



Date: 14/03/2018

To  
Member Secretary, EAC (Industry-2)  
Room No. 302, Vayu Wing, 3<sup>rd</sup> Floor,  
Indira Gandhi Paryavaran Bhawan  
Jor Bagh Road, Lodhi Road  
New Delhi-110003

Subject : Submission of clarification on query raised by MoEFCC for Proposed BS VI Quality  
Fuel Project of Guru Gobind Singh Refinery - (Proposal No IA/PB/IND2/61343/2016,  
File No: J-1011/386/2016-IA-II (I))

Dear Sir,

This refers to email query dated 08/03/2018 on the subject. The response to specific query pertaining to HMEL regarding anomaly in RO compliance report on commencement of Low Cost Expansion Project prior to Environmental Clearance is as under:

Project activities commenced on 09.09.2015 while Environmental Clearance was granted on 22/06/2015. This issue was taken up with Northern Regional Office (NRO), MoEFCC, Chandigarh and on discussion it emerged that inadvertently the construction date was mentioned as 09/09/2014 in place of 09/09/2015 due to typographical error. NRO has since corrected the date of construction as 09/09/2015 in the report and relevant page was signed and stamped by NRO, Chandigarh.

As per Sl no. xi of MoM issued under Agenda No. 34.3.15.1, total water requirement is indicated as 5952 m<sup>3</sup>/day against our submission of 5952 m<sup>3</sup>/hour. The same may also kindly be corrected.

Corrected compliance report is enclosed for your kind consideration.

With warm regards.

(Satish Kumar Kalra)  
DGM-Technical

**HPCL-Mittal Energy Limited**



सत्यमेव जयते  
भारत सरकार

पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय  
GOVERNMENT OF INDIA  
MINISTRY OF ENVIRONMENT, FOREST &  
CLIMATE CHANGE



दूरभाष नं०

Telephone No. : +91-172-2638994

Fax No. : +91-172-2638135

उत्तर क्षेत्रीय कार्यालय,  
बेज नं० 24 - 25, सेक्टर - 31 ए,  
दक्षिण मार्ग, चंडीगढ़ - 160030

Northern Regional Office  
Bays No. 24 - 25, Sector - 31 A,  
Dakshin Marg, Chandigarh - 160030  
E-mail: chdmoeenv@gmail.com  
ajay.mehrotra13@gov.in

दिनांक: 14.7.2017  
20

क्रमांक: 4-81/2004-RO (NZ)/293-294

प्रति,

निदेशक, (अनुवीक्षण सैल),  
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय,  
इंदिरा पर्यावरण भवन,  
जोर बाग रोड, अलीगंज,  
नई दिल्ली - 110003

विषय: 1. Modification of Refinery Configuration of 9 MMTPA Refinery Project at Village Phulo Khari, Teh Talwandi Saboo, Bathinda, Punjab by M/s Guru Gobind Singh Refineries Ltd. - Certification reg.  
2. Expansion of Refinery from 9 MMTPA to 11.25 MMTPA at Vill Phulo Kheri, Teh Talwandi Saboo, Bathinda, Punjab by M/s HPCL - Mittal Energy Ltd.- reg.

संदर्भ: 1. Ministry letter No. J-11011/275/2007 IA II (I) dated 16.07.2007  
2. Ministry letter No. J-11011/275/2007 IA II (I) dated 22.06.2015

महोदय,

उपरोक्त संदर्भित पत्रांक के संदर्भ में उक्त परियोजना को पर्यावरणीय दृष्टिकोण से अनुमति देते समय अनुबद्ध शर्तों के अनुपालन एवं certification of compliance के निर्देशानुसार, अनुवीक्षण प्रतिवेदन (मॉनिटरिंग रिपोर्ट) एतद् द्वारा संलग्न कर प्रेषित है ।

भवदीय,

संलग्न: उपरोक्तानुसार

सहायक

प्रतिलिपि:- The Vice President, Technical Serv, HPCL-Mittal Energy Ltd., INOX Towers,  
Sector- 16 A, Plot No. 17, Noida -201301.

सहायक

**Monitoring the Implementation of Environmental Safe Guards**  
**Ministry of Environment & Forest**  
**Western Region, Regional Office, Bhopal**  
**MONITORING REPORT**

**PART – I**  
**DATA SHEET**

1	Project type: River Valley/Mining/Industry/ Thermal/Nuclear/Other (Specify)	Industry
2	Name of the Project	1. Modification of refinery configuration of 9 MMTPA refinery project, Vill. Phullokhari, Tal. Talwandi Saboo, Bhatinda. 2. HPCL-Mittal Energy Ltd, Guru Gobind Singh Refinery, Vill. Phullokhari, Tal. Talwandi Saboo, Bhatinda.
3	Clearance letter (s) OM No. & date	1. J-11011/275/2007-IA II dated 16.7.2007 & amended dated 7.7.2010 2. J-11011/275/2007 IA II (I) dated 22.6.2015
4	Location a) Districts b) State(s) c) Location Latitude/Longitude	Bathinda Punjab 29°55'08.95"N / 74°57'16.98"E
5	Address for Correspondence a) Address of the Concerned Project Chief Engineer (with Pin Code & telephone/telex/fax numbers. b) Address of the Exe./Project Eng./Manager (Pin Code & telephone/telex/fax numbers.	Mr. Narendra Verma AGM – Technical Services (HQ) Email: narendra.verma@hmel.in Mobile: +918054100989; Tel. 01655-272807 - Do -
6	Salient Features a) Of the Project b) Of the EMP	Low Cost Expansion Project to increase refinery capacity from 9 MMTPA to 11.25 MMTPA.  Environment Monitoring Programme Details given below.
7	Breakup of the project area a) Submergence area: forest & non-forest b) Others	The proposed facility is coming within Industrial Premises
8	Breakup of the project affected population with enumeration of those losing houses/dwelling units only agricultural land only Both dwelling units & agricultural land & landless laborers/artisans a) SC, ST/Adivasi b) Others (Please indicate whether these figures are based on any scientific and systematic survey carried out or only provisional figures, if a survey is	NA



	carried out give details & year of survey)																						
9	<p>Financial details</p> <p>a) Project cost as originally planned and subsequent revised estimates and the year of price reference</p> <p>b) Allocation made for EMP with item wise and year wise break up</p> <p>c) BC ratio / IRR and the year of assessment</p> <p>d) Whether (c) includes the cost of EM as shown in the above</p> <p>e) Actual expenditure incurred on project</p> <p>f) Actual expenditure incurred on EMP so far</p>	<p>Financial details, as provided, of various projects are as below:</p> <table border="1"> <thead> <tr> <th></th><th>2007</th><th>2015</th></tr> </thead> <tbody> <tr> <td>a.</td><td>Rs 13119 Crs</td><td>Rs 2160 Crs</td></tr> <tr> <td>b.</td><td></td><td></td></tr> <tr> <td>c.</td><td>13.66% in 2007</td><td></td></tr> <tr> <td>d.</td><td>-</td><td></td></tr> <tr> <td>e.</td><td>Rs 10868 Crs</td><td></td></tr> <tr> <td>f.</td><td>Rs 69.08 Crs recurring</td><td></td></tr> </tbody> </table>		2007	2015	a.	Rs 13119 Crs	Rs 2160 Crs	b.			c.	13.66% in 2007		d.	-		e.	Rs 10868 Crs		f.	Rs 69.08 Crs recurring	
	2007	2015																					
a.	Rs 13119 Crs	Rs 2160 Crs																					
b.																							
c.	13.66% in 2007																						
d.	-																						
e.	Rs 10868 Crs																						
f.	Rs 69.08 Crs recurring																						
10	<p>Forest land requirement</p> <p>a) The status of approval for diversion of forest land for non-forestry use</p> <p>b) The status of clearing/felling</p> <p>c) The status of CA, if any</p> <p>d) Comments on the viability and sustainability of CA programme in the light of actual field experience so far</p>	NA																					
11	The status of clear felling in non-forest areas (such as submergence area of reservoir, approach road etc) if any with quantitative information required	NA																					
12	<p>Status of construction (Actual &amp;/ or planned)</p> <p>a) Date of commencement</p> <p>b) Date of completion</p>	<p>May 2011 (EC 2007); 9.9.2015 (EC 2015)</p> <p>August 2011 (EC 2007); 31.10.2017 (EC 2015)</p>																					
13	Reason for the delay, if project is yet to start	Details not provided.																					
14	<p>Dates of site visit</p> <p>a) Date on which the project was monitored by the RO on previous occasions if any</p> <p>b) Date of sit visits for this monitoring report</p>	<p>26.20.06, 23.7.09, 22.1.13, 10.6.14 (EC 2007)</p> <p>4.7.2017 (ECs 2007 &amp; 2015)</p>																					
15	Details of correspondence with project authorities for obtaining act on plans/information on status of compliance to safeguards other than the routine letters for logistic support for site visits) (The first monitoring report may contain the details of all the letters issued so far, but the later reports may cover only the letter issued subsequently).	-																					



**PART – II & III**  
**DESCRIPTIVE REPORT ON STATUS OF COMPLIANCE TO CONDITIONS OF**  
**ENVIRONMENTAL CLEARANCE AND ENVIRONMENTAL MANAGEMENT**  
**O.M. No & date : 1. J-11011/275/2007-IA II dated 16.7.2007 & amended dated**  
**7.7.2010. 2. J-11011/275/2007 IA II (I) dated 22.6.2015**

The review of conditions stipulated in two ECs, issued on 16.7.2007 & 22.6.15, has been undertaken during the visit and discussions held with Shri Satish Kalra, DGM (Env & Safety). Further, scrutiny of documents, as submitted by PP, & based on site visit followings are observed:

1. All the condition stipulated by this Ministry vide its letter no. J-11011/24/98-IA.II (I) dated 6.11.1998 and J-11011/275/2007-IA II dated 16.7.2007 & amended dated 7.7.2010 have been complied as reported in last inspection report which has been submitted to the Ministry.
2. Five CAAQMS monitoring stations have already been installed in consultation with PPCB in the existing refinery. Online stack monitoring instruments/analysers have been installed in existing stacks. Analytical data, as submitted, do not show anomaly.
3. CTE, issued by PPCB for expansion project, was expired on 6.9.2016 which has been extended up to 6.9.2017.
4. CTO was found valid up to 31.3.2018. PPCB has issued notices for non- compliance of provisions under Air Act, HWMH Rules, & E-waste Management Rules on 2.5.2013, 28.1.2014, 30.7. 2014, 21.10.14, 9.12.14, 3.6.2015 & 20.5 2015 respectively. Since PP has submitted replies to different notices and no response of PPCB was submitted to the Ministry, it is understood that issues pertaining to high sulphur emissions, foul smell, generation, storage & disposal of oily waste have been resolved. However, HW storage area was visited (**Photo 1**) & noticed that area & submission of reports needs improvement.
5. Two piezometers were noticed around HW storage pit during visit (**Photo 2**). Analysis data of ground water show parameters within limits.
6. It was noted from the water balance, as submitted, that 1178 KLPD fresh water was being used in the complex & 345 KLPD effluents was being generated. But quantitative details on utilization of treated effluent for different purpose were not submitted. Nor, proper metering system was observed.
7. It was also observed during the visit that two ponds have been constructed – a) storm water pond having capacity of 172981 m<sup>3</sup> water which is used for storing rain water (**Photo 3**) and for fire fighting & irrigation & b) ecological pond having capacity of 210000 m<sup>3</sup> of storing ETP treated water.
8. The following modification details were submitted for 11.25 MMTPA expansion:

UNITS	MODIFICATIONS
CFBC	<ul style="list-style-type: none"> <li>• Circulating Fluidized Bed Combustion (CFBC) Boilers</li> <li>• Electrostatic Precipitators (ESPs)</li> <li>• Solid Handling system</li> <li>• Refer Annexure 1 for Fuel &amp; Lime quantity for CFBC operation.</li> <li>• The SO<sub>2</sub>/SO<sub>3</sub> emission resulting from firing of Coke/Coal is captured by Limestone injected into furnace along with coal/ petcoke.</li> </ul>
CDU/VDU	<ul style="list-style-type: none"> <li>• Pumps: 1 New pump, 8 Existing pump internal(impeller) modifications</li> <li>• Heat Exchanger: 5 new Exchangers, 4 additional exchangers in parallel of existing, 1 Exchanger modification (Tube bundle replacement), 2 additional Air Coolers</li> <li>• Column: Tray modification/ replacement in 5 columns, Packing replacement in 1 column, Nozzle modification in CDU (Reboiler o/l) and VDU column (feed inlet)</li> <li>• Desalter internal replacement</li> <li>• Ejector modification</li> </ul>

	<ul style="list-style-type: none"> <li>Furnace: Tube addition in convection section of CDU heater, Tube addition and Transfer line modification in VDU heater</li> </ul>
<b>Sulphur Block</b>	<ul style="list-style-type: none"> <li>The required revamp capacity of Sulphur</li> <li>Furnace: New burner in reaction furnace</li> <li>Pumps: 4 New pump, 2 Existing pump internal(impeller) modifications</li> <li>Heat Exchanger: 2 new Exchangers, 6 additional exchangers in parallel of existing, 3 Exchanger modification (Tube bundle replacement), additional bay added to Air Cooler</li> <li>Column: Tray modification/ replacement in 5 columns</li> <li>Packages: Modification in existing filters, new steam desuperheaters, replacement of ejector</li> </ul>
<b>VGO</b>	<ul style="list-style-type: none"> <li>Column: Tray modification in 2 columns.</li> <li>Pumps: 2 Existing pump internal(impeller) modifications</li> </ul>
<b>MS Block</b>	No modification required for revamp.
<b>DHDT</b>	No modification required for revamp.
<b>DCU</b>	No modification required for revamp.
<b>HGU</b>	No modification required for revamp.
<b>PPU</b>	No modification required for revamp.
<b>Treater Block</b>	No modification required for revamp.
<b>ETP</b>	No modification required for revamp.

9. It was submitted that around 4800 workers are residing in labour camps that have been provided all necessary infrastructure & facilities including medical facilities.
10. It was observed that safety audit was conducted by M/s Chola Mandalam 28.09.2016 to 01.10.2016 and 43 recommendations were recorded. Of these, 37 recommendations have been implemented and remaining 6 are yet to be implemented.
11. The status of progress was found as below:

	Description	Existing Configuration (MMTPA)	Under Implementation Configuration (MMTPA)	Proposed Configuration post BS-VI @11.25 MMTPA
1	CDU/VDU	9	11.25	11.25
2	NHT/CCR	NHT 0.94 CCR- 0.5	NHT 1.18 CCR 0.63	NHT 1.18 CCR 0.63
3	Isomerization Unit	0.32	0.40	0.40
4	Diesel Hydrotreater	4.2	5.71	5.71
5	New Diesel Hydrotreater	-	-	1.9
6	Delayed Coker	2.76	3.45	3.45
7	Hydrogen Generation Unit	2 x 0.044	2 x 0.044	2 x 0.044 + 2 x 0.011
8	Sulphur Recovery Unit	2 x 300 TPD	2 x 375 TPD	2 x 375 TPD
9	Sour Water Stripper	300 + 100 M <sup>3</sup> /Hr	435.6 + 127 M <sup>3</sup> /Hr	435.6 + 127 M <sup>3</sup> /Hr

12. Green belt has been developed over more than 300 acres by planting about 2.39 lakhs saplings as claimed by PP which found satisfactory at certain places (**Photo 4**).
13. PP has submitted that 12 storage tanks for VGO feed (1), BBU feed (1), slop tank (1), BBU product (7), LCN/NHT LN tank (1) & diesel (1) are to be installed.
14. It was observed during the visit that UB – 5 & 6 (new CFBC boiler) was constructed. Works on coal handling plant & associated facilities, wagon tippler etc., were found in progress (**Photos 5 -6**).



15. Six monthly compliance status for conditions stipulated in EC 2015 were not submitted. PP was directed to submit the same as per condition. Although, reports for ECs 1998 & 2007 have been submitted but analytical data were not submitted regularly.
16. PP has intimated during visit that survey was carried out for 7 villages covering 2373 families for various CSR programs. It includes major projects namely, skill development, employment support, women empowerment, dairy farming, health, education support, agriculture & animal health. Details on expenditure incurred on CSR were not submitted.
17. PP has published the information in two local newspapers namely Tribune Bathinda (English) and Ajit (Punjabi) on 30.6.2015 regarding grant of EC. A copy of the same has been forwarded to R.O., Chandigarh vide letter dated 7.7.2015.
18. Copy of valid policy under PLI Act has been submitted.
19. The ES for each financial year ending 31st March in Form - V was not found on the website of the company along with the status of compliance of EC conditions as per condition.
20. The land status, identified for proposed expansion, is shown in Photos 7-8.
21. The milestones of financial closures of project include a) Date of final board approval - 21.12.2012 & b) date of financial closure - 20.3.2013.

#### END NOTE:

1. **Chronology of events:** PA has intimated that TOR application was submitted to MOEFCC for proposed TOR which was considered and issued by the Ministry vide letter dated 29.4.2017. PA has requested Regional Office of the Ministry for issuance of certification vide letter dated 22.5.2017. The Regional Office had requested for information w.r.t. issuance of certification vide letter dated 6.6.2017. Requisite information was submitted by PA vide letter dated 19.6.2017 and information sought during the visit was submitted vide email dated 12.7.2017.
2. **Implementation of Conditions:** All the major conditions of CC & A such as production, generation of trade effluent, use of fuel etc. are being complied as claimed by PA. The conditions stipulated in two ECs, issued on 6.11.1998 & 16.7.2007 have been complied. The generation of HW & its disposal, category wise, as per consent were not submitted for verification of provisions of rules under the act. Nor PA uploaded compliance & analytical data & other records on the web site of the company. It was noted from the water balance, as submitted, that 1178 KLPD fresh water was being used in the complex & 345 KLPD effluents was being generated. But quantitative details on utilization of treated effluent for different purpose were not submitted. Nor, proper metering system was observed.
3. **Housekeeping:** Overall it was found satisfactory.
4. **Review w.r.f. to MOEFs letter dated 30.5.2012:** The above mentioned report was prepared after site visit on 4.7.2017 for the proposed expansion.
5. **Court Cases:** PA has submitted that there is no court case against them over last five years.
6. **Uploading of compliance on web site:** The uploading of ECs, compliance status and analytical of the existing projects were verified from the website of the company which could not be seen. Ministry may like to take up with PP during appraisal.
7. **With regards to issuance of show cause/closure notices:** PPCB has issued notices for non-compliance of provisions under Air Act, HWMH Rules, & E-waste Management Rules on 2.5.2013, 28.1.2014, 30.7. 2014, 21.10.14, 9.12.14, 3.6.2015 & 20.5 2015. Since PP has submitted replies to different notices and no response of PPCB was submitted to the Ministry by PP, it is understood that issues pertaining to high sulphur emissions, foul smell, generation, storage & disposal of oily waste have been resolved.

  
 Advisor



**Photo 1: Showing status of HW storage area (SLF)**



**Photo 2: Showing installation of piezometer I SLF area**



**Photo 4: Showing status of green belt of refinery**



**Photo 3: Showing status of storage of storm water pond having capacity of 172981 m<sup>3</sup>**





**Photo 5: Showing status of construction of CFBC boiler units & coal handling facilities.**



**Photo 6: Showing status of construction of CFBC boiler units & coal handling facilities.**



**Photo 7-8: Showing status of area identified for proposed expansion**

