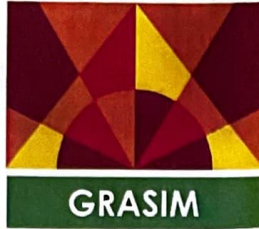


ADITYA BIRLA



Dated: 15.10.2023

ID: 14989

Birla Cellulosic- Kharach

To,

Mr. Yogesh Kumar (IRO),
Ministry of Environment, Forest and Climate Change
Aaranya Bhavan, Gandhingar.

Subject: Half Yearly Compliance Report of Environmental Clearance for period of "April-23 to Sept-23"

Respected Sir,

In view of above subject matter, Here, we are submitting soft copy/hard copy of half yearly Environmental Clearance Compliance report along with copy of EC-1997, No. J. 11012/85/95-IA II (I) dtd. 16.01.1997 for the report period from "April-23 to Sept-23".

Hope, the same is in order.

Yours Faithfully,
(For Birla Cellulosic)

Manish Patel

LH- Technical Services

Encl. :

1. EC Copy
2. EC-1997 Compliance report (April-23 to Sept-23)

CC To:

1. **GPCB Regional office** - Gujarat pollution control board, Plot No. 1501, GIDC, Ankleshwar
2. **GPCB Head office** - Gujarat pollution control board, Paryavaran Bhavan, CHH Road, Sector 10A, Gandhinagar, Gujarat 382010
3. **MOEFCC office** - Ministry of Environment, Forest & Climate Change, New Delhi.



Birla Cellulose
Fibres from nature

Grasim Industries Limited
Unit - Birla Cellulosic

Works : Birladham, Kharach Kosamba R.S.
Dist. Bharuch (Gujarat) - 394 120 INDIA
CIN : L17124MP1947PLC000410

Telephone +91 2646 270001-005, 270301-305
Fax +91 2646 270010, 270130
Email bc-kharach.info@adityabirla.com

Liaison Office : 11th Floor - 1101 & 1102 OCEAN, Opposite Vadodara Central Mall, Vikram Sarabhai Marg, Vadiwadi, Vadodara - 390023, Gujarat - India
Regd. Office : P.O. Birlagram, Nagda(MP) - 456 331. Phone : (07366) 246760-66, Fax : 255198, Website : www.grasim.com

GOVT. OF INDIA
MINISTRY OF ENVIRONMENT & FOREST
PARYAVARAN BHAWAN, CGO COMPLEX
LODHI ROAD, NEW DELHI-110003.

TELE : 4363964.

Dated 16.1.97

To,

The Chairman & Managing Director,
Birla Cellulosic (Grasim Industries Ltd.)
4th Floor, UCO Bank Building,
Parliament Street,
New Delhi-110001

Subject:- Viscose Staple Fibre Plant at Bharuch Environmental Clearance.

Sir,

This has reference to letter dated 1st August, 1995, 27th March, 1996 and 30th September, 1996 regarding your application for setting up a 60,000 TPA capacity Viscose Staple Fibre Plant and 15 MW coal based CPP at Bharuch District, Gujarat. The Ministry of Environment and Forests has carefully examined your application. It is observed that no forest land or rehabilitation is involved. The plant is based on imported pulp.

2. The Ministry of Environment and Forests hereby accords environmental clearance subject to the strict compliance of the terms and conditions mentioned below:-

- i. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- ii. No further expansion or modifications in the plant should be carried out without prior approval of this Ministry.
- iii. The industry should set up a pilot plant and standardize the technology for incineration of CS₂/H₂S rich stream before commissioning the plant. The feasibility of incinerating the entire stream containing CS₂ and H₂S instead of segregating and burning only CS₂ and H₂S stream should also be explored and report submitted to the

Ministry within a period of 1 year for review. The emission of H₂S should not exceed 10 mg/Nm³.

iv. Gaseous and particulate emissions (H₂S, SO₂, CS₂, NO_x and SPM) from the various process units should conform to the standards prescribed by the concerned authorities from time to time. At no time, the emissions level should go beyond the prescribed standards. In the event of failure of any pollution control system adopted by the units, the respective unit should be put out of operation immediately and should not be restarted until the control measures are rectified to achieve the desired efficiency.

v. Six air quality monitoring stations should be set up in the down wind direction as well as where maximum ground level concentrations of H₂S, SPM, SO₂, CS₂, NO_x are anticipated in consultation with the State Pollution Control Board. The air quality monitoring stations should be selected on the basis of modelling exercise to represent short term ground level concentrations, sensitive targets etc.

Stack emissions should be monitored regularly by setting stack monitoring devices in consultation with the State Pollution Control Board.

Data on stack emissions and ambient air quality including work zone should be submitted to this Ministry once in six months and the State Pollution Control Board once in three months along with the statistical analysis.

vi. Work area air quality should meet the standards prescribed by the competent authorities/OSHA. CS₂ level should be less than 100 ppm in the work zone. Leakages from the ducts should be rectified, meshing windows should be sealed and better house keeping should be practiced to improve the work area air quality.

vii. Fugitive emissions should be controlled, regularly monitored and data recorded. Sensors for detection of CS₂ and H₂S and chlorine should be provided at appropriate places in the complex in consultation with the State Pollution Control Board.

viii. Liquid effluents coming out of the plant and the township should comply with the norms stipulated by the competent authorities from time to time. Recycling and reuse of the treated waste water should be maximised to the extent possible.

ix. Guard ponds of sufficient holding capacity should be provided to cope up with the effluent discharge during the process disturbances. The contributing units should be immediately shut down and should not be restarted without bringing the system back to normalcy.

- x. Adequate number of effluent quality monitoring stations should be set up in consultation with the State Pollution Control Board. Regular monitoring should be carried out for PH, S, BOD₃, COD, Zn and colour. The monitored data along with statistical analysis and interpretation in the form of a report should be submitted to this Ministry once in six months and the SPCB once in three months.
- xi. Marine Impact Assessment Study report should be submitted to the Ministry for review. Recommendations made by NIO in the Marine Impact Study should be strictly adhered to the Marine outfall point for discharge of treated effluent should also have the approval of SPCB.
- xii. The hazardous wastes should be handled as per Hazardous Waste (Management & Handling) Rules, 1989 of the Environment (Protection) Act, 1986.
- xiii. Handling, manufacturing, storage and transportation of hazardous chemicals should be carried out in accordance with the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 as amended in October, 1994.

The approval of the Chief Inspector of Explosives should also be obtained.

- xiv. Medical surveillance and occupational health programme should be taken up on regular basis and record of the health status of the workers should be maintained. The worker's who may contract occupational diseases particularly due to carbon disulphide exposure should be monitored closely and adequate measures should be taken for their treatment and recovery.
- xv. A Green belt of adequate width and density (2000-2600 trees/ha) should be raised all around the factory complex and the township. Preferably native plant species should be selected for this purpose in consultation with the local DFO.
- xvi. The project authorities must set up adequate facilities for collection and analysis of samples under the supervision of competent technical personnel who will directly report to the Chief Executive.
- xvii. A separate Environmental Management Cell with suitably qualified people to carry out various functions should be set up under the control of Senior Executive, who will report directly to the Head of the organisation.
- xviii. The funds earmarked for the environmental protection measures should be kept in a separate account and should not be diverted for other purpose and year-wise expenditure

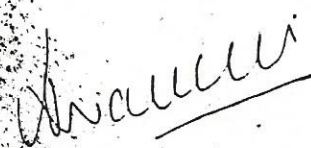
should be reported to this Ministry.

3. This Ministry or any competent authority may stipulate any further condition(s) after review of the monitoring reports. The above conditions will be monitored by the Regional Office of this Ministry located at Bhopal/CPCB/GSPCB.

4. The Ministry may revoke or suspend the clearance if implementation of any of the above condition is not satisfactory.

5. Any other condition(s) or alteration in the existing conditions will be fully implemented by the project authorities within the specified time frame.

6. The above conditions will be implemented under the provisions of the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, Environment (Protection) Act, 1986 and the Public (Liability) Act, 1991 along with their amendments.


(Dr. R. Warriar)
Joint Director

Copy to:-

1. Secretary, Ministry of Industry, Udyog Bhavan, New Delhi.
2. Chairman, Gujarat State Pollution Control Board, Old Assembly Bldg, 2nd Floor, Sector 10-A, Gandhinagar.
3. Chairman Central Pollution Control Board, Parivesh Bhavan, East Arjun Nagar, Delhi.
4. Secretary, State-Deptt. of Env. Govt. of Gujarat Sachivalaya, Block No. 5, 6th Floor, Gandhinagar.
5. Chief Conservator of Forests, Regional office, 3/240, Arear Colony, Bhopal.
6. Adviser (H), EI Section, Ministry of Environment & Forest, New Delhi.
7. Additional Director (Monitoring Cell), Ministry of Environment and Forests, Paryavaran Bhavan, New Delhi.

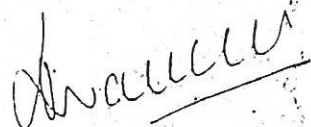
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(Dr. R. Warriar)
Joint Director

Copy to:-

1. Secretary, Ministry of Industry, Udyog Bhavan, New Delhi.
2. Chairman, Gujarat State Pollution Control Board, Old Assembly Bldg, 2nd Floor, Sector 10-A, Gandhinagar.
3. Chairman Central Pollution Control Board, Parivesh Bhavan, East Arjun Nagar, Delhi.
4. Secretary, State Deptt. of Env. Govt. of Gujarat Sachivalaya, Block No. 5, 6th Floor, Gandhinagar.
5. Chief Conservator of Forests, Regional office, 3/240. Arear Colony, Bhopal.
6. Adviser (H), EI Section, Ministry of Environment & Forest, New Delhi.
7. Additional Director (Monitoring Cell), Ministry of Environment and Forests, Paryavaran Bhavan, New Delhi.

8. Guard File
9. Record File.
10. Monitoring File

(Dr.R.Warrier)
Joint Director

Setting up of Viscose Staple fibre plant (60,000 TPA) and 15 MW coal based TPP

Compliance of Environmental Clearance Conditions by
M/s. Birla Cellulosic (A unit of Grasim Ind. Ltd.) at Kharach, Hansot, Bharuch, Gujarat

Name of Project : Setting up of Viscose Staple fibre plant (60,000 TPA) and 15 MW coal based TPP

EC letter no. & Date : J-11012/85/95-IA II(I) dated 16-01-1997

Address for Correspondence : M/s. Birla Cellulosic (A Unit of Grasim Industries Ltd.)
Birladham, Village: Kharach, Kosamba (R.S.),
Tehsil: Hansot, District: Bharuch (Gujrat) – 394120

Duration/Reporting period : April-23 to Sept-23

S. No	Conditions	Compliance Status
1.	This has reference to letter dated 1st August, 1995, 27th March, 1996 and 30th September, 1996 regarding your application for setting up a 60,000 TPA capacity viscose staple fibre plant and 15 MW coal based CPP at Bharuch District, Gujarat. The Ministry of Environment and forests has carefully examined your application. It is observed that no forest land or rehabilitation is involved. The plant is based on Imported Pulp.	<ul style="list-style-type: none"> ○ Noted ○ Unit has obtained EC for VSF production capacity up to 1,27,750 TPA along with 25 MW CPP on 15.01.2007. ○ Unit has obtained EC for VSF production capacity up to 2,33,600 TPA along with 45 MW CPP on 22.02.2018, which was amended on 31.12.2018. ○ Unit has obtained EC to CTE for VSF production capacity up to 2,33,600 TPA along with 45 MW CPP on 06.09.2019. ○ In first phase, unit has obtained CCA-amendment for VSF production capacity up to 1,42,350 TPA (1,27,750 Existing + 14,600 Debottlenecking) along with 25 MW CPP & 70 TPD Solvent Spun Cellulosic fibre along with 15 MW CPP having CCA order no. AWH-101226 dated: 23.05.2019 valid up to 11.04.2024. ○ In second phase, unit has obtained CCA amendment for VSF production capacity up to 1,56,950 TPA having CCA order no. AWH-104181 dated: 29.11.2019 valid up to 11.04.2024. ○ In continuation with that, unit has obtained CCA amendment for Sodium Sulphate recovery max. up to 1,56,950 TPA having

Setting up of Viscose Staple fibre plant (60,000 TPA) and 15 MW coal based TPP

Compliance of Environmental Clearance Conditions by
M/s. Birla Cellulosic (A unit of Grasim Ind. Ltd.) at Kharach, Hansot, Bharuch, Gujarat

S. No	Conditions	Compliance Status
		<p>CCA order no. AWH-111124 dated: 19.03.2021 valid up to 11.04.2024.</p> <ul style="list-style-type: none"> ○ In third phase, unit has obtained CCA amendment for VSF capacity upto 1, 73, 375 TPA and Sodium sulphate recovery max up to 1,73, 375 TPA having CCA order no. AWH-115368 Dated: 30.10.2021 valid up to 11.04.2024. ○ Unit has obtained CTE-amendment for installation of D.G. Set & EDTA/CAP System, along with increase quantity of production at TRADC on 17.11.2022. ○ Recently, Unit has obtained CCA-Amendment for installation of D.G. Set, TRADC, Installation of zinc recovery system & EDTA/CAP settle up on 11.09.2023. ○ The expansion project was implemented within the existing plant and no extra land was used.
2.	The Ministry of Environment and Forests hereby accords environmental clearance subject to the strict compliance of the terms and conditions mentioned below:	<ul style="list-style-type: none"> ○ <u>Noted & shall be complied.</u>
i.	The project authorities must strictly here to the stipulations made by the state pollution control board and the state Government.	<ul style="list-style-type: none"> ○ <u>Complied.</u> ○ All stipulations made by GPCB in various consent and authorizations are strictly complied.
ii.	No further expansion or modification in the plant should be carried out without prior approval of this ministry.	<ul style="list-style-type: none"> ○ <u>Noted.</u> ○ No further expansion or modifications in the plant will be carried out without prior approval of the Ministry of Environment, Forest and Climate Change.

Setting up of Viscose Staple fibre plant (60,000 TPA) and 15 MW coal based TPP

Compliance of Environmental Clearance Conditions by
M/s. Birla Cellulosic (A unit of Grasim Ind. Ltd.) at Kharach, Hansot, Bharuch, Gujarat

S. No	Conditions	Compliance Status
iii.	The industry should set up a pilot plant and standardize the technology for incineration of CS ₂ /H ₂ S rich stream before commissioning the plant. The feasibility of incinerating the entire stream containing CS ₂ /H ₂ S instead of segregating and burning only CS ₂ /H ₂ S stream should also be explored and report submitted to the ministry within a period of 1 year for review. The emission of H ₂ S should not exceed 10 mg/Nm ³ .	<ul style="list-style-type: none"> o <u>Complied.</u> o The industry installed the pilot plant and standardize the technology for incineration of CS₂/H₂S rich stream and recover the sulphur before commissioning the plant. Report for the same was submitted to concern statutory authority in given time duration. o Sulphur recovery plant has been provided to recover Sulphur from CS₂/H₂S rich stream coming from CS₂ plant. o The emission concentration of CS₂/H₂S is being maintained as per GPCB Norms.
iv.	Gaseous and particulate emission (H ₂ S, SO ₂ , CS ₂ , NO _x and PM) from the various process units should conform to the standards prescribed by the concerned authorities from time to time. At no time, the emission level should go beyond the prescribed standards. In the event of failure of any pollution control system adopted by the units, the respective unit should be put out of operation immediately and should not be restarted until the control measures are rectified to achieve the desired efficiency.	<ul style="list-style-type: none"> o <u>Being complied.</u> o Unit has appointed NABL accredited third party laboratory for monthly monitoring of Stack concentration. As per the monitoring conducted by the third party Lab team, results are well within the prescribed norms as per consent condition. o Multiple gas sensors and alarm systems Inter-linking with the pollution control Equipment/units have been provided so that early indication of malfunctioning can be detected and control measures can be taken accordingly. In case of any event of completely failure of pollution control equipment, the respective unit(s) is stopped.

o A Summary for Flue gas emission from stack for the reporting period is given below:

Location	Boiler-1 & 2 (76 m)			Boiler-3 (86 m)			
Parameter	SPM	SO ₂	NO _x	SPM	SO ₂	NO _x	Mercury
Unit	mg/Nm ³	mg/Nm ³	mg/Nm ³	mg/Nm ³	mg/Nm ³	mg/Nm ³	mg/Nm ³

Setting up of Viscose Staple fibre plant (60,000 TPA) and 15 MW coal based TPP

Compliance of Environmental Clearance Conditions by
M/s. Birla Cellulosic (A unit of Grasim Ind. Ltd.) at Kharach, Hansot, Bharuch, Gujarat

S. No	Conditions			Compliance Status			
Limit	100	600	600	50	600	300	0.03
Apr-23	58.48	254.10	85.56	42.73	237	82.61	ND
May-23	60.54	251.47	90.01	43.62	241	85.01	ND
Jun-23	56.80	256.00	89.50	46.20	251	84.10	ND
Jul-23	54.68	253.00	87.50	44.67	247	83.44	ND
Aug-23	57.43	249.34	84.83	42.83	243	80.11	ND
Sep-23	55.92	254.00	88.24	45.73	248	82.68	ND

o A Summary for process emission from stack for the reporting period is given below:

Location	CS2 Plant + Spinning		Total	Acid plant I		Acid plant II	
Parameter	CS2	H2S		SO2	Acid Mist	SO2	Acid Mist
Unit	Kg/ToF			Kg/ToA	mg/Nm3	Kg/ToA	mg/Nm3
Limit	125			2	25	2	25
Apr-23	90.40	17.54	107.94	0.86	11.04	Plant was under Overhauling	
May-23	86.47	19.28	105.75	0.83	10.09	0.70	7.46
Jun-23	87.33	20.20	107.53	0.86	10.10	0.74	6.90
Jul-23	80.68	11.65	92.33	0.84	10.17	0.72	6.74
Aug-23	90.58	8.84	99.42	0.80	11.29	0.76	7.34
Sep-23	86.07	10.18	96.25	0.83	12.06	0.79	7.92

- v. Six air quality monitoring stations should be set up in the downwind directions as well as where maximum ground level concentrations of H2S, SPM, SO2, CS2, NOx are anticipated in consultation with the state pollution control board. The air quality monitoring stations exercise to represent short term ground level concentrations, sensitive targets etc. Stack emission should be monitored regularly by setting stack monitoring devices in consultation with the state
- o **Being complied.**
 - o Unit has installed 3 nos. of Continuous ambient air quality monitoring stations in consultation with GPCB.
 - o Unit has also installed 4 nos. of offline Ambient air quality monitoring stations within premises.
 - o Unit has appointed NABL accredited laboratory for monthly monitoring of Stack concentration as well as ambient air quality, as per the monitoring conducted by their team, The results are well within the prescribed norms as per consent condition.
 - o Such parameters i.e Ozone, Lead, CO, Benzene,

Setting up of Viscose Staple fibre plant (60,000 TPA) and 15 MW coal based TPP

Compliance of Environmental Clearance Conditions by
M/s. Birla Cellulosic (A unit of Grasim Ind. Ltd.) at Kharach, Hansot, Bharuch, Gujarat

S. No	Conditions	Compliance Status
	<p>pollution control board. Data on stack emission and ambient air quality including work zone should be submitted to this ministry once in six months and the state pollution control board once in three months.</p>	<p>BAP, Arsenic, Nickel, Ammonia are not a part of process as well as not being generating. Analysis of same is being conducted on periodic basis.</p> <ul style="list-style-type: none"> o Stack Emissions are regularly monitored and the continuous emission monitoring system has been installed at the stacks. o Stack emission data along with ambient air quality report including work zone data is being submitted to ministry & SPCB every six month along with EC compliance report.

o A Summary for Ambient Air quality for the reporting period is given below:

Location	Ambient air Quality					
Parameter	PM10	PM2.5	SO2	NOx	H2S	CS2
Unit	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3
Limit	100	60	80	80	150	100
Apr-23	53.10	34.71	15.79	24.11	27.20	31.28
May-23	53.84	35.39	15.87	24.67	27.99	32.32
Jun-23	60.72	36.36	12.92	23.52	24.95	27.79
Jul-23	57.08	33.64	14.65	25.68	22.18	28.41
Aug-23	52.20	33.75	15.90	23.26	23.49	29.74
Sep-23	50.37	33.47	18.19	27.56	21.63	18.26

o A Summary for Ambient Air quality for the reporting period is given below:

Location	Ambient air Quality							
Parameter	Ozone	Lead	CO	Benzene	BAP	Arsenic	Nickel	Ammonia
Unit	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3
Limit (8 hr avg.)	100	0.5	2	5	1	6	20	100
June-23	19.67	ND	0.83	ND	ND	ND	ND	9.57
Sept-23	11.37	ND	0.87	ND	ND	ND	ND	7.80

Setting up of Viscose Staple fibre plant (60,000 TPA) and 15 MW coal based TPP

Compliance of Environmental Clearance Conditions by
M/s. Birla Cellulosic (A unit of Grasim Ind. Ltd.) at Kharach, Hansot, Bharuch, Gujarat

S. No	Conditions	Compliance Status
vi.	<p>Work area air quality should meet the standards prescribed by the competent authorities / OSHA. CS₂ level should be less than 100 ppm in the work zone.</p> <p>Leakages from the ducts should be rectified, meshing windows should be sealed and better housekeeping should be practiced to improve the work area air quality.</p>	<ul style="list-style-type: none"> o <u>Being complied.</u> o Work zone environment for emission of CS₂, H₂S and SO₂ is being regularly monitored by our Laboratory twice in a week. o Work area monitoring reports are regularly submitting to concerned govt. authority. o Fugitive emissions in the work zone environment are being controlled by exploring techniques like Motorized shutter & suction hoods on spinning machines & cutters, shutters for stretch roller & gear box and perfect sealing of all the openings in various tanks of spin bath. o Provision of fresh air by induced draft fans is in place at the spinning machines for ease of working. o Online gas detectors installed in the work zone around the spinning machines. Motorized shutters and completely closed after treatment machine with suction duct are there to control fugitive emission.
vii.	<p>Fugitive emissions should be controlled, regularly monitored and data recorded. Sensors for detection of CS₂ and H₂S and chlorine should be provided at appropriate places in the complex in consultation with the state pollution control board.</p>	<ul style="list-style-type: none"> o <u>Being complied.</u> o Fugitive emissions are being controlled & regularly monitored. o Presently there are 5 No. of Chlorine sensor installed at Chlorine area. o 9 No. of CS₂ sensors and 10 No. of H₂S sensors installed at spinning machine area. o 12 No. of SO₂ sensors, 5 No. of CS₂ sensors, 17 No. of H₂S sensors, 4 No. of Ammonia sensor installed at CS₂/Acid/WTP Plant. o 3 No. of CS₂ sensors, installed at Viscose Plant.
viii.	<p>Liquid effluents coming out of the</p>	<ul style="list-style-type: none"> o <u>Being complied.</u>

Setting up of Viscose Staple fibre plant (60,000 TPA) and 15 MW coal based TPP

Compliance of Environmental Clearance Conditions by
M/s. Birla Cellulosic (A unit of Grasim Ind. Ltd.) at Kharach, Hansot, Bharuch, Gujarat

S. No	Conditions	Compliance Status
	plant and the township should comply with the norms stipulated by the competent authorities from time to time.	<ul style="list-style-type: none"> o Unit has appointed NABL accredited third party laboratory for monitoring of waste water from the plant and township treated in the well-established ETP and STP. o As per the monitoring conducted by the lab team, results are well within the prescribed norms as per consent condition.

o A Summary of treated effluent for the reporting period is given below:

Parameter	pH	Temp.	S.S.	COD	BOD	Amm. N	Color	Zinc
Unit	-	°C	mg/l	mg/l	mg/l	mg/l	Co-pt u.	mg/l
Limit	6.5-8.5	40	100	250	100	50	100	10
Apr-23	7.56	34.8	47	126	28	5.40	50	0.54
May-23	7.41	36.9	46	142	38	3.90	60	0.36
Jun-23	7.56	32.1	38	118	27	4.3	40	0.48
Jul-23	7.4	31.9	37	134	24	6.2	60	0.57
Aug-23	7.38	29.8	35	121	28	4.1	50	0.38
Sep-23	7.2	33.4	47	122	26	5.3	45	0.56

o A Summary of treated Domestic sewage for the reporting period is given below:

Parameter	TSS	BOD	Residual Free Chlorine	pH
Unit	mg/Lit.	mg/Lit.	mg/Lit.	-
Limit	<30	<20	Min 0.5	-
Apr-23	26	16	0.60	7.31
May-23	21	18	0.80	7.59
Jun-23	19	18	0.70	7.65
Jul-23	24	17	0.80	7.29
Aug-23	21	15	0.70	7.12
Sep-23	19	14	0.82	7.29

ix.	Guard ponds of sufficient holding capacity should be provided to cope up with the effluent discharge during the process disturbances. The	<ul style="list-style-type: none"> o Complied. o Unit has constructed guard pond with sufficient holding capacity for effluent storage to cope up with the effluent discharge pipeline maintenance
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Setting up of Viscose Staple fibre plant (60,000 TPA) and 15 MW coal based TPP

Compliance of Environmental Clearance Conditions by
M/s. Birla Cellulosic (A unit of Grasim Ind. Ltd.) at Kharach, Hansot, Bharuch, Gujarat

S. No	Conditions	Compliance Status
	contributing units should be immediately shut down and should not be restarted without bringing the system back to normally.	if any.
x.	Adequate number of effluent quality monitoring stations should be set up in consultation with the state pollution control board. Regular monitoring should be carried out for pH, SS, BOD, COD, Zn and color. The monitored data along with statistical analysis and interpretation in the form of a report should be submitted to this ministry once in six month and the SPCB once in three months.	<ul style="list-style-type: none"> o <u>Complied.</u> o Adequate number of effluent quality monitoring stations i.e. Online TOC Analyser, Online pH Analyser etc are set up in consultation with the Gujrat pollution control board. o Regular monitoring is being carried out for pH, SS, BOD, COD, Zn & color by the internal laboratory on daily basis and NABL accredited Laboratory on monthly basis. o Results are enclosed in reply of point no. viii. o Waste Water quality monitoring data is being submitted to ministry & SPCB every six month along with EC compliance report.
xi.	Marine Impact Assessment study report should be submitted to the ministry for review. Recommendations made by NIO in the Marine impact study should be strictly adhered to the Marine outfall point for discharge of treated effluent should also have the Approval of SPCB.	<ul style="list-style-type: none"> o <u>Complied.</u> o In FY'07, Unit has appointed NIO to carry out Pre-marine impact assessment study. o NIO, Mumbai has carried out Post Monitoring study in FY'19. o Lastly, unit has conducted pre-monsoon & post monsoon study with NABL accredited Laboratory in FY'23. o Recommendations made by NIO in the Marine impact study have been strictly adhered to the Marine outfall point for discharge of treated effluent approved by GPCB.
xii.	The hazardous wastes should be handled as per Hazardous waste	<ul style="list-style-type: none"> o <u>Complied.</u> o Unit has segregated Hazardous/solid waste

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S. No	Conditions	Compliance Status
	(management & Handling) Rules, 1989 of the Environment (Protection) Act, 1986.	according to its characteristics and stored separately for treatment and disposal in safe manner as per Waste handling and disposal Rules.
xiii.	<p>Handling, manufacturing, storage and transportation of hazardous chemicals should be carried out in accordance with the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 as amended in October, 1994.</p> <p>The approval of the chief Inspector of Explosives should also be obtained.</p>	<ul style="list-style-type: none"> o <u>Complied.</u> o Approval for chlorine storage has been taken on 26.09.2018 and valid up to 30.09.2023. o Approval for possession and sales of Sulphuric acid has been taken on 27.02.2018 and valid up to 27.02.2028. o Approval for Ammonia, DA gas storage has been taken on 17.03.2022 and valid up to 30.09.2027. o Unit has obtained factory license #6059 and registration# 165/17114/1997 dated 06.07.2021 which is valid up to 31.12.2026. o Handling, manufacturing, storage and transportation of hazardous chemicals is being carried out in accordance with the Manufacture, Storage and Import of Hazardous Chemicals Rules 1989 as amended time to time.
xiv.	<p>Medical surveillance and occupational health program should be taken up on regular basis and record of the health status of the workers should be maintained. The workers who may contract occupational diseases particularly due to carbon disulphide exposure should be monitored closely and</p>	<ul style="list-style-type: none"> o <u>Complied.</u> o Awareness programs are being conducted on health by CMO and by ABG Emergency Code Red. o First aid training is being arranged on periodic interval, which covers all categories of employees, workmen. o Medical check-up is being conducted annually for all employees and six monthly, for those

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	adequate measures should be taken for their treatment and recovery.	<p>employees who engaged in handling hazardous substances at work place area.</p> <ul style="list-style-type: none"> o All the Employees are covered under Health Survey. Periodic and pre-joining medical check-up for each and every employees and Contractual worker is being done. o Medical records of employees and contract workers are maintained online and individual person can access his record as read only from any computer in the Unit.
xv.	A green belt of adequate width and density (2000-2600 trees/ha.) should be raised all around the factory complex and the township. Preferably native plant species should be selected for this purpose in consultation with the local DFO.	<ul style="list-style-type: none"> o <u>Complied.</u> o Green belt has been developed in the campus along the boundary wall and open spaces. o Native plant species has been selected in consultation with DFO and as per the directives of DoEF, Mangroves have been planted in 100 Ha. at Raniyo Island.
xvi.	The project authorities must set up adequate facilities for collection and analysis of samples under the supervision of competent technical personnel who will directly report to the chief executive.	<ul style="list-style-type: none"> o <u>Complied.</u> o Adequate facilities have been developed for the collection and analysis of samples under the supervision of competent technical personnel who directly reports to the chief executive at the plant.
xvii.	A separate Environmental Management Cell with suitably qualified people to carry out various functions should be set up under the control of senior executive, who will report directly to the Head of the	<ul style="list-style-type: none"> o <u>Complied.</u> o A separate environment management cell has been constituted under the leadership of Facility Head.

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S. No	Conditions	Compliance Status
	organization.	
<pre> graph TD SKV[Sanjay Kumar Verma Unit Head-Kharach] --- MP[Manish Patel AVP-Technical Services] MP --- HT[Hiral Tailor AM-Environment & Sustainability Cell] MP --- DB[Dhaval Balai FLE – Environment & Sustainability Cell] </pre>		
xviii.	The funds earmarked for the environmental protection measures should be kept in a separate account and should not be diverted for other purpose and year – wise expenditure should be reported to this ministry.	<ul style="list-style-type: none"> ○ <u>Complied.</u> ○ The funds earmarked for the environmental protection measures are being maintained and not diverted for other purpose. ○ A year wise expenditure on environment safeguards & towards Enterprise Social commitment is being submitted to MOEF&CC at the end of each FY along with EC compliance report. Expenses for FY-24 will be submitted in next EC compliance report. ○ Unit has taken various improvement measures to control pollution, which is beyond permissible limit, as mentioned below: <ul style="list-style-type: none"> ○ A project of EDTA scrubbing technology for recovering Sulphur from H2S gas and CAP system for CS2 recovery are under

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S. No	Conditions	Compliance Status
		<p>stabilization phase. After successfully completion of both EDTA & CAP, CS2 recovery will be increase.</p> <ul style="list-style-type: none"> ○ Unit has commissioned an additional Biological reactor having 15400 m3 capacity, higher efficient jet aerators to meet EUBAT (European best available technology) norms for COD, which is stringent than consented norms. ○ To treat rich concentrated zinc stream, zinc recovery project is under stabilization phase.
3.	This ministry of any competent authority may stipulate any further condition(s) after review of the monitoring reports. The above conditions will be monitored by the regional office of this ministry located at Bhopal/CPCB/GPCB.	○ <u>Noted.</u>
4.	The ministry may revoke/suspend clearance if implementation of any of the above condition is not satisfactory.	○ <u>Noted.</u>
5.	Any other condition(s) or alternation in the existing conditions will be fully implemented by the project authorities within the specified time frame.	○ <u>Noted.</u>

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6.	The above conditions will be implemented under the provisions of the water Act, 1974, the Air act, 1981, Environment) Act, 1986 and the public (Liability) Act, 1991 along with their amendments.	o <u>Complied.</u>