



ANDHRA PRADESH POLLUTION CONTROL BOARD
Paryavarana Bhavan, A-III, Industrial Estate,
Sanathnagar, Hyderabad - 500 018.
Phone : 040-23887500, Website: www.appcb.ap.nic.in

AUTO RENEWAL OF CONSENT, HAZARDOUS WASTE AUTHORISATION ORDER FOR OPERATIONS

In response to your application dated 22.10.2016 for Auto Renewal of Consent for Operation & Hazardous waste Authorisation Order, the Board is hereby extending validity period of Consent and Authorisation order issued vide Order APPCB/VSP/RJY/546/CFO/HO/2016, dated 22.07.2016 and valid upto 31.10.2016, for further period of 5 (five) years i.e., **upto 31.10.2021** under sections 25/26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of Air (Prevention & Control of Pollution) Act 1981 and amendments thereof and Authorization under Rule 6 of the Hazardous & Other Wastes (Management & Transboundary, Movement) Rules, 2016.

1. All other conditions mentioned in Schedules A, B & C of the combined CFO&HWA order issued by the Board vide order dated 22.07.2016 will remain same.
2. The industry shall comply with the standards issued by MoEF&CC / CPCB from time to time.
3. The facility shall submit the compliance report to all the stipulated conditions for Consent for Operation for every six months i.e. on 1st of January and 1st of July of every year.
4. The facility shall ensure that dedicated fund is allotted towards Environment Relief Fund (ERF) in the Public Liability Insurance policy and submit a copy of the policy at the Regional Office: Kakinada every year.

Date: 16.11.2016

Sd/-
MEMBER SECRETARY

To

M/s. Cairn India Limited,
Ravva Operations, S. Yanam,
Uppalaguptam Mandal,
East Godavari District - 533213

// T.C.F.B.O. //

Joint Chief Environmental Engineer (FAC)
Unit Head-IV



RED CATEGORY
CONSENT & AUTHORIZATION ORDER
BY REGISTERED POST WITH ACKNOWLEDGEMENT DUE

Consent Order No : APPCB/VSP/RJY/546/CFO/HO/2016-

Date : 22.07.2016

CONSENT is hereby granted for Operation under section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of Air (Prevention & Control of Pollution) Act 1981 and amendments thereof and Authorisation under Rule 6 of the Hazardous & Other Wastes (Management and Transboundary, Movement) Rules, 2016 and the rules and orders made there under (hereinafter referred to as 'the Acts', 'the Rules') to:

M/s. Cairn India Limited,
(Including Booster gas compressor station)
Ravva Operations, S. Yanam,
Uppalaguptam Mandal,
East Godavari District - 533213
E mail: manager.hse@cairnindia.com

(Hereinafter referred to as 'the Applicant') authorizing to operate the industrial plant to discharge the effluents from the outlets and the quantity of emissions per hour from the chimneys as detailed below:

(i) Outlets for discharge of effluents:

| Outlet No. | Outlet Description | Max Daily Discharge KLD | Point of Disposal |
|------------|--|-------------------------|--|
| 1 | Produced water from hydrocarbon production operations after treatment. | 9302 | Re-injection into the reservoir through PWRI system. |
| 2 | Treated process waste water from Tank drainage cooling makeup etc operations including produced water (excess of produced water) | 3000 | Into Sea through marine outfall. |
| 3 | Domestic Effluents after treatment in STP. | 120 | Reused for green belt development. |

The industry is permitted for abstraction and re-injection of deep ground saline water @ 10,413 m³/day upto 2019.

ii) Emissions from chimneys:

| Chimney No. | Description of Chimney | Quantity of Emissions at peak flow (m ³ /hr) |
|-------------|--|---|
| 1. | Attached to 4 x 2.5 MW Power Generation Gas Turbines | 19,782 |
| 2. | Attached to LP Flare Stack | 2,976 |
| 3. | Attached to HP Flare Stack | 19,782 |
| 4. | Attached to Hot Oil Heater - 1 No. | 3,617 |
| 5. | Attached to AGC A engine | |
| 6. | Attached to AGC B engine | |
| 7. | Attached to AGC C engine | |

| | | |
|-----|--|----------|
| 8. | Attached to AGC D engine | |
| 9. | Attached to RSGDP A/B engine | |
| 10. | Attached to TSGR 1 engine | |
| 11. | Attached to TSGR 2 engine | |
| 12. | Attached to Export pump engines (A/B) | |
| 13. | Attached to Fire pump engines (Pump House 1) | |
| 14. | Attached to Fire pump engines (Pump House 2) | |
| 15. | Attached to Fire pump engines (Pump House 3) | |
| 16. | Attached to HP flare-II | |
| 17. | Attached to MEG Re-Booster – 2 Nos. (Hot oil heater) | |
| 18. | Attached to Gas Lift Booster Compressor Station (A) | |
| 19. | Attached to Gas Lift Booster Compressor Station (B) | |
| 20. | Attached to 1010 KVA D.G. Set | 1,10,792 |

iii) **HAZARDOUS WASTE AUTHORISATION (FORM – II) [See Rule 6 (2)]:**

M/s. Cairn India Limited, Ravva Operations, S. Yanam, Uppalagupam Mandal, East Godavari District is hereby granted an authorization to operate a facility for collection, reception, storage, treatment, transport and disposal of Hazardous Wastes namely:

• **HAZARDOUS WASTES WITH DISPOSAL / RECYCLING OPTION:**

| S.No. | Name of the Waste | Stream | Quantity | Disposal Option |
|-------|---|---------------------|-------------------------|---|
| 1. | Oily Sludge | 1.3 of Schedule -I | 400 MT/Year | Disposed to the APPCB approved/authorized vendors for co-processing in cement kilns/TSDF/Recycling. |
| 2. | Waste oil (Tank bottom oil / Sludge, oil emulsions) | 3.3 of Schedule -I | 600 MT Once in 10 years | Disposed to the APPCB approved/authorized vendors for co-processing in cement kilns/TSDF/Recycling. |
| 3. | ETP Sludge containing hazardous constituents | 34.5 of Schedule -I | 70 MT/year | Disposed to the APPCB approved/authorized vendors for co-processing in cement kilns/TSDF. |
| 4. | Used Oil / Spent Oil | 5.1 of Schedule -I | 25 KL/Year | Recycled in the process by mixing with the crude oil in own premises. |
| 5. | Filters contaminated with oil / chemicals | 3.3 of Schedule -I | 4 Ton/Year | AAPCB approved TSDF/authorized vendors. |
| 6. | Wastes / Residues containing oil | 5.2 of Schedule -I | 10 KL/Well | Disposed to the APPCB approved/authorized vendors for co-processing in cement kilns/TSDF/Recycling. |
| 7. | Waste chemical (PPD, Glycol) | - | 15 MT/Year | Disposed to the APPCB approved/authorized vendors for co-processing in cement kilns/TSDF/Recycling. |
| 8. | Paint Sludge | 21.1 of Schedule -I | 2 MT/Year | Disposed to the APPCB approved/authorized vendors for co-processing in cement kilns/TSDF. |
| 9. | Spent Carbon | 34.2 of Schedule -I | 80 MT/Year | Disposed to the APPCB approved/authorized vendors for co-processing in cement kilns/TSDF. |

| | | | | |
|------------------------|--|---------------------|-------------------------|---|
| 10. | Oil rags | 5.2 of Schedule -I | 15 MT/Year | Disposed to the APPCB approved/authorized vendors for co-processing in cement kilns/TSDf. |
| 11. | Discarded containers / barrels / liners contaminated with hazardous wastes / chemicals | 33.3 of Schedule -I | 200 Nos/year | Disposed to the traders after decontamination. |
| 12. | Insulation wool / thermocol / PUF | - | 10 MT/Year | Disposed to the APPCB approved TSDf/authorized vendors. |
| During Drilling | | | | |
| 13. | Drill cuttings containing oil | 2.1 of Schedule -I | 220m ³ /well | Offshore disposal as per MoEF guidelines. |
| 14. | Sludge containing oil | 2.2 of Schedule -I | 20 KL/well | Offshore disposal as per MoEF guidelines. |
| 15. | Drilling mud and other drilling waste | 2.3 of Schedule -I | 150m ³ /well | Disposal as per MoEF guidelines. |

This consent order is valid for the following products along with quantities indicated only:

| S.No. | Product | Quantity |
|-------|-------------|---|
| 1. | Natural Gas | 23,20,000 Standards Million m ³ /day |
| 2. | Crude Oil | 50,000 Barrels/day |

This order is subject to the provisions of 'the Acts' and the Rules' and orders made thereunder and further subject to the terms and conditions incorporated in the schedule A, B & C enclosed to this order.

This combined order of consent & Hazardous Waste Authorization shall be valid for a period ending with the 31st day of October, 2016.

Sd/-
MEMBER SECRETARY

To
M/s. Cairn India Limited,
Ravva Operations, S. Yanam,
Uppalaguptam Mandal,
East Godavari District - 533213

// T.C.F.B.O. //

Ulas 11/8/16
Joint Chief Environmental Engineer
Unit Head-IV
SCHEDULE-A

- Any up-set condition in any industrial plant / activity of the industry, which result in, increased effluent / emission discharge and/ or violation of standards stipulated in this order shall be informed to this Board, under intimation to the Collector and District Magistrate and take immediate action to bring down the discharge / emission below the limits.

2. The industry should carryout analysis of waste water discharges or emissions through chimneys for the parameters mentioned in this order on quarterly basis and submit to the Board.
3. All the rules & regulations notified by Ministry of Law and Justice, Government of India regarding Public Liability Insurance Act, 1991 should be followed as applicable.
4. The industry should put up two sign boards (6x4 ft. each) at publicly visible places at the main gate indicating the products, effluent discharge standards, air emission standards, hazardous waste quantities and validity of CFO and exhibit the CFO order at a prominent place in the factory premises.
5. Not withstanding anything contained in this consent order, the Board hereby reserves the right and powers to review / revoke any and/or all the conditions imposed herein above and to make such variations as deemed fit for the purpose of the Acts by the Board.
6. The industry shall file the water cess returns in Form-I as required under section (5) of Water (Prevention and Control of Pollution) Cess Act, 1977 on or before the 5th of every calendar month, showing the quantity of water consumed in the previous month along with water meter readings. The industry shall remit water cess as per the assessment orders as and when issued by Board.
7. The applicant shall submit Environment statement in Form V before 30th September every year as per Rule No.14 of E(P) Rules, 1986 & amendments thereof.
8. The applicant should make applications through Online for renewal of Consent (under Water and Air Acts) and Authorization under HWM Rules at least 120 days before the date of expiry of this order, along with prescribed fee under Water and Air Acts and detailed compliance of CFO conditions for obtaining Consent & HW Authorization of the Board. The industry should immediately submit the revised application for consent to this Board in the event of any change in the raw material used, processes employed, quantity of trade effluents & quantity of emissions. Any change in the management shall be informed to the Board. The person authorized should not let out the premises / lend / sell / transfer their industrial premises without obtaining prior permission of the State Pollution Control Board.
9. Any person aggrieved by an order made by the State Board under Section 25, Section 26, Section 27 of Water Act, 1974 or Section 21 of Air Act, 1981 may within thirty days from the date on which the order is communicated to him, prefer an appeal as per Andhra Pradesh Water Rules, 1976 and Air Rules 1982, to Appellate authority constituted under Section 28 of the Water(Prevention and Control of Pollution) Act, 1974 and Section 31 of the Air(Prevention and Control of Pollution) Act, 1981.

SCHEDULE-B

WATER POLLUTION:

1. The effluent discharged shall not contain constituents in excess of the tolerance limits mentioned below:

| Outlet | Parameter No. | Limiting Standards |
|--------|---------------------|--------------------|
| 1 & 2 | pH | 5.50 – 9.00 |
| | Oil and Grease | 10 mg/l |
| | Suspended Solids | 100 mg/l |
| | BOD 27°C for 3 days | 30 mg/l |
| | Chromium as Cr | 0.10 mg/l |
| | Copper as Cu | 0.05 mg/l |
| | Cyanide as CN | 0.005 mg/l |
| | Fluoride as F | 1.50 mg/l |
| | Leas as Pb | 0.05 mg/l |
| | Mercury as Hg | 0.01 mg/l |
| | Nickel Ni | 0.10 mg/l |
| | Zinc as Zn | 0.10 g/l |

2. The source of water is borewell / irrigation canal. The following is the permitted water consumption:

| Sl. No. | Purpose | Quantity (KLD) |
|---------|----------------------------------|----------------|
| 1 | Industrial cooling, boiler feed. | 70.0 |

| | | |
|--------------|---|--------------|
| 2 | Domestic purposes. | 140.0 |
| 3 | Process, whereby water gets polluted and pollutants are easily bio degradable. | -- |
| 4 | Processing, whereby water gets polluted and the pollutants are not easily bio – degradable. | -- |
| Total | | 210.0 |

Separate meters with necessary pipe-line shall be maintained for assessing the quantity of water used for each of the purposes mentioned above for Cess assessment purpose.

AIR POLLUTION:

- The emissions shall not contain constituents in excess of the prescribed limits mentioned below:

| Chimney No. | Parameter | Emission Standards |
|-------------|--------------------|------------------------|
| 1 to 19 | Particulate matter | 115 mg/Nm ³ |

- The industry shall comply with ambient air quality standards of PM10 (Particulate Matter size less than 10µm) - 100 µg/ m³; PM2.5 (Particulate Matter size less than 2.5 µm) - 60 µg/ m³; SO₂ - 80 µg/ m³; NO_x - 80 µg/m³, outside the factory premises at the periphery of the industry.

Standards for other parameters as mentioned in the National Ambient Air Quality Standards CPCB Notification No.B-29016/20/90/PCI-I, dated 18.11.2009.

Noise Levels: Day time (6 AM to 10 PM) - 75 dB (A)

Night time (10 PM to 6 AM) - 70 dB (A)

- The industry shall comply with emission limits for DG sets of capacity upto 800 KW as per the Notification G.S.R.520 (E), dated 01.07.2003 and G.S.R.448(E), dated 12.07.2004 under the Environment (Protection) Act Rules. In case of DG sets of capacity more than 800 KW shall comply with emission limits as per the Notification G.S.R.489 (E), dated 09.07.2002 at serial no.96, under the Environment (Protection) Act, 1986.

GENERAL:

- The industry shall handover the original Consent order No. APPCB/VSP/RJY/546/CFO/HO/2015-1180, dated 21.01.2015, having validity upto 28.02.2017 to the RO, Kakinada after receipt of this order and the same stands cancelled from the date of receipt of this order.
- The industry shall operate ETP and STP and maintain records.
- The industry shall maintain separate digital water flow meters with totalisers for the following:
 - Produced water generation from hydrocarbon production operations.
 - Saline water drains from deep ground reservoir.
 - Produced water re-injected through PWRI system.
 - Treated waste water inlet to ETP and at outlet.
 - Marine discharge before outfall.
- The industry shall ensure no burning of effluents in the pits shall not be carried out at any stage.
- The industry shall ensure that the gas does not contain sulphides / sulphur compounds.
- The power mains, switches shall be such that the power to the facility be shut without affecting power for emergency utilities, control room, sprinkler systems, ROVs, emergency material transfer pumps, telephones, etc.
- The Disaster Management Plan (DMP) shall be updated every year taking into account changes in the installation, other in the proximity facilities which may materially affect the installation.

8. Proof of having insured the facility under the Public Liability Insurance Act shall be submitted to the Board annually.
9. The industry shall comply with the guidelines for disposal of Solid Waste, Drill Cutting and Drilling Fluids for Onshore Drilling operations as stipulated in the in the MoEF Notification G.S.R.546 (E), dated 30.08.2005 and other Notifications. Rules made under E(P) Act.
10. Existing Greenbelt shall not be disturbed in the proposed activity. Greenbelt of adequate width and density shall be developed along the boundary of the industry with minimum area of 33% of total area 90.25 Ha.

SCHEDULE – C

[See rule 6(2)]

[CONDITIONS OF AUTHORISATION FOR OCCUPIER OR OPERATOR HANDLING HAZARDOUS WASTES]

1. All the rules and regulations notified by Ministry of Environment and Forests, Government of India under the E(P) Act, 1986 in respect of management, handling, transportation and storage of the Hazardous wastes should be followed.
2. The industry shall not store hazardous waste for more than 90 days as per the Hazardous & Other Wastes (Management and Transboundary Movement) Rules, 2016 and amendments thereof.
3. The industry shall store Used / Waste Oil and Used Lead Acid Batteries in a secured way in their premises till its disposal to the manufacturers / dealers on buyback basis.
4. The industry shall maintain 6 copy manifest system for transportation of waste generated and a copy shall be submitted to concerned Regional Office of APPCB. The driver who transports Hazardous Waste should be well acquainted about the procedure to be followed in case of an emergency during transit. The transporter should carry a Transport Emergency (TREM) Card.
5. The industry shall maintain proper records for Hazardous & other wastes stated in Authorisation in FORM-3 i.e., quantity of Incinerable waste, land disposal waste, recyclable waste etc., and file annual returns in Form- 4 as per Rule 6 (5) of the Hazardous & Other Wastes (Management & Transboundary Movement) Rules, 2016 and amendments thereof.
6. The industry shall submit the condition wise compliance report of the conditions stipulated in Schedule A, B & C of this Order on half yearly basis to Board Office, Hyderabad and concerned Regional Office.

Sd/-

MEMBER SECRETARY

To
M/s. Cairn India Limited,
Ravva Operations, S. Yanam,
Uppalaguptam Mandal,
East Godavari District – 533213

// T.C.F.B.O. //


Joint Chief Environmental Engineer
Unit Head-IV