

**BEFORE THE NATIONAL GREEN TRIBUNAL
SOUTHERN ZONE, CHENNAI**

Original Application No. 73 of 2021 (SZ)

IN THE MATTER OF:

Visakha Pawan Praja Karmika
Sangham, Andhra Pradesh

...Applicant

:Vs:

Union of India
Rep. by its Secretary,
Ministry of Environment, Forest & CC
Indira Paryavaran Bhavan,
Jorbagh, NewDelhi-110 003 and Others

... Respondents

REPLY TO JOINT COMMITTEE REPORT DATED 17.12.2021
FILED ON BEHALF OF HINDUSTAN PETROLEUM CORPORATION
LIMITED – 7th RESPONDENT WITH ANNEXURES

M/s. KING & PARTRIDGE

M.VIJAYAN

M.KUMARESAN

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Indira Paryavaran Bhavan,
Jorbagh, NewDelhi-110 003
2. Union of India
Rep. by its Secretary
Ministry of Petroleum & Natural Gas,
Sastry Bhavan, New Delhi-1
3. Central Pollution Control Board
Rep. by its Chairman
Parivesh Bhavan,
East Arjun Vihar, New Delhi-110 032
4. State of Andhra Pradesh
Rep. by its Chief Secretary,
Government Complex,
Velagapudi, Guntur District
Andhra Pradesh-522 503
5. Andhra Pradesh Pollution Control Board
Rep. by its Member Secretary,
Near Sunrise Hospital, Pushpa Hotel Center
Chalamvari Street, Kasturibaipet
Vijayawada, Andhra Pradesh-520 010
6. District Collector and Magistrate
Main Road, Krishna Nagar,
Maharani Peta, Visakhapatnam
Andhra Pradesh-530 002.
7. M/s.Hindustan Petroleum Corporation Limited
Rep. by its Chairman & Managing Director
Malkapuram Post, Visakhapatnam
Andhra Pradesh-530 011

...Respondents


G. BHAGAVAN
उप महाप्रबंधक - तकनीकी
Dy. General Manager-Technical
एच.पी.सी.एल. - विशाख रिफाइनरी
H.P.C.L - Visakh Refinery

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I, Gudala Bhagavan, S/o Gudala Appanna, aged about 52 years, Deputy General Manager-Technical in Visakh Refinery, Hindustan Petroleum Corporation Limited, Malkapuram Post, Visakhapatnam, Andhra Pradesh-530 011, do hereby solemnly affirm and sincerely state as follows:

1. I am Deputy General Manager-Technical in Visakh Refinery, Hindustan Petroleum Corporation Limited and as such, I am well acquainted with the facts and circumstances of the case. It is submitted that HPCL have already filed a reply dated 12.04.2021 to the main application, Objections to the report of Joint committee on fire incident and reply-to-Reply Affidavit filed by Applicant dated 25.07.2021, objections to the report of Joint committee dated 17.06.2021 which are prayed to be read as a part and parcel of this affidavit.

Preliminary Submissions:

2. The genesis of the complaint by the Applicant is that this Respondent has not complied with the directions of the Report submitted by Indian Institute of Science in 2016 (IISc Report). The Joint Committee in its report dated December 17, 2021 filed before this Tribunal on January 29, 2022 clearly and unambiguously states that this Respondent is compliant with the recommendations of the IISc Report. Hence, once the Joint Committee finds that this Respondent is compliant with IISc Report recommendations, no further cause of action survives, and the Application is to be dismissed without findings against this Respondent.
3. The Respondent submits that the Hon'ble High Court of Andhra Pradesh in Writ Petition (PIL) No. 259 of 2017 vide order dated


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23.09.2019 (Copy enclosed as **Annexure-III**) has held that this Respondent is complying with the taskforce directives dated 03.10.2016. The said writ petition was also filed by the same Applicant herein (Secretary of Visakha Pawan Praja Karmika Sangam), and the Order of the Hon'ble High Court has attained finality. The Hon'ble High Court has conclusively found that this Respondent is in substantial compliance with the taskforce directives 03.10.2016. It is also submitted that taskforce directives dated 03.10.2016 issued to HPCL-VR do not mention of any non-compliance to the conditions of CFO & earlier task force directives. The Joint Committee cannot go against the findings of the Hon'ble High Court and make the recommendations as mentioned in the Joint Committee Reports for deposit of any amount by this Respondent.

4. Without prejudice to the foregoing, it is submitted that the decision of the Appellate Authority under the Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981 vide its order dated 13.10.2012 in Appeal No. 48 of 2012 upheld the appeal of this Respondent with respect to the taskforce directives dated 14.11.2011 and 16.02.2012 (and related communications). APPCB was directed to take appropriate action after receipt of the report of I.I.Sc., and pass appropriate orders. Hence, the effect of this order is that this Respondent has complied with these taskforce directives of APPCB. The order of the Appellate Authority has attained finality. Hence, the Joint Committee cannot reopen the issue and has erred in coming to a conclusion that these directives were not complied with, and there can be no action against the Respondent in this regard. Copy of Order dated 13.10.2012 is enclosed as **Annexure-II**.
5. Without prejudice to the foregoing, the Joint Committee has considered the directions given by the APPCB under Section 33-A of Water (Prevention and Control of Pollution) Amendment Act, 1988 and Section 31-A of Air (Prevention and Control of Pollution) Amendment


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Act, 1987 to arrive at a conclusion that there is violation from the date of such directions. The mere issuance of directions under Section 33-A of Water (Prevention and Control of Pollution) Amendment Act, 1988 and Section 31-A of Air (Prevention and Control of Pollution) Amendment Act, 1987 is not an evidence of any violation. This is clear from a bare perusal of the provisions which make it clear that the directions under these sections are in exercise of the powers of the board and for performance of its functions. Unless there is an allegation of a violation, and such alleged violation is not remedied it cannot be said that there is violation by the industry i.e. this Respondent. The directions provided by APPCB to this Respondent under the taskforce directives dated 14.12.2011, 16.02.2012, and 03.10.2016 have been complied with, as has been stated hereinabove, and the taskforce directives dated 19.03.2020 is under compliance. Furthermore, the Joint Committee has neither checked the compliance of these directives nor stated what are the violations allegedly committed by this Respondent. Therefore, it cannot then be open to the Joint Committee to refer to past taskforce directives, which have been satisfactorily complied with, to state that there is some violation.

6. As regards, the taskforce directives dated 19.03.2020, this Respondent has complied with the same except for one point which is being complied with by this Respondent. This Respondent has already filed the compliance status of these directives dated 19.03.2020 before this Hon'ble Tribunal in Attachment-III of the Objections dated 23.02.2022. The Respondent refers and relies upon the same, and is not repeating it for the sake of brevity. It is pertinent to note that on perusal of the APPCB Action Taken Report dated 10.11.2021 in the present proceedings, it is clear that APPCB is satisfied with the compliance of this Respondent to APPCB directives from time to time.


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S.No	Particulars	HPCL Reply
		<p>Respondent to all taskforce directive is stated as below:</p> <ul style="list-style-type: none"> • Vide order dated 13-10-2012 by the Appellate Authority (Annexure-II) under the Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981 it has upheld the appeal of this Respondent and the Board was directed to take appropriate action after receipt of the report of IISc, and pass appropriate orders. Hence, the effect of this order is that this Respondent has complied with the taskforce directives of APPCB conveyed vide their letter dated 24.07.2012. • Further, the taskforce directives dated 03.10.2016 issued to HPCL-VR do not mention of any non-compliance to conditions of CFO and earlier taskforce directives. • It is also evident from the IISc report that sporadic odour nuisance cannot be attributed to single source of emission in Visakhapatnam. The Joint Committee itself concluded in their report dated 17.12.2021 that the recommendations made by IISc, Bengaluru pertaining to HPCL have been complied. • Vide order dated 23.09.2019, the Hon'ble


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S.No	Particulars	HPCL Reply
	<p>APPCB is enclosed as Annexure 4. Hence, the Committee observed that there was a repeated violations by the unit from 2011 onwards and decided to consider the no. of violations from the date of directions issued by APPCB on 14/12/2011 and recommends levying environmental compensation on the Visakh refinery as detailed below:</p>	<p>Joint Committee Report dated 17.12.2021.</p> <p>To APPCB taskforce directive dated 19.03.2020, this Respondent has provided its reply vide letter dated 28.09.2020. This Respondent has also filed the compliance status of these directives dated 19.03.2020 before this Hon'ble Tribunal in Attachment-III of this Respondent's Objections dated 23.02.2022. The Respondent refers and relies upon the same.</p>
5 ii	<p>Number of days of violation (N): The number of days for which violation took place is considered as the period between the day of violation observed and day of compliance verified by the CPCB/APPCB. From the available records, APPCB issued directions to HPCL on 14/12/2011 and committee verified the compliances on June 23, 2021. Based on the criteria, 3480 days (from 14.12.2011 to 23.06.2021 including both the days) is considered for calculation of period of violation for estimating EC.</p>	<p>At the outset, as submitted in the compliance status report for the above mentioned task force directives (enclosed as Annexure-I), there is no violation by this Respondent and there has been general compliance with all these taskforce directives and there was no environmental damage or degradation.</p> <p>It is humbly submitted that without any evidence of environmental damage or degradation attributable to this respondent, there cannot be any assessment of environmental damage compensation.</p> <p>Furthermore, as there is no non-compliance with any of the taskforce directives, it is not correct to recommend any compensation from 14.12.2011 onwards for calculation of compensation. The compliance of this</p>


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7. It is submitted that it is clear from the above that the Joint Committee has erred in not considering the compliant status of all taskforce directives and has erred in assessing environmental compensation without any violation or environmental damage or degradation attributable to this extent and that too for the past period, which is more than a decade ago.
8. Without prejudice to the above submissions, the below tabulation is Respondent's reply to Joint Committee Report dated 17.12.2021, in seriatim (where there is any finding against the Respondent):

S.No	Particulars	HPCL Reply
5	<p>Assessment of Environmental compensation (EC) for non-compliance</p> <p>The committee earlier in calculation of EC had considered the directions issued by APPCB after the recommendations of IISc, Bengaluru and for non-compliances observed during inspection. The committee examined the earlier directions issued by APPCB for non-compliances of CFO & CFE conditions and also for odour nuisances. APPCB had issued directions under Section 33 (A) of Water (Prevention and Control of Pollution) Amendment Act 1988 and Section 31 (A) of Air (Prevention and Control of Pollution) Amendment Act 1988 and under, 1987 to M/s HPCL on 14/12/2011, 16/02/2012, 3/10/2016 and 19/03/2020 for non-compliances. The copy of the directions issued by</p>	<p>It is submitted that HPCL VR has been complying with all the taskforce directives issued dated 14/12/2011, 16/02/2012, 3/10/2016 and 19/03/2020. The detailed compliance status of these directives, as communicated by HPCL, vide letters dated 23/12/2011, 12/01/2012, 10/02/2012, 05/03/2012, 12/07/2017 and 28/09/2020 and the said letters are taken on record by the Taskforce, copies are attached as enclosure marked as Annexure-I (Colly.) It is to be noted that APPCB has been satisfied with the compliance status under each of the taskforce directives by this Respondent, and hence, has not further followed up or taken any other action against this Respondent. This by itself shows that there is complete compliance by this Respondent on the various taskforce directions, and there is no non-compliance or any continuing non-compliance as stated in the</p>


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S.No	Particulars	HPCL Reply
		<p>High Court of Andhra Pradesh has disposed the Writ Petition (PIL) 259/2017 which was filed by Mr. K. Ganga Raju, Secretary of "Visakha Pawan Praja Karmika Sangam" (i.e. the Applicant). In its Order (Annexure-III) the Hon'ble High Court has clearly mentioned that, "It is evident that the directions issued by the board in the order dated 03.10.2016 have been substantially complied with by the 8th Respondent" (i.e. HPCL-VR). The order of the Hon'ble High Court has attained finality. Hence, it is not open now to state that there is no compliance of the said taskforce directives.</p> <ul style="list-style-type: none"> • Compliance with the recommendations of taskforce directives dated 19.03.2020, is already placed before this Tribunal, and it can be seen that there is non-compliance by this Respondent.
	<p>Conclusions and Recommendations</p>	
6.i	<p>The unit after expansion consists of 860 acres and 112.5 acres is used for green belt development within the premises. At present the unit has no space for developing green belt inside the refinery. However, the unit has developed green belt outside</p>	<p>HPCL VR has developed green belt within the space available inside the refinery premises. The refinery has also developed 6,50,000 plants in the neighboring areas as directed by APPCB.</p> <p>As mentioned in JC report dated 17.12.2021, and Action</p>


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S.No	Particulars	HPCL Reply
	the premises and major areas of Visakhapatnam city viz. Autonagar, Vadlapudi, Parawada, Sheelanagar, Aganampudi, Denkada etc.	taken report of APPCB dated 10.11.2021, the area of green belt in HPCL-VR within the premises after expansion is 112.5 acres and HPCL-VR also planted approx.700 Acres of block plantation in neighboring areas of refinery due to shortage of space inside the refinery.
ii.	The recommendations made by IISc, Bengaluru pertaining to M/s HPCL, Visakhapatnam (7th respondent) have been complied.	As mentioned by Joint committee, HPCL-VR has complied with all recommendations made by IISc Bengaluru pertaining to HPCL.
iii.	The committee revisited the no. of days of violations by M/s HPCL and takes the violations date as the date of directions issued by APPCB on 14/12/2011 till 23/06/2021 the day of committee inspected and observed the non-compliances. Hence, for the repeated violations committed by HPCL, Rupees eight crores thirty five lakhs and twenty thousand of EC has been calculated and levied	The Respondent adopts the reply to Sl. No. 5(ii) above and states that there is no violation or non-compliance of the directives of APPCB. Hence, no compensation can be levied on this Respondent.
iv.	M/s HPCL may be directed to deposit Rs. 8,35,20,000/- with APPCB	
v.	M/s HPCL may be directed to comply with all conditions of Environmental Clearance, Consent For Establishment & Consent For Operate and submit the compliance report to APPCB	It is to be kindly noted that HPCL-VR is regularly submitting the compliance to statutory authorities as stipulated in CFO and EC conditions, and will continue to do as required.
vi.	APPCB may be directed to verify compliance submitted by M/s HPCL and take necessary actions for non-compliances.	Pertains to APPCB


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S.No	Particulars	HPCL Reply
vii.	APPCB may be directed to constitute the odour Squad as per the recommendations of IISc. Bengaluru to initiate action and resolve the odour episodes. The APPCB and industries shall jointly organize awareness programmes for public on odour & pollution matters.	Pertains to APPCB

It is submitted that the Applicant first approached the Hon'ble High Court of Andhra Pradesh earlier vide Writ Petition (PIL) 259 of 2017 with vested interests, which had nothing to do with environmental consideration or care. When the attempt was not fruitful due to the Hon'ble High Court rightly disposed the case finding in favour of this Respondent, the same Applicant has approached this Hon'ble Tribunal with baseless allegations against a reputed Central Government Public Sector Undertaking with some malicious intent. The constantly changing allegations of the Applicant appears to show that the Applicant is undertaking a fishing expedition and is an abuse of process of law.

It is therefore most respectfully prayed that this Hon'ble Tribunal may be pleased to dismiss the above application as against the 7th Respondent and thus render justice.

Solemnly affirmed at Visakhapatnam
on this the twenty third day of March, 2022 and
signed his name in my presence.


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G. BHAGAVAN
उप महाप्रबंधक - तकनीकी
Dy. General Manager-Technical
एच.पी.सी.एल. - विशाख रिफाइनरी
H.P.C.L - Visakh Refinery

BEFORE ME

NOTARY: VISAKHAPATNAM

ATTESTED

NOTARY
MALKAPURAM
VISAKHAPATNAM-11
A.P. INDIA

BATCHU SRINIVASA RAO
M.Com., B.L.,
ADVOCATE & NOTARY
D.No.: 60-31-56, Janatha Colony,
Malkapuram (Post),
VISAKHAPATNAM-530 011 (A.P.)
Cell No.: 9393120901





11
हिन्दुस्तान पेट्रोलियम कॉर्पोरेशन लिमिटेड
(भारत सरकार संस्थान) रजिस्टर्ड ऑफिस 17 जमशेदजी टाटा रोड, मुम्बई -400 020
HINDUSTAN PETROLEUM CORPORATION LIMITED
(A GOVERNMENT OF INDIA ENTERPRISE) REGISTERED OFFICE: 17 JAMSHEDJI TATA ROAD, MUMBAI-400 020



विशाख रिफाइनरी, पोस्ट बॉक्स नं. 15, विशाखपट्टनम - 530 011 (आंध्रप्रदेश), फोन : 2895000, 2895100, तार : हिंपेट्रेफ
VISAKH REFINERY, POST BOX NO.15, VISAKHAPATNAM-530 011 (A.P.), PHONES : 2895000, 2895100, GRAMS : HIPETREF

Date: 23.12.2011

Shri M. Dana Kishore, I.A.S.,
Member Secretary
Andhra Pradesh Pollution Control Board
Hyderabad

Dear Sir,

Sub: HPCL – Visakh Refinery – Directions issued - Request for amendment

This has reference to your Order No. 702/APPCB/TF-VSP/2002-162 dated 14.12.2011.

At the outset, we would like to reiterate our views as indicated in our letters dated 16th Nov '11 and 9th Dec '11 (copies enclosed for ready reference). The gaseous emissions from the refinery are flue gases from the stacks of furnaces and boilers and the major pollutant in the flue gases is Sulphur Dioxide. While the SO₂ emissions from the refinery were normal and within the specified limits, the odour experienced by the public in some parts of Visakhapatnam could probably be due to non-dispersion of pollutants from the industries and other sources (like automobiles, marine tankers, etc.) under certain climatic conditions specific to winter season, aggravated by the phenomenon of inversion. This is confirmed by the fact that there were no complaints of odour in the subsequent weeks though we have been operating at normal crude capacities.

As per the directions, it was suggested to restrict the production capacity to 70% or to process low Sulphur crudes during winter. Reduction in production capacity to the tune of 30% is quite significant and would have serious impact on the availability of critical products like Petrol and Diesel, leading to their shortage and possible dry out at certain locations of Andhra Pradesh. On the other hand, processing of 100% low Sulphur crudes would lead to reduced availability of certain products like Aviation Turbine Fuel (ATF) for aircrafts and Bitumen for road construction.

It may be noted that the main contributor for SO₂ is the fuels fired in various furnaces/boilers. Fuel Oil generated from low Sulphur crudes and de-sulphurized Fuel Gas are used as fuels. The Sulphur in the crude gets distributed in the various product streams, from which it is removed in the product de-sulphurization facilities so as to meet the

2/11/11/18

finished product specifications. Even with marginal changes in crude mix / fuel Sulphur, without decrease in capacity, the desired SO₂ levels at less than 11.5 Tons per day can be achieved at all times. Restricting the capacity of the refinery to 70% will result in a drastic reduction in the availability of petroleum products, and, on the other hand, will have very little effect with respect to reduction in SO₂ emissions, which is the main intent of the direction.

It is also to be noted that SO₂ emissions are from various sources and the same needs to be evaluated. As you are aware, there is not only an increase in the industrial activity but also a substantial rise in the automobile population, coupled with the huge traffic of marine tankers due to addition of another port. This has put pressure on the carrying capacity in the region. Any cuts in SO₂ emissions have to be apportioned accordingly to all the sources.

Our point-wise clarifications on the various observations stated in the APPCB Order are given in the enclosed Annexure-I. As is evident, all the issues need a more detailed review and would also need to be analyzed in proper perspective before any conclusions can be drawn.

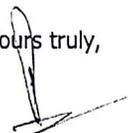
View above, we propose to run the refinery at full crude capacity with appropriate controls on fuel Sulphur and adjustment of crude mix to achieve an SO₂ emission which is always less than 11.5 Tons per day. We request you to review the direction in this context in order for us to maintain the refining capacity at the desired levels while maintaining SO₂ emission within the limits set by APPCB.

Kindly note that we have initiated the process for increasing the frequency of third party testing of critical stacks and will make the results available on a regular basis to the local APPCB office.

In the light of the above, we submit that the direction with regard to restrictions on production capacity or crude type be reviewed and revised suitably.

With kind regards,

Yours truly,



P.A.B Raju
Executive Director - Visakh Refinery

1. *High SO₂ and NO_x emissions recorded in CAAQMS at store yard of HPCL on 03.11.2011.*
 - We would like to submit that power to the store yard station failed between 1530 and 1730 hrs. Analyzer reads high values on each re-start and stabilizes gradually. The high values recorded at 1800 hrs for SO₂ and NO_x are the readings immediately after the re-start and are not representative of actual values. All the other readings on that day were normal indicating that there were no abnormal emissions from the refinery.
 - It is to be noted that the NAAQ standard for the GLC of SO₂ (80 µg/m³) is based on 24-hour average.
 - The daily average value for SO₂ on 03.11.11 in the said monitoring station is 24.3 µg/m³, which is well within the limit. Similarly, the daily average value for the GLC of NO₂ on 03.11.11 is 11.4 µg/m³, which is well within the NAAQ standard of 80 µg/m³.

2. *Smell nuisance continued till 12.11.11 from the refinery due to processing of high sulphur crudes.*
 - The most probable reason for the smell experienced in some parts of the city is non-dispersion of pollutants under certain climatic conditions specific to winter season, aggravated by the phenomenon of inversion.
 - The main contributor for SO₂ emissions is the fuels fired in various furnaces/ boilers but not processing of high Sulphur crudes.
 - Refinery operations were normal during and after the said period. SO₂ emissions from the refinery were within the limit and in the range of 8 to 11 TPD.

3. *SO₂ levels in the ambient air outside the refinery recorded in the range of 70-159 µg/m³ during 04.11.11 to 10.11.11 and subsequently came to normal.*
 - The Ground Level Concentrations of SO₂ based on source emissions from refinery were estimated for the said period using AERMOD dispersion model which is preferred by CPCB. The GLCs so estimated in the vicinity of refinery are in the range of 3.5 -27 µg/m³. Hence, the contribution of emissions from other industries and sources in the area also needs to be taken into consideration.

- The reports on the incidence of smell being from the city which is at a distance of 12-15 KM, the feasibility for SO₂ from the said location outside the refinery at such concentrations being the cause of the smell needs to be ascertained.
 - It is to be noted in this context that SO₂ has a high odour threshold; that is, SO₂ can be detected by smell only when the concentration is 7614 µg/m³ (2.7 ppm). This is as per CPCB published guideline (May 2008). The maximum concentration of 159 µg/m³ for SO₂ recorded by APPCB outside the refinery is well below this threshold limit.
 - Therefore, the observations cannot be correlated to the smell issue or to the emissions from the refinery.
4. *The SO₂ emissions as per the comprehensive monitoring carried out by APPCB on 22nd & 23rd Nov 2011 is 11.826 TPD.*
- The reported value for SO₂ emission is only marginally higher than the stipulated limit of 11.5 TPD. The APPCB data may please be made available to us for further analysis.
 - Parallel sampling was carried out by an MOE&F-recognized third party. The sampling and test method (IS-11255-P-2009) employed by this third party is the same as that of APPCB. The equipment used are regularly calibrated. The SO₂ emission on 23.11.11 as per this third party sampling is 8.29 TPD.
5. *Flue gas volumes of 14 stacks (2-F-1, 2-F-4, 11-F-1, 12-F-1, 14-F-1, 42-F-1, 42-F-2, 46-F-1, 4-F-51, FCCU-II CO boiler, 61-F-1, 75-F-1, 79-X-310 and HRSG-III) have exceeded the consent quantity.*
- The flue gas quantities as per the MOE&F-recognized third party sampling are within the consented limits for all the stacks cited except for 79-X-310 (SRU Train-III Incinerator) and 42-F-02 (CDU-III vacuum furnace).
 - Please refer to Annexure-II for the comparative readings.
 - Corrective action will be taken for the two stacks exceeding the consented limits. However, it is to be noted that these higher flue gas quantities will not contribute to higher pollutant load as it is a function of the Sulphur content of fuels fired.

OBSERVATIONS IN APPCB TASK FORCE DIRECTIVES DATED 14.12.11

6. *The source based emission norms for SPM have exceeded for 10 stacks (14-F-01, 46-F-01, 60-F-01, 65-X-001, 72-F-01, 74-F-01, 79-X-310, FCCU-I CO boiler, FCCU-II CO boiler and IBH boiler).*

- The SPM concentrations as per the parallel sampling by MOE&F-recognized third party are within the stipulated norms.
- Please refer to Annexure-III for the comparative readings.

7. *SPM load is higher (1.569 TPD) than 1.11 TPD (consent quantity) during 09th to 11th Nov '11 stack monitoring. These loads on 22nd and 23rd Nov '11 were 1.7022 & 1.579 TPD respectively.*

- The SPM load as per the parallel sampling by MOE&F-recognized third party during 09th to 11th Nov '11 is 1.02 TPD.
- SPM emissions are expected to reduce with the implementation of FGD.

8. *During the inspection on 11.11.11, APPCB observed smell in Merox unit due to Mercaptans which is similar to the smell experienced in the city.*

- In Merox unit, Mercaptans are removed from LPG product by absorption in Caustic (Sodium Hydroxide).
- The spent caustic is handled in a closed system before being routed to ETP for treatment.
- Mercaptans get converted to Mercaptides upon absorption into caustic and thus no free Mercaptans are present in spent caustic.
- If caustic is used beyond its absorption capacity, the Mercaptans in LPG will not get removed and the product will become off-spec. Such instances do not occur since meeting the product quality always is an essential requirement and the concerned parameters are monitored regularly.
- Thus, there is absolutely no chance for any emanation of Mercaptans in Merox unit and for they being the cause for the smell experienced in the city.
- The smell as stated to have been experienced by the APPCB personnel during the Merox unit inspection could probably that of spent caustic from gland leaks and drains, which is confined to the unit.
- Even in the case of any smell emanating from Merox unit, the refinery Personnel would be the first to experience the same before it can travel beyond the boundary of the refinery.

9. *There are large variations in the SO₂ emissions (6.0 to 21.1 TPD) estimated on the basis of monitored data as per the draft report of NEERI.*

- Data as sought by NEERI was provided for the period April 2009 to December 2010.
- Based on the same data provided to NEERI, SO₂ emissions were calculated by the refinery. All the values were within the stipulated limit of 11.5 TPD. The maximum value during that period was 11.34 TPD (Dec 2010).
- The draft report by NEERI may please be made available to us so as to analyze and reconcile the discrepancies, considering that the estimation of SO₂ emission by HPCL and NEERI are based on the same data.

Annexure-II

Flue Gas Flow rate, Nm ³ /Hr					
S. No.	Stack Name	Consent Quantity	Date of sampling	APPCB reading	Third party reading
1	61-F-1	1566	09.11.11	7430	1143
			12.11.11	6788	1554
			22.11.11	4771	1020
			23.11.11	4771	1453
2	79-X-310	1519	09.11.11	6732	8089
			12.11.11	8112	6610
			13.11.11	24123	6622
			22.11.11	5759	6467
			23.11.11	5759	7236
3	2-F-1	33009	09.11.11	37410	23269
4	12-F-1	25716	09.11.11	34703	19974
			12.11.11	45251	17147
			22.11.11	47826	
			23.11.11	47826	20536
5	42-F-1	57300	10.11.11	77329	53032
6	46-F-1	31500	10.11.11	56995	23501
7	11-F-1	79812	12.11.11	86600	73994
8	2-F-4	24470	13.11.11	39277	19919
9	42-F-2	15300	22.11.11	30310	16053
10	4-F-51	21487	22.11.11	56382	23203
			23.11.11	56382	21457
11	HRS G III	320388	22.11.11	327879	150139
12	75-F-1	1310	22.11.11	10262	1469
13	14-F-1	20514	22.11.11	22724	17682
			23.11.11	22724	17857
14	FCCU II CO boiler	93000	22.11.11	121369	92574
			23.11.11	121369	91646

Annexure-III

SPM, mg/Nm ³					
S. No.	Stack Name	Consent Quantity	Date of sampling	APPCB reading	Third party reading
1	79-X-310	10	09.11.11	99.6	25
			12.11.11	133.2	20
			13.11.11	61.6	14
			22.11.11	141.2	17
2	46-F-1	115	10.11.11	145	55
3	FCCU II CO boiler	115	10.11.11	195.6	94
			22.11.11	138.3	90
4	14-F-1	115	11.11.11	132.4	48
			22.11.11	188.1	46
5	FCCU-I CO boiler	115	22.11.11	134.9	95
			23.11.11	145	94
6	72-F-1	10	22.11.11	29	8
7	60-F-1	115	22.11.11	142.1	55
			23.11.11	129.6	57
8	65-X-001	115	22.11.11	141.2	20
9	74-F-1	10	23.11.11	22.2	7
10	IBH	115	23.11.11	143.7	45



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हिन्दुस्तान पेट्रोलियम कॉर्पोरेशन लिमिटेड

(भारत सरकार संस्थान) रजिस्टर्ड आफिस 17 जमशेदजी टाटा रोड, मुम्बई -400 020

HINDUSTAN PETROLEUM CORPORATION LIMITED

(AGOVERNMENT OF INDIA ENTERPRISE) REGISTERED OFFICE:17 JAMSHEDJI TATA ROAD, MUMBAI-400 020



विशाख रिफाइनरी, पोस्ट बाक्स नं. 15, विशाखपट्टनम - 530 011 (आंध्रप्रदेश), फोन : 2895000, 2895100, तार : हैपेट्रेफ
VISAKH REFINERY, POST BOX NO.15, VISAKHAPATNAM-530 011 (A.P.), PHONES : 2895000, 2895100, GRAMS : HIPETREF

Date: 12.01.2012

The Member Secretary
Andhra Pradesh Pollution Control Board
Hyderabad

Dear Sir,

Sub: HPCL – Visakh Refinery – Directions issued - Request for amendment

This has reference to your order No. Order No. 702/APPCB/TF-VSP/2002-162 dated 14.12.2011 and is further to our letter dated 23.12.2011 wherein we had requested for re-consideration and revision of the direction regarding restriction on production capacity or crude type. The status of the other directions along with our comments thereof is given below:

- 1. The industry shall install on-line pH meter to Merox unit to measure the pH of NAOH. The mercaptane in the spent NAOH shall be precipitated before discharging into ETP.*

Online pH meter can be installed on the spent caustic pump discharge line and pH can be monitored. However, the following may please be noted in this context:

- In Merox unit, Mercaptans are removed from LPG product by absorption in Caustic (Sodium Hydroxide). When the caustic becomes spent, it is removed from the system and a fresh charge of caustic is added to carry on with the absorption.
- The pH of any caustic solution will be around 12 to 14; there will not be any variation in pH with the extent of spent (or availability)
- Mercaptans get converted to Mercaptides upon absorption into Caustic and thus no free Mercaptans are present in spent caustic.
- If caustic is used beyond its absorption capacity, the Mercaptans in LPG will not get removed and the product will become off-spec. Close control on

product quality is maintained and it is ensured that such situations do not occur.

- The spent caustic is handled in a closed system before being routed to ETP for treatment.
 - Thus, there is no chance for any emanation of Mercaptans in Merox unit.
2. *The industry shall submit the inventory of Crude, Products, and Sulfur balance on weekly basis to the RO, Visakhapatnam failing which HPCL will be called for explanation and necessary action will be taken.*

The Crude/Product inventory and Sulphur balance details are being submitted to the Regional Office of APPCB at Visakhapatnam on a regular basis.

3. *The industry shall submit the inventory of Crude, Products, and Sulfur balance on weekly basis to the RO, Visakhapatnam failing which HPCL will be called for explanation and necessary action will be taken.*

We confirm that replacement of online stack analyzers for 7 stacks will be completed by January 2012 and the balance stacks by March 2012. Online connectivity for the stack analyzers will be provided upon resolution of data security issue.

4. *The industry shall comply with all the conditions stipulated in the Order dt. 18.05.2011 & 17.09.2011*

The compliance status of Orders dated 18.05.2011 and 17.09.2011 are given in Annexure-I and Annexure-II respectively.

5. *The industry shall comply with the conditions stipulated in the Consent for Operation dt. 16.08.2011*

The compliance status of *Consent for Operation dt. 16.08.2011* is given in *Annexure-III*.

Further, our point-wise clarifications on the observations stated in the APPCB order dated 14.12.2011 (and not covered in or earlier letter dated 23.12.2011) are given in Annexure-IV.

The estimated SO₂ emissions for 70% of the consented quantity with 2 wt% Crude Sulphur is exceeding the refinery stipulated limit of 11.5 TPD vis-à-vis 10.5 – 11.0 TPD for the current max possible crude processing operation (9.0 MMTPA; 65:35 HS:LS).

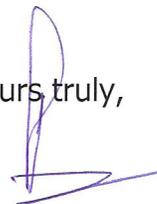
In the light of the above, we once again submit that the first direction of "Restricting the production capacity to 70% of the consented quantity or processing of crudes containing 'S' content <0.5 wt%" be reviewed and revised to original consented quantity.

In this regard, we request you to call for a hearing at the earliest and allow us to provide clarifications on the various issues.

In the meanwhile, we propose to run the refinery at full crude capacity with appropriate controls on fuel Sulphur and adjustment of crude mix to achieve an SO₂ emission which is always less than 11.5 TPD.

With kind regards,

Yours truly,



P.A.B Raju
Executive Director - Visakh Refinery

cc: The Chairperson – APPCB (Smt. Janaki Kondapi)

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हिन्दुस्तान पेट्रोलियम कॉर्पोरेशन लिमिटेड
(भारत सरकार संस्थान) रजिस्टर्ड ऑफिस 17 जमशेदजी टाटा रोड, मुंबई - 400 020
HINDUSTAN PETROLEUM CORPORATION LIMITED
(A GOVERNMENT OF INDIA ENTERPRISE) REGISTERED OFFICE: 17 JAMSHEDJI TATA ROAD, MUMBAI-400 020



विशाख रिफाइनरी, पोस्ट बॉक्स नं. 15, विशाखपट्टनम - 530 011 (आंध्रप्रदेश), फोन - 2895000, 2895100, तार : हिपेट्रेफ
VISAKH REFINERY, POST BOX NO.15, VISAKHAPATNAM-530 011 (A.P.), PHONES : 2895000, 2895100, GRAMS : HIPETREF

Date: February 10, 2012

To
Member Secretary,
Andhra Pradesh Pollution Control Board,
Hyderabad.

Dear Sir,

Sub: HPCL - Visakh Refinery – Directions issued – Request for amendment.

This is further to our letters dated 23.11.2011 and 12.01.2012 on the above subject. We would like recapitulate briefly the events related to the recent incidents of odour at Visakhapatnam and highlight our observations thereof.

The first incidence of odour was reported during the period 5th to 8th November, 2011. Attributing the smell to emissions from the HPCL refinery, directions were issued by APPCB on 14.12.2011 imposing certain restrictions on refinery production capacity and crude type.

Similar incidences of smell were reported again on two more occasions, viz., during 15-16 January 2012 and 7-8 February 2012. During the first incidence of smell in November 2011, the refinery operations were normal with a crude processing capacity of 23-26 TMT per day and Sulphur Dioxide emissions of 8-11 MT per day. During January 2012 when the second episode of smell was reported, the refinery has been operating at 16-20 TMT per day (~60% of the consented capacity) and the Sulphur Dioxide emissions were 6-9 MT per day. When the third occurrence of odour was reported in the first week of February 2012, the capacity of the refinery was in the range of 24-25 TMT per day (~80% of the consented capacity) and the Sulphur Dioxide emissions were in the range of 8-9 MT per day.

The refinery has always been operating within a given set of parameters towards meeting the environmental regulations. On all the three occasions of odour complaint, the refinery operations were well within the consented limits. More significantly, the production capacity and the Sulphur Dioxide emissions were much lower than normal during January 2012 when the second incidence of smell occurred. On the other hand, it is pertinent to note that certain specific climatic conditions were prevailing on all the three occasions of odour incidence; significant reductions in the minimum temperatures (2-3 °C) were noticed during these periods along with average wind velocities of 0-1 m/sec (still-weather conditions). When the temperatures became normalized after these specific weather conditions, the odour problem also has disappeared. These facts

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conclusively prove that the odour issue is a weather phenomenon and occurs at certain specific climatic conditions irrespective of the capacity level and Sulphur Dioxide emissions of the refinery. This aspect, viz., non-dispersion of pollutants under certain climatic conditions specific to winter season aggravated by the phenomenon of inversion, has already been pointed out in our earlier communications.

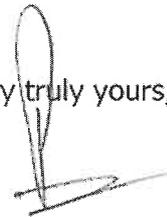
The other aspects that also need to be considered in this context are the topography of Visakhapatnam and the impact of emissions from various other sources (industries, automobiles, marine tankers, port activities, etc.) which have increased over a period of time in Visakhapatnam due to significant overall growth in the area.

Considering all the above factors, it is imperative to carry out a source emission study by a reputed consultant to assess the overall pollution scenario in Visakhapatnam and ascertain the actual cause for the odour, taking into account all possible sources in their respective proportions along with the impact of weather conditions; the mitigative measures thereof can be deduced based on such a study. This has already been indicated in our earlier letters and we now request that APPCB may take the same forward in an appropriate manner. We, at HPCL, are willing to provide all the necessary support to APPCB in this regard.

In this backdrop, and considering that reduction in the refinery production capacity does not contribute to alleviating the odour problem (as evidenced by the odour incidence during January 2012), we once again submit that the directions of APPCB dated 14.12.2011 be amended withdrawing the restrictions on refinery production capacity or crude type.

With kind regards,

Very truly yours,



P.A.B. Raju
Executive Director –
Visakh Refinery



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हिन्दुस्तान पेट्रोलियम कॉर्पोरेशन लिमिटेड
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VISAKH REFINERY, POST BOX NO.15, VISAKHAPATNAM-530 011 (A.P.), PHONES : 2895000, 2895100, GRAMS : HIPETREF

Date: March 05, 2012

To
Member Secretary,
Andhra Pradesh Pollution Control Board,
Hyderabad.

Dear Sir,

Sub: HPCL - Visakh Refinery – Directions issued – Request for review.

This has reference to your Order No.702/APPCB/TF-VSP/2002-235 dated 16.02.2012 imposing restriction on production capacity / crude type till 29.02.2012.

At the outset, we would like to draw your kind attention to our earlier letters on the subject, dated 16.11.2011, 09.12.2011, 23.12.2011, 12.01.2012 and 10.02.2012 (copies of which are enclosed for ready reference and which, we notice, have not been referenced in your order dated 16.02.2012), wherein we have expressed in no uncertain terms that the refinery alone is not responsible for the odour issue. Sulphur Dioxide might not be the cause for the odour as the reported ambient air concentrations were many-fold below the odour threshold limit. Even if the odour were to be caused by Sulphur Dioxide, the intent of the direction would not be served by restricting the refinery capacity to 70%, since operation at lower capacity will have very little impact on the Sulphur Dioxide emissions as explained in our communications.

Our views on the odour issue were given in a comprehensive manner in our letters along with a suggested action plan towards resolution. The salient points are re-stated below:

1. Operation of the refinery is normal and the Sulphur Dioxide emissions are well within the stipulated limit of 11.5 MT/day.
2. There are no abnormal emissions from the refinery.
3. Odour incidences have been reported even when the refinery was operating at about 60% of the consented capacity and the Sulphur Dioxide emissions were 6 to 9 MT/day.
4. The most probable cause for the odour is non-dispersion of pollutants under certain climatic conditions specific to winter season. This is evidenced by the fact that there was a marked drop in the minimum temperature accompanied by very low wind velocities (still-weather conditions) on all the occasions of odour incidence.

14/01/12

5. The impact of emissions from various other sources (industries, automobiles, marine tankers, port activities, etc.), which have increased over a period of time in Visakhapatnam, cannot be ignored.

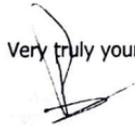
These points were also explained by HPCL during the legal hearing on 16.02.2012, besides emphasizing the need for identifying the exact nature and source of the emission causing the odour.

Considering the above aspects, it is imperative to carry out a source emission study by a reputed consultant to assess the overall pollution scenario in Visakhapatnam and ascertain the actual cause for the odour, taking into account all possible sources in their respective proportions along with the impact of weather conditions. Since such a study will encompass all emission sources in Visakhapatnam city, including other industries, APPCB will be in a better position to drive this effort as the nodal agency. HPCL is willing to provide all the necessary support towards this end.

With this background, we once again submit that the capacity/crude related direction in your orders dated 14.12.2011 and 16.02.2012 "restricting the refinery production capacity to 70% of the consented quantity or processing of crudes containing Sulphur content <0.5%" be reviewed and revoked.

With kind regards,

Very truly yours,



P.A.B. Raju
Executive Director –
Visakh Refinery

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हिन्दुस्तान पेट्रोलियम कॉर्पोरेशन लिमिटेड
(भारत सरकार संस्थान) रजिस्टर्ड आफिस 17 जमशेदजी टाटा रोड, मुम्बई -400 020
HINDUSTAN PETROLEUM CORPORATION LIMITED
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CIN : L23201MH1952GOI008858



विशाख रिफाइनरी, पोस्ट बाक्स नं. 15, विशाखपट्टनम - 530 011 (आंध्रप्रदेश), फोन : 2895000, 2895100
VISAKH REFINERY, POST BOX NO.15, VISAKHAPATNAM-530 011 (A.P.), PHONES : 2895000, 2895100

Date: July 12, 2017
Ref : TSD/PS&E/APPCB/108/17

The Joint Chief Environmental Engineer,
A.P. Pollution Control Board,
D.No.39-33-20/4/1,
Zonal Office, Beside RTA Office,
Madhavadhara Vuda Colony,
Visakhapatnam-530018.

Dear Sir,

Sub: Inputs on CEPI Committee's visit to HPCL - Visakh Refinery

This has reference to the visit of the CEPI Committee & APPCB officials to HPCL - Visakh Refinery on 22.06.2017 and the discussion thereof. It may kindly be noted that compliance status of CFO, Task Force directives and EC for VRMP were personally handed over to APPCB-RO on 23.6.2017. However, copies of the same are enclosed again for ready reference. Kindly find enclosed our further inputs on the following as **Annexure – I**:

- A) Total recycle of effluent water
- B) Leak Detection and Repair (LDAR) program
- C) Improvement of housekeeping at Sludge Lagoon area

This is for your kind information and perusal please.

With warm regards,

Yours truly,


S. K. Ghosh

Chief Manager – Technical (PS&E)

A) Total recycle of effluent water:

Total recycling of refinery effluent is envisaged under the ongoing Visakh Refinery Modernization Project (VRMP). The integrated Effluent Treatment Plant (IETP) coming up under the project fulfills this requirement.

The IETP shall include an RO based DM water plant to treat the IETP effluent and produce DM water; the reject will be routed as make-up water to Sea Water Cooling Tower. The water balance of IETP is as given below:

➤ Influent to IETP	:	902 m³/hr
◆ Treated water recycle	:	665 m ³ /hr
◆ Reject to SCW make up	:	217 m ³ /hr
◆ Evaporation loss	:	20 m ³ /hr
◆ Discharge to sea	:	0 m³/hr

Thus, the envisaged system under VRMP ensures zero liquid discharge.

B) Leak Detection and Repair (LDAR) program:

Leak Detection and Repair (LDAR) program is a work practice designed to identify leaking equipment so that VOC emissions can be reduced through repairs. Survey for leak detection and repair thereof is carried out at HPCL – Visakh Refinery as a permanent continuous process covering all the refinery facilities once every 6 months.

The current order for LDAR is on M/s Pragati Labs & Consultants (Pvt.) Ltd. which is a MOEF certified agency for carrying out LDAR survey. This order is valid for a period of 2 years (2016-18).

The latest survey covering all the refinery facilities was carried out between September 2016 and February 2017 as per the schedule given below:

	Month of Survey	Areas covered
1	September 2016	ETPs & WWTP
2	October 2016	CDU-2, FCCU-1, DHDS
3	November 2016	DHDS HGU, SRU
4	December 2016	CDU-3
5	January 2017	CDU-1, FCCU-2
6	February 2017	MS Block, DHT Block

The VOC emissions as measured during the above survey were in the range of 0-100 ppm for pumps & compressors and flanges & valves.

C) Improvement of housekeeping at Sludge Lagoon area:

Action has been initiated towards improvement of housekeeping in the Sludge Lagoon and nearby areas. Segregation & storage of drums at designated place with proper flooring and curb wall is also being taken up. The expected time for completion of these activities is about 5 months (30th November 2017).

Status of Legal Directives issued to HPCL-VR by APPCB Task Force
(Ref: Order No. 702/APPCB/UH-II/TF-VSP/2016- dated 03.10.2016)

S. No.	Description	Status
1	The industry shall construct STP for treatment of domestic effluents within 4 months.	STP was commissioned in May 2017.
2	The industry shall explore the possibility of using treated sewage water from nearest GVMC STP for reduction of fresh water consumption.	Noted. Treated sewage water can be used subject to meeting the quality and pricing criteria.
3	The industry shall explore the possibility of using low Sulphur fuels for heating purposes.	The fuels used in the refinery are Low Sulphur Heavy Stock (LSHS), desulphurized fuel gas and Naptha. Dedicated storage tanks are available for the low Sulphur liquid fuels from where fuel will be supplied to all furnaces/boilers. The fuel quantity as well as quality from the dedicated tanks are monitored and controlled. Emissions from the refinery are regularly being monitored and are within the stipulated limits.
4	The industry shall monitor the additional parameters viz., Benzene, Toluene & Xylene in the CAAQM Stations.	As stipulated in CFO, all 3 CAAM stations have been provided with online analyzers for monitoring Sulphur Dioxide, Nitrogen Oxide, Carbon Monoxide, PM-10, PM-2.5, Ozone, Ammonia & Benzene and they are connected to APPCB/CPCB websites. Emissions of Toluene & Xylene are not expected from the refinery.
5	The industry shall develop the thick green belt around the boundary of the factory premises.	Plantation along the South boundary of the refinery has been carried out.
6	The flare stack shall be improved to flare off all hydrocarbons duly ensuring complete combustion without black smoke.	Complied. Flare stacks are adequately designed.
7	The industry shall ensure the validity CFO of the Board and ensure continuous compliance of the conditions issued by the Board.	Noted and compiled.
8	The industry shall comply with the green Visakha targets.	HPCL-VR has taken up plantation of 1,50,000 saplings/year in various locations of Visakhapatnam under Green Visakha program initiated by the Parliamentary Standing Committee on Science & Technology, Environment & Forests. Last phase of 2,00,000 saplings plantation completed in December 2016. With this, the total plantation target of 6,50,000 saplings stands achieved.
9	The industry shall take necessary measures for control of smell nuisance.	All the refinery emissions and the ground level concentrations of pollutants are maintained within the stipulated limits by ensuring required design & operational controls. There is no odour nuisance in the surrounding areas due to refinery operations.



हिन्दुस्तान पेट्रोलियम कॉर्पोरेशन लिमिटेड

(भारत सरकार संस्थान) रजिस्टर्ड ऑफिस 17 जमशेदजी टाटा रोड, मुंबई - 400 020
HINDUSTAN PETROLEUM CORPORATION LIMITED
(A GOVERNMENT OF INDIA ENTERPRISE) REGISTERED OFFICE: 17 JAMSHEDJI TATA ROAD, MUMBAI - 400 020
CIN : L23201MH1952GOI008858

विशाख रिफाइनरी, पोस्ट बाक्स नं. 15, विशाखपट्टनम -530 011 (आंध्रप्रदेश), फोन : 2895000, 2895100
VISAKH REFINERY, POST BOX NO. 15, VISAKHAPATNAM-530 011 (A.P.), PHONES : 2895000, 2895100

Date: September 28, 2020
Ref.: TSD/PS&E/APPCB/69/20

The Member Secretary,
A.P. Pollution Control Board,
D.No.33-26-14, D/2, Near Sunrise Hospital,
Pushpa Hotel Centre, Chalamalavari Street,
Kasthuribaipet, Vijayawada - 520010

Dear Sir,

Sub: HPCL - Visakh Refinery - Submission of Bank Guarantee and compliance to TFD

This has reference to your Order No. 702/APPCB/UH-II/TF/VSP/2020, dated 19.03.2020 wherein it was directed to submit a Bank Guarantee for Rs. 64,00,000/- (Rupees Sixty four Lakhs only) for compliance towards APPCB Order No. 702/APPCB/UH-II/TF/VSP/2020, dated:19.03.2020.

Please find enclosed the original bank guarantee No. 0393NDLG00066021 dated 23.07.2020 executed by ICICI Bank, Mumbai, for Rs. 64,00,000/- (Rupees Sixty four Lakhs only).

Compliance to Order No.702/APPCB/UH-II/TF/VSP/2020, dated 19.03.2020 is attached as Annexure-I for your kind perusal.

With best regards,

Yours truly,

G Bhagavan
DGM-Technical

cc: The JCEE, APPCB-ZO, Visakhapatnam
cc: The Environmental Engineer, APPCB-RO, Visakhapatnam

Inputs and compliance status of directions issued Vide Order No. 702/APPCB/UH-II/TF/VSP/2020, dated 19.03.2020

Please find below our inputs and compliance status of directions issued by the APPCB:

1. The industry shall carry out the study by reputed institute like IIT regarding the odour issue.
As directed by APPCB, HPCL-Visakh Refinery will carry out the odour study within the premises of Refinery by a reputed consultant and submit the report. APPCB is requested to suggest the agency/consultant to be considered for carrying out the study at Visakh Refinery.
2. The industry shall ensure that reduced sulphur compounds and other odorous compound emissions are within odour detection threshold.
Sulphur compounds & H₂S are handled in a closed system. Thus, chances for emanation of any odorous compounds from the refinery are not there.
3. The industry shall carry out the Leak Detection and Repair Program (LDAR) at the specified regular intervals to identify the emission of VOCs, Volatile Hazardous Air pollutants from any leaking equipment, process equipment, etc preferably every month and the records shall be submitted to the APPCB officials during inspection.
Leak Detection and Repair (LDAR) survey is being carried out regularly by MoEF recognized laboratory. Survey reports are being maintained.
4. VOCs shall be monitored at vulnerable locations periodically inside the plant. The sporadic odorous emissions shall also be placed on record and necessary measures to stop reoccurrences shall be taken.
VOCs within the refinery premises are monitored periodically as per MoEF notification.
5. The industry shall ensure that odorous compounds in Merox unit are within odour detection threshold at minute levels.
Sulphur compounds & H₂S are handled in a closed system. Thus, chances for emanation of any odorous compounds from the refinery are not there.
6. Gas detection systems shall be in place to detect process leakages.
Gas detectors are available to detect process leakages.
7. The industry shall operate the ETP-I, ETP-II and ETP- IV continuously to ensure that the outlet of each meet the discharge standards as stipulated in the CFO. The industry shall ensure that treated process water, Treated cooling tower blow down joining the Meghadrigadda shall meet the discharge standards including the heavy metals.
ETPs are in service and treated process water, treated cooling tower blow down are meeting the discharge standards including the heavy metals. Reports of the effluent sample analysis carried out by MoEF recognized laboratory during the past 3 months are enclosed in Annexure-IIA.

8. The industry shall ensure that values of parameters of Online Stack monitoring systems are within the Board standards.

All the refinery emissions are monitored continuously for maintaining the parameters within the stipulated limits by ensuring required design & operational controls.

9. The industry shall ensure that values of continuous Ambient Air Quality Monitoring (CAAQM) station are within the standards.

All the ground level concentrations of pollutants are ensured within the stipulated limits. Reports of ambient air quality analysis carried out by MoEF recognized laboratory during the past 3 months are enclosed as Annexure-IIB.

10. The industry shall submit their preparedness plan for the use of low Sulphur fuels in case of bad weather conditions.

The fuels used in the refinery are Low Sulphur Heavy Stock (LSHS), desulphurized fuel gas and Naphtha. Dedicated storage tanks are available for the low Sulphur liquid fuels from where fuel will be supplied to all furnaces/boilers. Emissions from the refinery are monitored continuously and are within the stipulated limits.

11. The industry shall comply with CFO conditions.

Being complied.

12. The contaminated storm water shall not be let outside the industry premises.

Being complied.

13. The preventive maintenance of VOC condensers shall be taken up at regular intervals.

We would like to bring to your kind notice that VOC condensers are not available in HPCL-Visakh Refinery and hence, request APPCB kindly not to consider this direction.

14. The industry shall submit BG of Rs.64 Lakhs towards the compliance of above directions within 15 days for valid of one year.

Original bank guarantee No. 0393NDLG00066021 dated 23.07.2020 executed by ICICI Bank, Mumbai, for Rupees 64,00,000/- (Rupees Sixty four Lakhs only) is attached.

The above directions are being complied by HPCL-Visakh Refinery and are of continuous in nature. We would like to assure HPCL-VR's commitment to environmental control & protection and all necessary systems are in place towards meeting all the stipulated environmental norms at all the times.

Hence, request you to consider bank guarantee towards compliance of direction No.1 (The industry shall carry out the study by reputed institute) only.

This is for your kind information and consideration please.

BEFORE THE APPELLATE AUTHORITY UNDER WATER (PREVENTION AND CONTROL OF POLLUTION) ACT, 1974 AND AIR (PREVENTION AND CONTROL OF POLLUTION) ACT, 1981.

Saturday, Thirteenth day of October, Two Thousand and Twelve

PRESENT:

**THE HONOURABLE CHAIRMAN SRI JUSTICE C. V. N. SASTRI,
HONOURABLE MEMBER Prof. A. SAMBA SHIVA REDDY &
HONOURABLE MEMBER SRI M. VEERANNA**

Appeal No. 48 of 2012

Between:

M/s. Hindustan Petroleum Corporation Limited,
Visakha Refinery,
Post Box No. 15, Visakhapatnam – 530 011,
Rep by its Executive Director.

.....Appellant

AND

- 1) The State of Andhra Pradesh,
Rep. by its Secretary, E F S & T Department,
A.P. Secretariat, Hyderabad
- 2) A. P. Pollution Control Board,
Paryavaran Bhavan, A-3, Industrial Estate,
Opp: Police Station, Sanathnagar, Hyderabad – 500018.
Rep. by its Member Secretary
- 3) The Joint Environmental Engineer,
A. P. Pollution Control Board,
Zonal Office, Behind RTA Office,
Madhavadhara VUDA Colony,
Visakhapatnam.
- 4) Senior Environmental Engineer (CFO),
A. P. Pollution Control Board,
Paryavaran Bhavan, A-3,
Industrial Estate, Opp: Police Station,
Sanathnagar, Hyderabad – 500018.
- 5) The Environmental Engineer,
Regional Office, A. P. Pollution Control Board,
Behind RTA Office, Madhavadhara VUDA Colony,
Visakhapatnam.

.....Respondents

This Appeal having come up for hearing before us in the presence of Sri S. V. Bhatt, Advocate representing the Appellant; Sri Y. Srinivasa Murthy, Advocate representing the 1st, 2nd, 3rd, 4th & 5th Respondents, we deliver the following: *Cur*

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JUDGMENT

Heard both sides. It is brought to our notice that by letter dated 24.07.2012, the A. P. Pollution Control Board has directed the Appellant to engage the services of Indian Institute of Science (for short the I.I.Sc.), Bangalore, to conduct a study to identify the probable source of the odour nuisance in Visakhapatnam to take further course of action. Accordingly the matter has been entrusted to I.I.Sc., for conducting the study and submitting a report in that behalf. Now that the matter is entrusted to I.I.Sc., we feel it appropriate to dispose of this Appeal with a direction to the Board to take appropriate action after receipt of the report of I.I.Sc., and pass appropriate orders after giving an opportunity of being heard to the Appellant.

In the mean time, status quo with regard to the production capacity of the Appellant, shall continue.

Sd/-
Justice C. V. N. Sastri
Chairman

Sd/-
Prof. A. Samba Shiva Reddy
Member

Sd/-
Sri M. Veeranna
Member

Copy to

1. M/s. Hindustan Petroleum Corporation Limited, Visakha Refinery, Post Box No. 15, Visakhapatnam - 530 011,
2. The Secretary, State of Andhra Pradesh, E.F.S. & T Department, A.P. Secretariat, Hyderabad.
3. The Member Secretary, A. P. Pollution Control Board, Paryavaran Bhavan, A-3, Industrial Estate, Opp: Police Station, Sanathnagar, Hyderabad - 500018.
4. The Joint Environmental Engineer, A. P. Pollution Control Board, Zonal Office, Behind RTA Office, Madhavadhara VUDA Colony, Visakhapatnam.
5. The Senior Environmental Engineer (CFO), A. P. Pollution Control Board, Paryavaran Bhavan, A-3, Industrial Estate, Sanathnagar, Hyderabad - 500018.
6. The Environmental Engineer, Regional Office, A. P. Pollution Control Board, Behind RTA Office, Madhavadhara VUDA Colony, Visakhapatnam

V. N. Sastri
CHIEF MINISTERIAL OFFICER

CHIEF MINISTERIAL OFFICER
A. P. Pollution Control Board
H. No. 2-1-1
HYD.

HON'BLE THE ACTING CHIEF JUSTICE C. PRAVEEN KUMAR

AND

HON'BLE SRI JUSTICE M.SATYANARAYANA MURTHY

WRIT PETITION (PIL) No.259 of 2017

ORDER: (Per Hon'ble The Acting Chief Justice C.Praveen Kumar)

The present Writ Petition came to be filed, in the nature of public interest litigation, seeking the following relief:

"For the reasons stated in the accompanying affidavit filed in support of the present Writ Petition, it is therefore prayed, that this Hon'ble Court may be pleased to issue a Writ, Order or direction more particularly one in the nature of "Writ of Mandamus" declaring the inaction on the part of Respondent No.8 in failing to adhere to the pollution control norms and protective measures pursuant to Consent Order No.APPCB/VSP/VSP/72/CFO/HO/2016, dated 24.03.2016 and consequential Order No.702/APPCB/UH-II/TF-VSP/2016, dated 03.10.2016, of the Respondent No.2 and consequently direct the Respondent No.2 to constitute an expert committee for conducting necessary tests/examining for evaluating the permissible limits of the effluents being discharged by the refinery and to necessarily follow the required compliances under the Petroleum and explosives Safety Organization as far as protective measures to be undertaken by the refinery for the well-being of the Residents around the refinery in view of the mammoth expansion and pass such other order or orders as this Hon'ble High Court may deem fit and proper in the interest of justice and to pass other order or orders as this Hon'ble Court may deem fit and proper."

The averments made in the affidavit filed in support of the writ petition would show that Hindustan Petroleum Corporation Limited (hereinafter referred to as 'HPCL') established its Refinery at Visakhapatnam, with an installed capacity of 1.5 Million Metric Tonnes Per Annum ('MMTPA'), which was increased to 4.5 MMTPA in the year 1985 and to 7.5 MMTPA in the year 1999, through expansion programme. The

petitioner alleges that the HPCL renewed its Consent Order for Operation, vide order dated 24.03.2016, and it has also obtained Consent Order for Establishment for expansion of refinery crude processing capacity from 8.33 MMTPA to 15 MMTPA, vide order dated 06.07.2016, for which environmental clearance was also issued by the Ministry of Environment and Forests, Government of India, vide order dated 11.02.2016. The petitioner contends that during process of crude oil, the Refinery is discharging lakhs of litres of liquid waste and causing huge amount of air and water pollution.

It is the case of the petitioner that the Andhra Pradesh Pollution Control Board inspected the premises of the Refinery on 27.07.2016 under randomized risk based inspection and thereafter, a legal hearing was conducted before the External Advisory Committee (Task Force) meeting of the APPCB on 16.09.2016, which was attended by the representatives of the Corporation. The Committee, after detailed discussions, issued certain directions to be complied with by the Corporation, vide order dated 03.10.2016, and directed that if the Corporation violates any one of the said directions, the unit will be closed without any further notice, in the interest of public health and environment. The petitioner alleges that in spite of the said order dated 03.10.2016, the 8th respondent has not complied with the directions issued by the APPCB and in the subsequent inspection conducted by the APPCB on 31.01.2017, several deviations were found, such as failure to construct STP for treatment of effluents, monitoring of stack samples being not done to check if they were in compliance with the Board Standards of ambient air quality, calibration procedure of online equipment being not properly intimated to the Board in order to keep a track, odour control measures being not property undertaken etc. The petitioner alleges

that the mandatory compliances vis-à-vis protective measures have not been complied with till date and if the refinery is allowed to continue with its expansion plans without proper compliance, the residents of the locality would be put to great hardship due to enormous increase of air and water pollution caused by the activities of the refinery.

A detailed counter-affidavit came to be filed on behalf of respondents 7 and 8-HPCL, disputing the allegations made by the petitioner except to the extent admitted by them, stating that all the recommendations of the APPCB with respect to Consent For Operation of 10.0 MMTPA have been complied with, which is evident from the proceedings dated 17.10.2017 issued by the APPCB reporting full compliance of the recommendations. Hence, prayed for dismissal of the writ petition.

Heard. Perused the record.

A perusal of the order dated 03.10.2016 issued by the APPCB would show that pursuant to the inspection of the premises of the 8th respondent Refinery on 27.07.2016, the Board has issued the following directions:

- “1. The industry shall construct STP for treatment of domestic effluents within 4 months.
2. The industry shall explore the possibility of using treated sewage water from nearest GVMC STP for the reduction of fresh water consumption.
3. The industry shall explore the possibility of using low sulphur fuels for heating purposes.
4. The industry shall monitor the additional parameters viz., Benzene, Toluene & Xylene in the CAAQM Stations.
5. The industry shall develop the thick green belt around the boundary of the factory premises.

6. The flare stack shall be improved to flare off all hydrocarbons duly ensuring complete combustion without black smoke.
7. The industry shall ensure the validity CFO of the Board and ensure continuous compliance of the conditions issued by the Board.
8. The industry shall comply with the green Visaka targets.
9. The industry shall take necessary measures for control of smell nuisance.”

Even in the subsequent inspections conducted on 30.01.2017 and 31.01.2017, it was found that the Corporation has not constructed STP for treatment of effluents. However, a perusal of the subsequent inspection report dated 19.10.2017, which is enclosed to the counter-affidavit of respondents 7 and 8, would show that the Board inspected the premises of the Refinery on 17.10.2017 and observed as under:

- “1. The industry has taken up and completed plantation of 6,50,000 samplings in various locations of Visakhapatnam under green Visakha program initiated by parliamentary standing committee on Science and Technology.
2. All the Refinery emissions and the ground level concentrations of pollutants are maintained within stipulated limits.
3. Two STPs of 25 KLD and 15 KLD are installed.
4. There have been some complaints on the industrial installations in the area on some occasions and APPCB is attending whenever complaints are received for redressal.”

Having regard to the above observations, the Board recommended that the industry shall ensure compliance of CFO conditions stipulated.

To ascertain whether the Corporation has been complying with the CFO conditions, this Court called for a report from the APPCB.

Accordingly, Sri Gurram Ramachandra Rao, learned standing counsel for the APPCB, placed on record the inspection report dated 26.04.2019, a perusal of which shows that the Board inspected the premises of the Refinery on 25.04.2019 and made the following recommendations:

“The Board has stipulated Load based standards for the stack emissions. Whereas the Industry is measuring the emissions for concentrations. But the industry is generating load based data randomly duly taking volumetric flow data from third party monitored reports. The industry may be recommended to develop a methodology to correlate the concentration based result to convert to load based values to verify the compliance.

The industry may be recommended to improve housekeeping near ETP-IV.

The industry may be recommended to store used chemical drums in closed sheds.

There is further scope for development of Green Belt in the vacant areas.

There is scope for improvement of Bio-remediation pond management as certain spillages on ground were observed.

The industry may be recommended to comply with CFO conditions.”

Thus, it is evident that the directions issued by the Board in the order dated 03.10.2016 have been substantially complied with by the 8th respondent.

Learned counsel for the petitioner would contend that regular monitoring of the Refinery of the 8th respondent by the Board would help the things to be in order.

In reply, learned standing counsel for the Board would submit that the Board would regularly monitor the Refinery and if there is non-compliance to the CFO conditions, necessary action would be taken against the 8th respondent.

Having regard to above, we dispose of the writ petition directing the 8th respondent to comply with the CFO conditions, including the recommendations made by the Andhra Pradesh Pollution Control Board in the inspection report dated 26.04.2019, as noted above, and the Board shall also regularly monitor the Refinery and take necessary action, as and when required.

As a sequel, pending miscellaneous petitions, if any, shall stand closed. No order as to costs.

C. PRAVEEN KUMAR, ACJ

M.SATYANARAYANA MURTHY, J

Dt: 23.09.2019
AKC/IBL

**HON'BLE THE ACTING CHIEF JUSTICE C. PRAVEEN KUMAR
AND
HON'BLE SRI JUSTICE M.SATYANARAYANA MURTHY**

WRIT PETITION (PIL) No.259 of 2017

Dt: 23.09.2019

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