



ONGC Petro additions Limited

CIN: U23209GJ2006PLCO60282

Plant site: Plot #Z-1 & Z-83, C/o. Dahej SEZ Ltd., P.O. Dahej, Taluka Vagra,
Dist. Bharuch – 392130, Gujarat, India. | Tel.: 02641-666000 | Fax.: 02641-666110

OPaL/DHJ/COO Office/24-25/21

Date: 04.11.2024

To,
The IRO
MoEF & CC
Room No. 407, Aranya Bhawan,
Near CH -3 Circle Sector 10 – A,
Gandhinagar, Gujarat - 380210
India.

Subject: Submission of six-monthly Compliance Report of Environmental Clearance and other details for M/s. ONGC Petro additions Ltd. (OPaL) located at Dahej SEZ Ltd., Village: Ambheta, Tal. Vagra, Bharuch District (Gujarat).

Ref: EC issued vide letter No. J-11011/316/2006-IA II (I) dated 21/11/2007, EC extension vide letter no. J-11011/316/2006-IA II (I) dated 01/03/2013 and EC amendment vide letter no. J-11011/316/2006-IA II (I) dated 30/09/2015

Dear Sir,

With reference to above mentioned subject, kindly find enclosed herewith compliance report (encl. as **Annexure – A**) of Environmental Clearance issued by MoEF & CC vide letter No. J-11011/316/2006-IA II (I) dated 21/11/2007 for our unit M/s. ONGC Petro additions Ltd. (OPaL) for the period of April 2024 to Sept 2024.

Thanking you
Yours sincerely,

For, M/s. ONGC Petro additions Ltd. (OPaL),

Arup Jhampri
COO – OPaL

Encl.: A/a.

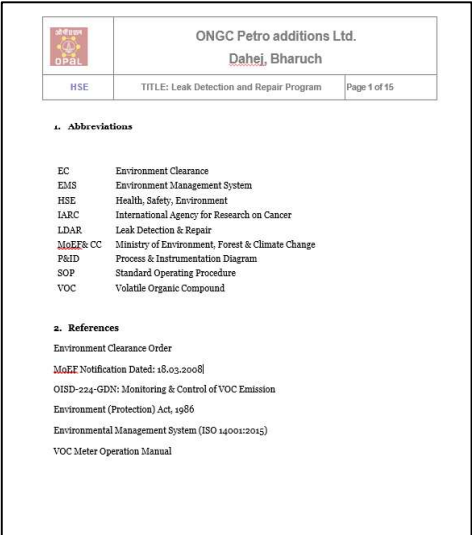
ANNEXURE A
COMPLIANCE STATUS REPORT OF ENVIRONMENTAL CLEARANCE

EC issued vide letter no. F. No. J-11011/316/2006-IA II (I) on 21/11/2007

Sr No	EC Condition	Compliance Status (As on 30/09/2024)
2.	<p>The Ministry of Environment and Forest has examined your application. It is observed that the M/s. ONGC Petro additions Ltd (OPaL) propose to set up a petrochemical complex at a distance of 10 km towards east of C2, C3 & C4 extraction plant which is a feed stock supplier and Petronet LNG Limited Terminal near village Ambheta in Dahej SEZ. A list of products to be manufactured is given at Annexure. Total area required for the petrochemical complex is 492 ha. And is located in Seismic Zone – 3. It is noted that water requirement will be 1,30,320 m³d. However, with the proposed recovery of 31920 m³d of water from the cooling tower blow down and cooling water, the net water requirement would be 98400 m³d and will be met from the Narmada River supplied by GIDC. Power requirement of 208 MW will be met from Power Plant in Dahej SEZ. Both process effluent and contaminated rain water effluent will be treated in the waste water treatment plant and reused in DM plant. The RO reject from DM plant will be disposed of into gulf of Cambay through effluent disposal pipeline. The treated processed effluent of 3000 m³D AND 2160 m³d of sanitary waste water would meet the MINAS standard and proposed to be used as RO plant feed. Hazardous waste as per the category will be sold to the authorized recyclers, incinerated in the incinerator or disposed of in the secured landfill facility. It is noted that public hearing of the project was held on 21.07.2007. Cost of the project is Rs. 13,540 crores.</p>	<p>Earlier unit has obtained EC vide letter no. J-11011/316/2006-IA II (I) on 21/11/2007 and after then, extension letter on 01/03/2013.</p> <p>After that, unit has obtained amendment in EC vide letter no. J-11011/316/2006-IA II (I) on 30/09/2015.</p> <p>Copies of EC letters are attached as Appendix-1.</p> <p>Unit is carrying out production activity as per granted EC letter.</p>
-	<p>Fresh water consumption during the compliance period is 33,024 KL/day, which shows that it does not exceed 98,400 KL/day and fresh water is being source through GIDC.</p>	

Sr No	EC Condition	Compliance Status (As on 30/09/2024)																		
	<p>Details of Fresh Water Consumption</p> <p>-</p> <table border="1" data-bbox="284 327 1403 642"> <thead> <tr> <th data-bbox="284 327 873 363">Month</th> <th data-bbox="873 327 1403 363">Fresh Water</th> </tr> </thead> <tbody> <tr> <td data-bbox="284 363 873 399">Apr-24</td> <td data-bbox="873 363 1403 399">1066162</td> </tr> <tr> <td data-bbox="284 399 873 434">May-24</td> <td data-bbox="873 399 1403 434">1137236</td> </tr> <tr> <td data-bbox="284 434 873 470">Jun-24</td> <td data-bbox="873 434 1403 470">999881</td> </tr> <tr> <td data-bbox="284 470 873 506">Jul-24</td> <td data-bbox="873 470 1403 506">922382</td> </tr> <tr> <td data-bbox="284 506 873 541">Aug-24</td> <td data-bbox="873 506 1403 541">986499</td> </tr> <tr> <td data-bbox="284 541 873 577">Sep-24</td> <td data-bbox="873 541 1403 577">931285</td> </tr> <tr> <td data-bbox="284 577 873 613">Total</td> <td data-bbox="873 577 1403 613">6043445</td> </tr> <tr> <td data-bbox="284 613 873 642">Avg./Day</td> <td data-bbox="873 613 1403 642">33024</td> </tr> </tbody> </table> <p>-</p>	Month	Fresh Water	Apr-24	1066162	May-24	1137236	Jun-24	999881	Jul-24	922382	Aug-24	986499	Sep-24	931285	Total	6043445	Avg./Day	33024	
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3	The project has been considered in accordance with para {2.1 (2.1.1) (ii)} intent operational guidelines dated 13 th October 2006 issued by the Ministry of Environment and Forests under Para 12 of the EIA Notification, 2006.	--																		
4	Based on the information submitted by you, the Ministry of Environment and Forests hereby accords environmental clearance to above project under the provisions of Environmental Impact Assessment Notification dated 14 th September 2006 subjected to the compliance of the following Specific and General conditions.	--																		

Sr. No.	EC Condition				Compliance Status (As on 30/09/2024)									
		Min	59.1	27.1	17.8	16.4	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Location: AAQM-3: Near Sub Station:14														
	Month		PM ₁₀	PM _{2.5}	SO ₂	NO ₂	CO	O ₃	NH ₃	Pb	As	Ni	C ₄ H ₆	B(a)P
April-24	Max		80.0	29.1	26.5	32.4	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	Min		65.0	20.00	15.8	20.6	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
May-24	Max		78.0	29.2	25.5	33.2	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	Min		70.0	20.9	18.5	26.5	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
June-24	Max		89.7	48.4	26	34.6	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	Min		58.3	25.9	15.4	22.3	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
July-24	Max		71.6	34.6	22.9	30.2	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	Min		55.00	23.8	10.2	15.7	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Aug-24	Max		78.8	38.3	25.3	34.3	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	Min		55.6	24.6	12.8	20.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Sept-24	Max		86.7	47.7	28.0	34.1	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	Min		53.2	53.2	10.2	15.9	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
ii	Continuous monitoring of AAQ shall be carried out at least at three locations and data displayed on the website.				Complied. Continuous monitoring has been carried out at three different locations and data in form of EC Compliance report is being displayed on the website.									
iii	Fugitive emissions of HC from product storage tank yards etc. must be regularly monitored. Sensors for detecting HC leakage shall also be provided at strategic locations. The company shall use low Sulphur fuel to minimize SO ₂ emission.				Complied. Fugitive emissions are being monitored in hydrocarbon-prone locations, and gas detectors are installed near probable leakage sources to detect and alert in the event of an HC leak. The unit is using use low-sulfur fuels to reduce SO ₂ emissions.									
iv	The company shall install online O ₂ monitor in the furnaces and boilers shall be operated with minimum excess air for optimal fuel consumption and to minimize NO _x emission, Fire stack burners and steam injection system shall be designed for smokeless operation to minimize NO _x emission.				Complied Unit has installed O ₂ monitor in the furnaces and boilers to minimize NO _x emission. Unit has also installed fire stack burners and steam injection systems to minimize NO _x emission.									
v	For control of fugitive emissions, the company shall provide for a main flare system and a auxiliary flare system, and route all unsaturated hydrocarbons to the flare system. All the pumps and other equipment's where there is likelihood of HC leakages shall be provided				Complied. The unit has provided both a main and an auxiliary flare system, and all unsaturated HC was directed to it.									

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	<p>with LEL indicators and also provide for immediate isolation of such equipment in case of a leakage. The company shall adopt Leak Detection and Repair (LDAR) programme for quantification and control of fugitive emissions.</p>	<p>All HC leak potential areas are equipped with HC detectors with LEL warnings. Also. instant isolation has been provided by unit.</p> <p>Also, unit has prepared LADR programme and copy of the same is provided below and attached as Appendix-7.</p> <div style="text-align: center;">-</div> <div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: fit-content;">  <p>1. Abbreviations</p> <p>EC Environment Clearance EMIS Environment Management System HSE Health, Safety, Environment IARC International Agency for Research on Cancer LDAR Leak Detection & Repair MoEF/CC Ministry of Environment, Forest & Climate Change P&ID Process & Instrumentation Diagram SOP Standard Operating Procedure VOC Volatile Organic Compound</p> <p>2. References</p> <p>Environment Clearance Order MoEF Notification Dated: 18.03.2008 OISD-224-GDN: Monitoring & Control of VOC Emission Environment (Protection) Act, 1986 Environmental Management System (ISO 14001:2015) VOC Meter Operation Manual</p> </div> <div style="text-align: center;">-</div> <table border="1" style="width: 100%; border-collapse: collapse; margin: 10px auto;"> <thead> <tr> <th colspan="13" style="text-align: center;">Title: Format to maintain master list & monitoring sheet for LDAR program</th> </tr> <tr> <th>Sr.</th> <th>Date</th> <th>P&ID</th> <th>Sector</th> <th>Type of Component Equipment/Pipeline</th> <th>Equipment ID Equipment/Pipeline ID</th> <th>Type of Component & Component Tag No.</th> <th>Chemical Name</th> <th>Pressure (bar)</th> <th>Temperature (°C)</th> <th>Results (of request)</th> <th>Corrective actions (if request)</th> <th>Action By</th> <th>Target Date</th> <th>Completion Date</th> <th>Result (pending/leakage)</th> <th>Other (Confirmed By)</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>	Title: Format to maintain master list & monitoring sheet for LDAR program													Sr.	Date	P&ID	Sector	Type of Component Equipment/Pipeline	Equipment ID Equipment/Pipeline ID	Type of Component & Component Tag No.	Chemical Name	Pressure (bar)	Temperature (°C)	Results (of request)	Corrective actions (if request)	Action By	Target Date	Completion Date	Result (pending/leakage)	Other (Confirmed By)																																																																				
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vi	<p>Data on fugitive emissions shall be regularly monitored and records maintained. The company shall conform to the process vent standards for organic chemicals including non-VOCs and all possible VOCs i.e., TOCs standard and process vent standards for top priority chemicals. The company shall install online monitor for VOC measurements. Action on the above shall be take during the detailed design stage of the NCC and intimate to this Ministry.</p>	<p>Complied.</p> <p>Company has implemented the LDAR program at site and as per this programme data of fugitive emissions are regularly monitored and records are also mentioned.</p> <p>Also, regular monitoring has been carried by MoEF approved third party environmental laboratories and data of the same are also being maintained on regular basis.</p> <p>All the emission standards as per GPCB/CPCB guidelines are conformed during compliance period.</p> <p>Monitoring reports for the reference are attached as Appendix-2.</p>																																																																																																		

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vii	The company shall ensure that no halogenated organic is sent to the flares. If any of the halogenated organic are present then the respective streams may be incinerated. If there are in technically feasible or economically viable reduction/recover options. Any stream containing organic carbon, other than halogenated shall be connected to proper flaring system, if not to a recovery device or an incinerator.	Complied. Halogenated organic compounds are not used in the process during compliance period.
viii	All new standards/norms that are being proposed by the CPCB for petrochemical plants and notified subsequently shall be applicable for the proposed unit.	Noted and shall be complied whenever applicable.
ix	Flue gas emissions from the various stacks attached to the boilers, furnaces/heaters shall conform to the prescribed standards.	Complied. Flue gas emission monitoring has been carried out by MoEF approved third party environmental laboratories at regular period. Monitoring reports are attached as Appendix-2.
x	The effluent generation shall not exceed 35520 m ³ /d. The waste water generated shall be treated in waste water treatment plant. As reflected in the EIA/EMO report, the company shall maximize the recycling of treated effluent and treated effluent (3600 m ³ /d) after conforming to the prescribed standards shall be discharged into the deep sea through effluent disposal pipeline. A holding pond for treated effluent for bio assay test shall be constructed before discharging the effluent into the sea. The domestic effluent (2160 m ³ /d) after treatment and conforming to the prescribed standards shall be discharged along with industrial effluent. A proper drainage system shall be provided for storm water drain.	Noted and same is being complied. Total industrial waste water generated during the compliance period is 11,705 KL/day, which shows that it does not exceed 35,520 KLD. Unit has provided RO based tertiary treatment and used treated water as make up water for cooling tower. Unit is treating domestic effluent into separate package unit and treated domestic effluent is recycled in RO based tertiary system. Month wise effluent generation is provided below.

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	<p>-</p> <p>Details of Industrial Wastewater Generation</p> <table border="1" data-bbox="305 348 1403 690"> <thead> <tr> <th data-bbox="305 348 889 415">Month</th> <th data-bbox="889 348 1403 415">Industrial Wastewater Generation (KL)</th> </tr> </thead> <tbody> <tr> <td data-bbox="305 415 889 449">Apr-24</td> <td data-bbox="889 415 1403 449">372269</td> </tr> <tr> <td data-bbox="305 449 889 483">May-24</td> <td data-bbox="889 449 1403 483">382600</td> </tr> <tr> <td data-bbox="305 483 889 516">Jun-24</td> <td data-bbox="889 483 1403 516">355802</td> </tr> <tr> <td data-bbox="305 516 889 550">Jul-24</td> <td data-bbox="889 516 1403 550">382536</td> </tr> <tr> <td data-bbox="305 550 889 583">Aug-24</td> <td data-bbox="889 550 1403 583">371954</td> </tr> <tr> <td data-bbox="305 583 889 617">Sep-24</td> <td data-bbox="889 583 1403 617">276868</td> </tr> <tr> <td data-bbox="305 617 889 651">Total</td> <td data-bbox="889 617 1403 651">2142029</td> </tr> <tr> <td data-bbox="305 651 889 684">Avg./Day</td> <td data-bbox="889 651 1403 684">11705</td> </tr> </tbody> </table> <p>-</p>	Month	Industrial Wastewater Generation (KL)	Apr-24	372269	May-24	382600	Jun-24	355802	Jul-24	382536	Aug-24	371954	Sep-24	276868	Total	2142029	Avg./Day	11705	
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xi	The company shall obtain necessary approval from the State Irrigation Department to meet the water requirement.	<p>Noted.</p> <p>However, fresh water requirement is being fulfilled through GIDC water supply system of Dahej SEZ Ltd.</p>																		
xii	The company shall undertake rainwater harvesting measures to recharge the ground water and also to minimize the water drawl from the Narmada River.	<p>Complied.</p> <p>Rainwater harvesting systems are provided around the administration building to collect rainwater from the buildings.</p> <p>Contaminated rainwater from the process units is transferred to a wastewater collection and treatment system and treated in a separate Contaminated Rainwater Treatment System and reused within plant premises.</p>																		
xiii	Green belt shall be raised in an area of 52.5 ha to mitigate the fugitive emissions from the plant. Selection of plant species shall be as per the Central Pollution Control Board guidelines.	<p>Complied.</p> <p>Unit has developed greenbelt within plant premises to minimize the fugitive emissions.</p>																		
xiv	Occupational Health Surveillance of the workers should be done on a regular basis and maintained as per the Factories Act.	<p>Complied.</p> <p>Occupational health surveillance of the employees is being carried out on regular basis and records maintained as per the Factories Rules.</p> <p>A separate Occupational Health Centre is developed to carry out the different activities of occupational health services.</p> <p>Health check-up reports of employees are attached as Appendix-5.</p>																		

Sr. No.	EC Condition	Compliance Status (As on 30/09/2024)
xv	The company shall comply with all the recommendations made in the EIA/EMP report and risk assessment report.	Noted and complied.
B	GENERAL CONDITIONS:	
i	No further expansion or modernization in the plant shall be carried out without prior approval of the Ministry of Environment and Forests.	Noted. Unit assure that unit will not do any further expansion or modification till unit will get necessary permission for the authority.
ii	The gaseous emissions (SO ₂ , NO _x , CO, NMHC, Cl ₂ and HCl) from the various process units should conform to the standards prescribed under Environment (Protection) Rules, 1986 or norms stipulated by the SPCB whichever is more stringent. In the event of failure of pollution control systems (s) adopted by the unit, the respective unit should be restarted until the control measures are rectified to achieve the desire efficiency.	Complied. Unit has provided appropriate APCM for control of flue and process gas emission. Process gas emission monitoring has been carried out by MoEF approved third party environmental laboratories on regular period. Monitoring reports are attached as Appendix-2 .
iii	At no time, the emissions should go beyond the prescribed standards. In the event of failure of any pollution control system adopted by the units, the respective unit should be immediately put out of operation and should not be restarted until the desired efficiency has been achieved.	
iv	The overall noise levels in and around the plant area shall be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all source of noise generation. The ambient noise levels should conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time.)	Complied. Noise monitoring has been carried out by third party environmental laboratories on regular period. Also, unit has noise control measures like acoustic hoods, silencers, enclosures etc. on all sources of noise generation i.e., D G set & boiler room.
v	The project authorities must strictly comply with the provisions made in Manufacture, Storage and Import of Hazardous Chemicals Rules 1989 as amended in 2000 for handling of hazardous chemicals etc. Necessary approvals from chief Controller of	Complied. Unit has prepared compliance of Manufacture, Storage and Import of Hazardous Chemicals Rules 1989 as amended in 2000 for handling of hazardous chemicals.

Sr. No.	EC Condition	Compliance Status (As on 30/09/2024)
	Explosives must be obtained before commission of the project.	
vi	The project authorities must strictly comply with the rules and regulations with regard to handling and disposal of hazardous wastes in accordance with the Hazardous Wastes (Management and Handling) Rules, 2003. Authorization from the State Pollution Control Board must be obtained for collections/treatment/storage/disposal of hazardous wastes.	<p>Complied.</p> <p>Unit strictly comply with the rules and regulations with regard to handling and disposal of hazardous wastes in accordance with the Hazardous Wastes (Management and Handling) Rules, 2003.</p> <p>Unit is also a member of GPCB approved TSDF facility for disposal of hazardous waste and same are attached as Appendix-6.</p>
vii	The project authorities will provide adequate funds both recurring and non-recurring to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so provided should not be diverted for any other purposes.	<p>Complied.</p> <p>ETP operation cost during April 2024 to September 2024 is approx. 22.66 crores.</p>
viii	The stipulated conditions will be monitored by the Regional of this Ministry at Bhopal/Central Pollution Control Board/State Pollution Control Board. A six-monthly compliance report and the monitored data should be submitted to them regularly.	<p>Noted and Same is being Complied.</p> <p>Earlier unit has submitted EC Compliance for the period of October 2023 to March 2024.</p>
ix	The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and Copies of the clearance letter are available with the State Pollution Control Board/Committee and may also be seen at website the Ministry of Environment and Forests at http://www.envfor.nic.in . This should be advertised within seven days from the date of issue of the clearance letter at least in two local newspaper that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the regional office.	<p>Complied.</p> <p>Unit has provided advertisement in two local newspapers i.e., in Times of India (English newspaper) and Divya Bhaskar (Gujarati newspaper) on 10/07/2014.</p>

Sr. No.	EC Condition	Compliance Status (As on 30/09/2024)
x	The project authority shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.	<p>Final approval of the project by the concerned authorities - Consolidated Consent & Authorization (CC&A) has been renewed by GPCB vide consent order No.: AWH-109305, Date of issue: 08/07/2020, which is valid till 07/07/2025.</p> <p>A Copy of Consent to Established is placed as Appendix-3 & Consolidated Consent and Authorization is placed as Appendix-4.</p> <p>The date of commencing the land development work. - 05/05/2008</p>
5.	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	Noted
6.	The Ministry reserves the right to stipulated additional conditions if found necessary. The company in a time bound manner will implement these conditions.	Noted
7.	The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management and Handling) Rules, 2003 and the Public Liability Insurance Act, 1991 along with their amendments and rules.	Noted