in October, 1994 and January, 2000. All Transportation of Hazardous Chemicals shall be as per the MVA, 1989.	: Industry is already complying with Manufacture, Storage and Import of Hazardous Chemical Rules, 1989 as amended in October, 1994 and January, 2000. All Transportation of Hazardous Chemicals complied as per the MVA, 1989.



<p>vi.</p>	<p>The Company shall undertake following Waste Minimization measures:-</p> <ul style="list-style-type: none"> ➤ Metering & control of quantities of active ingredients to minimize waste. ➤ Reuse of by-products from the process as raw materials substitutes in other processes. ➤ Use of automated filling to minimize spillage. ➤ Use of “Close Feed’ system into Batch reactors. ➤ Venting equipment through vapour recovery system. ➤ Use of high pressure hoses for equipment cleaning to reduce waste water generation. 	<p>: Company has adopted all the provisions of Waste Minimization such as:</p> <ul style="list-style-type: none"> ➤ Metering & control of quantities (Flow Control Valves, Pressure Control Valves & Temp Control Valves) of active ingredients to minimize waste (the plant operation is DCS based). ➤ By-product i.e. HCL from the Formulation Process is being reused as raw material for other Processes. ➤ Automated filling has been adopted to minimize spillage. ➤ “Close Feed’ system is being applied for Batch reactors. ➤ LLP steam generated from Flash Vessel is utilized for VAM Unit and Boiler Blowdown flash steam is utilized for Boiler De aerator. ➤ Proper hoses with atomized nozzels, as per process requirement, are used for equipment cleaning to reduce waste water generation.
<p>vii.</p>	<p>Fugitive emissions in the work zone environment, product, raw material storage area shall be regularly monitored. The emissions shall conform to the limits imposed by SPCB.</p>	<p>: IGL has Scrubber system in production line. IGL is monitoring Work Zone air quality on regular interval through MoEF & CC approved laboratory. Monitoring is also conducted on sample basis using Dragger tubes.</p> <p>Monitoring reports are attached as <u>Annexure – IV.</u></p>
<p>viii.</p>	<p>Hazardous chemicals shall be stored in tanks in tank farms, drums, carboys etc. An area of 33% shall be developed as green belt. Selection of plants species shall be as per the guidelines of CPCB.</p>	<p>: Hazardous Chemicals are being stored in tanks in tank farms and in drums, carboys etc. at Plant area. Green belt has already been developed approx. 34% of the total land area as per CPCB. Photographs of green belt is attached as <u>Annexure – V.</u></p>
<p>ix.</p>	<p>Permission shall be obtained from the State Ground Water Department / Central Ground Water Board to draw the water</p>	<p>: NOC Renewal has been obtained from Ministry of Jal Shakti, Department of Water Resources, River Development & Ganga</p>



	as may be applicable in this case.	Rejuvenation, Central Ground Water Authority for abstraction of ground water (3056.0 KLD) and valid till 25.10.2023. Copy of the same is attached as <u>Annexure – VI.</u>
x.	The Company shall harvest surface as well as rainwater from the rooftops of the buildings and storm water drains to recharge the ground water and use the same for the various activities of the project to conserve fresh water.	<p>: Roof top rain water harvesting has been implemented by the Industry at Technical Building, Tennis ground, “B” Block Housing complex, “C” Block Housing complex, “D” Block Housing complex and a natural pond is also available within the premises for recharge the ground water.</p> <p>Digital Piezometers (2 Nos.) as per CGWA guidelines are installed for regular monitoring of ground water level.</p> <p>Gabion Structure at Gabua Nala, Near Village - Kishanpur Kotli, Ramnagar is maintained by the company to facilitate the ground water recharge.</p> <p>Photographs of rain water harvesting structure, Peizometers and Gabion Structure are attached as Annexure – VII.</p>
xi.	Occupational health surveillance of the workers shall be carried on a regular basis and records shall be maintained as per the factories Act.	<p>: Occupational health surveillance programme is under practice. Regular check-up of the employee’s health is being done & record is maintained by our Medical Centre within the premises. Details related to planned vs actual medical examination are attached as Annexure-VIII.</p>



GENERAL CONDITIONS:

i.	The project authorities shall strictly adhere to the stipulations made by the State Pollution Control Board.	: IGL is strictly complying with Specific & General conditions stipulated with CCA Order & submitting compliance report to the UKPCB regularly. Copy of the Receipt of CCA Compliance and CCA order is attached as Annexure – IX .
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 this ministry for clearance, a fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.	: Agreed. IGL will follow the latest guidelines or Notifications issued by the MoEF & CC time to time.
iii.	At no time, the emissions shall exceed the prescribed limits. In the event of failure of any pollution control system adopted by the unit, the unit shall be immediately put out of operation and shall not be restarted until the desired efficiency has been achieved.	: Noted & it shall be complied. Stack monitoring is being carried out in house Laboratory and from MoEF & CC approved laboratory periodically to ensure the emission norms as stipulated (Annexure – III).
iv.	The gaseous emissions (NO _x , SO ₂ and SPM) and particulate matter along with RSPM levels from various process units shall conform to the standards prescribed by the concern authorities from time to time. At no time, the emission level 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. Stack monitoring for SO ₂ , NO _x and SPM shall be carried.	: Provision has been made to control the air pollution in such a way that quantity of emitted pollutants meet with prescribed standards. PM concentration from various stack is well below the prescribe norms. In the event of failure of APCS if emission of pollutants will be more than prescribed standards, IGL agreed that the Unit will not be restarted until the control measures are rectified to achieve the desired efficiency. Stack Emission monitoring reports are attached as Annexure – III .
v.	The locations of ambient air quality monitoring stations shall be decided in consultation with the State Pollution Board (SPCB) and	: Location for ambient air quality monitoring has been already identified in consultation with SPCB, to monitor SPM, SO ₂ ,



	it shall be ensured that at least one station is installed in the up wind & downwind direction as well as where maximum ground level concentrations are anticipated.		NO _x , in the up wind & downwind direction as well as where maximum ground level concentrations are anticipated. AAQ Monitoring reports are attached as Annexure – X .
vi.	The overall noise levels in and around the plant shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under Environment (Protection) Act, 1986 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 done on yearly basis by EMC/ F&S. Noise level monitoring reports are attached as Annexure – XI .
vii.	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 under taken on regular basis.	:	For safe Storage, Handling & use of Chemicals following measures are being adopted:- <ul style="list-style-type: none"> • Training/Awareness program on safety for each employee is being conducted on regular basis. • The workers have been provided with the training for the First aid measures. • Pre-employment and routine periodical medical examinations for all employees are being done periodically by qualified Doctors of Medical Centre.
viii.	Usage of PPEs by all employee / workers shall be ensured.	:	Company ensures that all employee / workers use PPEs. PPEs such as Helmets, Safety Shoes, Hand Gloves, Face Masks, Goggles, Apron and other specific are provided while working in plant area as required. We are adhering all the guidelines to implement strict social distancing and isolation measures to contain the spread of COVID-19 pandemic.



ix.	The project shall also comply with all the environmental protection measures and safeguards proposed in the project report submitted to the ministry. All the recommendations made in respect of environmental management and risk mitigation measures related to the project shall be implemented.	: All the environmental protection measures as per requirement have been implemented.
x.	The Company will undertake all relevant measures for imposing the Socio-economic conditions of the surrounding area. CSR activities will be undertaken by involving local villages & administration.	: IGL is undertaking the CSR activities in the surrounding areas. Details of CSR activities during April, 2021 to September, 2021 is attached as Annexure – XII .
xi.	The Company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.	: The Company has undertaken various eco-developmental measures including community welfare measures in surrounding areas such as: <ul style="list-style-type: none"> ▪ Facilitating Tree Plantation ▪ Free Medical Assistance ▪ Free distribution of Medicine, Sanitizer ▪ Organizing Blood donation Camps ▪ Financial assistance to poor Villagers ▪ Hand Pumps for drinking water in surrounding villages. ▪ Organized Swachhta Pakhwara - Cleaning of Pond
xii.	A separate Environmental Management Cell equipped with full fledged laboratory facilities shall be set up to carry out the Environmental Management & Monitoring functions.	: The Unit is having Environmental Management Division equipped with laboratory.
xiii.	The project authorities shall earmark adequate funds to implement the conditions stipulated by the Environment & Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purpose.	: Desired funds are available to implement the conditions stipulated by MoEF & SPCB time to time.



xiv.	A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad/Municipal Corporation, Urban local Body and the local NGO, if any, from who suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.	:	A copy of the EC sent to the Concerned Gram Panchayat. A copy of Environmental Clearance letter already uploaded on the website of company.
xv.	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.	:	Noted.
xvi.	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 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 concerned Regional Office of the Ministry.	:	Information about Environmental Clearance was published in Amar Ujala and Dainik Jagran dated 06.06.2009. copy of the same is attached as <u>Annexure – XIII</u> .
xvii.	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.	:	It was informed to the concerned authorities with the relevant informations.

