

**MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE
(IA DIVISION-INDUSTRY-2 SECTOR)**

**MINUTES OF THE 16th MEETING OF THE
EXPERT APPRAISAL COMMITTEE (INDUSTRY-2 SECTOR) HELD DURING 21st to
23rd JANUARY 2020**

Venue: Indus Hall, Ground Floor, Jal Wing, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi-110003.

Time: 10:00 AM

16.1 Opening Remarks by the Chairman

The Chairman welcomed the Committee members and gave the opening remarks.

16.2 Confirmation of the Minutes of the 15th Meeting of the EAC (Industry-2) held during 30th-31st December 2019 to 1st January 2020 at MoEFCC, Indira Paryavaran Bhawan, New Delhi

The EAC, having taken note that no comments were offered on the minutes of its 15th meeting held during 30-31 December, 2019 & 1st January, 2020 at MoEFCC New Delhi, confirmed the same.

[DAY 1: 21st January 2019 \(Tuesday\)](#)

16.3 Consideration of Environmental Clearance

Agenda No. 16.3.1

**Technical Grade Pesticide Manufacturing Unit at B-16, 17 UPSIDC Industrial Area Village Salempur, Hathras, Uttar Pradesh by M/s EXCEL PHOSPHATES PVT LTD- Consideration of Environmental Clearance
[IA/UP/IND2/106127/2019, IA-J-11011/199/2019-IA-II(I)]**

The project proponent, vide email dated 20th January, 2020 has requested for deferment of proposal. The Committee has accordingly not considered the proposal and based on the request of PP the proposal was **deferred**.

Agenda No. 16.3.2

Onshore Oil and Gas Exploration and Appraisal in RJ-ONHP-2017/1 Block, Barmer District, Rajasthan by M/s Vedanta Limited (Division Cairn Oil & Gas)- Consideration of Environmental Clearance

[IA/RJ/IND2/98724/2019, IA-J-11011/80/2019-IA-II(I)]

16.3.2.1 The EAC before initiating the presentation and discussion has informed the project proponent that, after receipt of references requesting for exemption from requirement of prior environmental clearance under the provisions of the EIA Notification, 2006 for exploration drilling in respect of on-shore and off-shore oil and gas, the Ministry has, issued a Notification S.O. 236(E) dated 16th January, 2020 mentioning that "**All project in respect of off-shore and onshore oil and gas exploration are categorized as 'B2' projects**". Accordingly, now, only projects in respect of off-shore and onshore oil and gas development and production except exploration, are listed at Category A, requiring appraisal at the Central by the Expert Appraisal Committee. The proposed project of the project proponent requires appraisal as category B2 by the concerned Committee.

In response, the project proponent has informed the Committee that their proposal is for exploration and appraisal which involves early production and is not covered under category B2 and requires appraisal by the EAC.

Thereafter, the Committee has agreed to hear the presentation. The Project Proponent and their accredited Consultant M/s AECOM India Private Limited, made a detailed presentation on the salient features of the project.

16.3.2.2 During deliberations the EAC noted the following:

The proposal is for environmental clearance to the project for Onshore Oil and Gas Exploration and Appraisal in RJ-ONHP- 2017/1 Block, Barmer District, Rajasthan by M/s Vedanta Limited (Division: Cairn Oil & Gas).

Earlier, 'Offshore and onshore oil and gas exploration, development & production' projects were covered under category A of item 1(b) of the schedule to the Environment Impact Assessment (EIA) Notification, 2006. Now, all projects in respect of off-shore and onshore oil and gas development and production except exploration, are covered under category A and requires appraisal at central level by sectoral Expert Appraisal Committee (EAC) in the Ministry.

Standard ToR was issued by the Ministry vide letter dated 13th April 2019. Public hearing for the proposed project has been conducted by the State Pollution Control Board on 12th September 2019. The Committee has noted that one public hearing has been conducted for all projects falling in the same district under the Chairmanship of same ADM, however the project, are located in different blocks having separate ToR and EIA report, and the **same has been not concluded due to public protest. The Committee has also listened to the video of the public hearing.**

The Committee observed that as per the Form 1/PFR, Form 2/EIA&EMP and public hearing report submitted by the project proponent, it appears that the project is for exploration and no commercial production has been envisaged. The project proponent has obtained PEL for exploratory activities and no PML has been obtained. The cost of the project, facilities/utilities proposed in the project, air/water quality parameters, impacts assessed in the EIA report, EMP report prepared for the projects considered only

exploration and appraisal activity, and no commercial development and production of oil and gas.

16.3.2.3 *The Committee after detailed deliberations, in the first instant was not inclined to accept the proposals considering Ministry's Notification dated 16th January, 2020 for streamlining the project consideration and OM's/guidelines regarding appraisal of projects of category A/B, as the instant project requires appraisal under 'category B2' project by the concerned authority. **However, considering the submissions of the project proponent, the EAC has agreed for deliberations, however desired for requisite information/input on the following for further consideration of the proposal:***

- (i) The Committee mentioned that Seismic exploration is important steps to search the commercially economic subsurface deposits of crude oil, natural gas and minerals by the recording, processing, and interpretation of artificially induced shock waves in the earth. The Committee noted that PP has not still completed the Seismic Exploration Study in the allocated Block. PP has to fasten the Seismic Exploration Study to achieve the objective of this Project.
- (ii) Justification/clarity from Director General of Hydrocarbon regarding categorization of the present project, requirement for PEL/PML for production, etc.
- (iii) Comments from Director General of Hydrocarbon on the justification submitted by the project proponent against Ministry's Notification dated 16th January, 2020 and permission for production activity in the PEL as per the Revenue Contract Agreement.
- (iv) Addendum to the EIA/EMP report considering all the impacts and mitigation measures for Development and Production, in all terms, as proposed by the project proponent. The PP needs to revise the Report accordingly.
- (v) All the Permission received from the concerned authorities for development and production in the PEL(i.e. from MoPNG, DGH, State Govt., etc) needs to be submitted.
- (vi) Information regarding the public consultation vis-à-vis proposed development and production and clarification from SPCB needs to be submitted.
- (vii) The Public hearing is project specific and as ToR has been obtained Block wise, generally individual public hearing needs to be conducted w.r.t.project/ToR specific. However, in this instant case the PH was conducted for all projects falling in the same district under the Chairmanship of same ADM, however the project, are located in different blocks having separate ToR and EIA report.
- (viii) **The EAC observed that PH has not been not concluded due to public protest and adjourned by the Chairman.** In this regard the comments/clarifications from SPCB/ADM on whether public hearing was conducted and concluded as per the provisions of the EIA Notification, 2006 or not.

- (ix) The Committee has also listened the video of the public hearing and noted that the Public has raised various issues of the earlier EC granted to M/s Vedanta in the region. Public (in video) cited that M/s Vedanta has not complied the commitment made during earlier PH for getting earlier EC. In this regard the EAC suggested that the Ministry may seek the comments from the Regional Office of the MoEFCC in this regard.
- (x) The Committee noted that the block has the forest area and PP has not applied for Stage I FC. In this regard, FC Division of the Ministry may be consulted regarding the requirement of forest clearance for the project due to presence of forest area in the block in view of order of Hon'ble Supreme Court (Lafarge case).

The proposal was accordingly deferred for the needful.

Agenda No. 16.3.3

Onshore Oil and Gas Exploration and Appraisal in RJ-ONHP-2017/2 block in Barmer and Jalore Districts, Rajasthan by M/s Vedanta Limited (Division Cairn Oil & Gas)-Consideration of Environmental Clearance

[IA/RJ/IND2/99900/2019, IA-J-11011/103/2019-IA-II(I)]

16.3.3.1 The EAC before initiating the presentation and discussion has informed the project proponent that, after receipt of references requesting for exemption from requirement of prior environmental clearance under the provisions of the EIA Notification, 2006 for exploration drilling in respect of on-shore and off-shore oil and gas, the Ministry has, issued a Notification S.O. 236(E) dated 16th January, 2020 mentioning that "**All project in respect of off-shore and onshore oil and gas exploration are categorized as 'B2' projects**". Accordingly, now, only projects in respect of off-shore and onshore oil and gas development and production except exploration, are listed at Category A, requiring appraisal at the Central by the Expert Appraisal Committee. The proposed project of the project proponent requires appraisal as category B2 by the concerned Committee.

In response, the project proponent has informed the Committee that their proposal is for exploration and appraisal which involves early production and is not covered under category B2 and requires appraisal by the EAC.

Thereafter, the Committee has agreed to hear the presentation. The project Proponent and their accredited Consultant M/s AECOM India Private Limited, made a detailed presentation on the salient features of the project.

16.3.3.2 During deliberations the EAC noted the following:

The proposal is for environmental clearance to the project for Onshore Oil and Gas Exploration and Appraisal in RJ-ONHP-2017/2 Block in Barmer & Jalore District, Rajasthan by M/s Vedanta Limited (Division: Cairn Oil & Gas).

Earlier, 'Offshore and onshore oil and gas exploration, development & production' projects were covered under category A of item 1(b) of the schedule to the Environment Impact Assessment (EIA) Notification, 2006. Now, all projects in respect of off-shore and onshore oil and gas development and production except exploration, are covered under category A and requires appraisal at central level by sectoral Expert Appraisal Committee (EAC) in the Ministry. Standard ToR was issued by Ministry vide letter dated 25th April 2019.

Public hearings for the proposed project has been conducted by the State Pollution Control Board on 29th July 2019 at Collectorate Meeting Hall Jalore and on 12th September 2019 at Rajkiya Higher Secondary School, Bachdao of Barmer District. The Committee has noted that one public hearing has been conducted for all projects falling in the same district under the Chairmanship of same ADM, however projects are located in different blocks having separate ToR and EIA report, and the same has been not concluded due to public protest in Jalore District. The Committee has also listened to the video of the public hearing.

As per the Form 1/PFR, Form 2/EIA&EMP and public hearing report submitted by the project proponent, it appears that the project is for exploration and no commercial production has been envisaged. The project proponent has obtained PEL for exploratory activities and no PML has been obtained. The cost of the project, facilities/utilities proposed in the project, air/water quality parameters, impacts assessed in the EIA report, EMP report prepared for the projects considered only exploration and appraisal activity, and no commercial development and production of oil and gas.

16.3.3.3 *The Committee after detailed deliberations, in the first instant was not inclined to accept the proposals considering Ministry's Notification dated 16th January, 2020 for streamlining the project consideration and OM's/guidelines regarding appraisal of projects of category A/B, as the instant project requires appraisal under 'category B2' project by the concerned authority. **However, considering the submissions of the project proponent, the EAC has agreed for deliberations, however desired for requisite information/input on the following for further consideration of the proposal:***

- (i) The Committee mentioned that Seismic exploration is important steps to search the commercially economic subsurface deposits of crude oil, natural gas and minerals by the recording, processing, and interpretation of artificially induced shock waves in the earth. The Committee noted that PP has not still completed the Seismic Exploration Study in the allocated Block. PP has to fasten the Seismic Exploration Study to achieve the objective of this Project.
- (ii) Justification/clarity from Director General of Hydrocarbon regarding categorization of the present project, requirement for PEL/PML for production, etc.
- (iii) Comments from Director General of Hydrocarbon on the justification submitted by the project proponent against Ministry's Notification dated 16th January, 2020 and permission for production activity in the PEL as per the Revenue Contract Agreement.

- (iv) Addendum to the EIA/EMP report considering all the impacts and mitigation measures for Development and Production, in all terms, as proposed by the project proponent. The PP needs to revise the Report accordingly.
- (v) All the Permission received from the concerned authorities for development and production in the PEL (i.e. from MoPNG, DGH, State Govt., etc) needs to be submitted.
- (vi) Information regarding the public consultation vis-à-vis proposed development and production and clarification from SPCB needs to be submitted.
- (vii) The Public hearing is project specific and as ToR has been obtained Block wise, generally individual public hearing needs to be conducted w.r.t. project/ToR specific. However, in this instant case the PH was conducted for all projects falling in the same district under the Chairmanship of same ADM, however the project, are located in different blocks having separate ToR and EIA report.
- (viii) **The EAC observed that PH has not been not concluded due to public protest and adjourned by the Chairman.** In this regard the comments/clarifications from SPCB/ADM on whether public hearing was conducted and concluded as per the provisions of the EIA Notification, 2006 or not.
- (ix) The Committee has also listened the video of the public hearing and noted that the Public has raised various issues of the earlier EC granted to M/s Vedanta in the region. Public (in video) cited that M/s Vedanta has not complied the commitment made during earlier PH for getting earlier EC. In this regard the EAC suggested that the Ministry may seek the comments from the Regional Office of the MoEFCC in this regard.
- (x) The Committee noted that the block has the forest area and PP has not applied for Stage I FC. In this regard, FC Division of the Ministry may be consulted regarding the requirement of forest clearance for the project due to presence of forest area in the block in view of order of Hon'ble Supreme Court (Lafarge case).

The proposal was accordingly deferred for the needful.

Agenda No. 16.3.4

Onshore Oil and Gas Exploration and Appraisal in RJ-ONHP-2017/5 Block, Barmer District, Rajasthan by M/s Vedanta Limited (Division Cairn Oil & Gas)- Consideration of Environmental Clearance

[IA/RJ/IND2/98971/2019, IA-J-11011/83/2019-IA-II(I)]

16.3.4.1 The EAC before initiating the presentation and discussion has informed the project proponent that, after receipt of references requesting for exemption from

requirement of prior environmental clearance under the provisions of the EIA Notification, 2006 for exploration drilling in respect of on-shore and off-shore oil and gas, the Ministry has, issued a Notification S.O. 236(E) dated 16th January, 2020 mentioning that **"All project in respect of off-shore and onshore oil and gas exploration are categorized as 'B2' projects"**. Accordingly, now, only projects in respect of off-shore and onshore oil and gas development and production except exploration, are listed at Category A, requiring appraisal at the Central by the Expert Appraisal Committee. The proposed project of the project proponent requires appraisal as category B2 by the concerned Committee.

In response, the project proponent has informed the Committee that their proposal is for exploration and appraisal which involves early production and is not covered under category B2 and requires appraisal by the EAC.

Thereafter, the Committee has agreed to hear the presentation. The project Proponent and their accredited Consultant M/s AECOM India Private Limited, made a detailed presentation on the salient features of the project.

16.3.4.2 During deliberations the EAC noted the following:

The proposal is for environmental clearance to the project for Onshore Oil and Gas Exploration and Appraisal in RJ-ONHP- 2017/5 Block, Barmer District, Rajasthan by M/s. Vedanta Limited (Division: Cairn Oil & Gas).

Earlier, 'Offshore and onshore oil and gas exploration, development & production' projects were covered under category A of item 1(b) of the schedule to the Environment Impact Assessment (EIA) Notification, 2006. Now, all projects in respect of off-shore and onshore oil and gas development and production except exploration, are covered under category A and requires appraisal at central level by sectoral Expert Appraisal Committee (EAC) in the Ministry.

Standard ToR was issued by Ministry vide letter dated 14th April 2019.

Public Hearing for the proposed project has been conducted by the State Pollution Control Board on 12th September 2019. The Committee has noted that one public hearing has been conducted for all projects falling in the same district under the Chairmanship of same ADM, however projects are located in different blocks having separate ToR and EIA report.

As per the Form 1/PFR, Form 2/EIA&EMP and public hearing report submitted by the project proponent, it appears that the project is for exploration and no commercial production has been envisaged. The project proponent has obtained PEL for exploratory activities and no PML has been obtained. The cost of the project, facilities/utilities proposed in the project, air/water quality parameters, impacts assessed in the EIA report, EMP report prepared for the projects considered only exploration and appraisal activity, and no commercial development and production of oil and gas.

16.3.4.3 *The Committee after detailed deliberations, in the first instant was not inclined to accept the proposals considering Ministry's Notification dated 16th January, 2020 for streamlining the project consideration and OM's/guidelines regarding appraisal of projects of category A/B, as the instant project requires appraisal under 'category B2' project by the concerned authority. **However, considering the submissions of the project proponent, the EAC has agreed for deliberations, however desired for requisite information/input on the following for further consideration of the proposal:***

- (i) The Committee mentioned that Seismic exploration is important steps to search the commercially economic subsurface deposits of crude oil, natural gas and minerals by the recording, processing, and interpretation of artificially induced shock waves in the earth. The Committee noted that PP has not still completed the Seismic Exploration Study in the allocated Block. PP has to fasten the Seismic Exploration Study to achieve the objective of this Project.
- (ii) Justification/clarity from Director General of Hydrocarbon regarding categorization of the present project, requirement for PEL/PML for production, etc.
- (iii) Comments from Director General of Hydrocarbon on the justification submitted by the project proponent against Ministry's Notification dated 16th January, 2020 and permission for production activity in the PEL as per the Revenue Contract Agreement.
- (iv) Addendum to the EIA/EMP report considering all the impacts and mitigation measures for Development and Production, in all terms, as proposed by the project proponent. The PP needs to revise the Report accordingly.
- (v) All the Permission received from the concerned authorities for development and production in the PEL (i.e. from MoPNG, DGH, State Govt., etc) needs to be submitted.
- (vi) Information regarding the public consultation vis-à-vis proposed development and production and clarification from SPCB needs to be submitted.
- (vii) The Public hearing is project specific and as ToR has been obtained Block wise, generally individual public hearing needs to be conducted w.r.t.project/ToR specific. However, in this instant case the PH was conducted for all projects falling in the same district under the Chairmanship of same ADM, however the project, are located in different blocks having separate ToR and EIA report.
- (viii) **The EAC observed that PH has not been not concluded due to public protest and adjourned by the Chairman.** In this regard the comments/clarifications from SPCB/ADM on whether public hearing was conducted and concluded as per the provisions of the EIA Notification, 2006 or not.
- (ix) The Committee has also listened the video of the public hearing and noted that the Public has raised various issues of the earlier EC granted to M/s Vedanta in the

region. Public (in video) cited that M/s Vedanta has not complied the commitment made during earlier PH for getting earlier EC. In this regard the EAC suggested that the Ministry may seek the comments from the Regional Office of the MoEFCC in this regard.

- (x) The Committee noted that the block has the forest area and PP has not applied for Stage I FC. In this regard, FC Division of the Ministry may be consulted regarding the requirement of forest clearance for the project due to presence of forest area in the block in view of order of Hon'ble Supreme Court (Lafarge case).

The proposal was accordingly deferred for the needful.

Agenda No. 16.3.5

Onshore Oil and Gas Exploration and Appraisal in RJ-ONHP-2017/4 block in Barmer and Jalore District, Rajasthan by M/s Vedanta Limited (Division Cairn Oil & Gas)-Consideration of Environmental Clearance [IA/RJ/IND2/100056/2019, IA-J-11011/106/2019-IA-II(I)]

16.3.5.1 The EAC before initiating the presentation and discussion has informed the project proponent that, after receipt of references requesting for exemption from requirement of prior environmental clearance under the provisions of the EIA Notification, 2006 for exploration drilling in respect of on-shore and off-shore oil and gas, the Ministry has, issued a Notification S.O. 236(E) dated 16th January, 2020 mentioning that "**All project in respect of off-shore and onshore oil and gas exploration are categorized as 'B2' projects**". Accordingly, now, only projects in respect of off-shore and onshore oil and gas development and production except exploration, are listed at Category A, requiring appraisal at the Central by the Expert Appraisal Committee. The proposed project of the project proponent requires appraisal as category B2 by the concerned Committee.

In response, the project proponent has informed the Committee that their proposal is for exploration and appraisal which involves early production and is not covered under category B2 and requires appraisal by the EAC.

Thereafter, the Committee has agreed to hear the presentation. The project Proponent and their accredited Consultant M/s AECOM India Private Limited, made a detailed presentation on the salient features of the project.

16.3.5.2 During deliberations the EAC noted the following:

The proposal is for environmental clearance to the project for Onshore Oil and Gas Exploration and Appraisal in RJ-ONHP-2017/2 Block in Barmer&Jalore District, Rajasthan by M/s Vedanta Limited (Division: Cairn Oil & Gas).

Earlier, 'Offshore and onshore oil and gas exploration, development & production' projects were covered under category A of item 1(b) of the schedule to the Environment Impact Assessment (EIA) Notification, 2006. Now, all projects in respect of off-shore and onshore oil and gas development and production except exploration, are covered under

category A and requires appraisal at central level by sectoral Expert Appraisal Committee (EAC) in the Ministry. The proposal is for environmental clearance to the project for Onshore Oil and Gas Exploration and Appraisal in RJ-ONHP-2017/4 Block in Barmer & Jalore District, Rajasthan by M/s. Vedanta Limited (Division: Cairn Oil & Gas).

Standard ToR was issued by the Ministry vide letter dated 26th April, 2019. Public hearing for the proposed project has been conducted by the State Pollution Control Board on 29th July 2019 at Collectorate Meeting Hall Jalore and on 12th September 2019 at Rajkiya Higher Secondary School, Bachdao of Barmer District. The Committee has noted that one public hearing has been conducted for all projects falling in the same district under the Chairmanship of same ADM, however projects are located in different blocks having separate ToR and EIA report, and the same has been not concluded due to public protest in Jalore District. The Committee has also listened to the video of the public hearing.

As per the Form 1/PFR, Form 2/EIA&EMP and public hearing report submitted by the project proponent, it appears that the project is for exploration and no commercial production has been envisaged. The project proponent has obtained PEL for exploratory activities and no PML has been obtained. The cost of the project, facilities/utilities proposed in the project, air/water quality parameters, impacts assessed in the EIA report, EMP report prepared for the projects considered only exploration and appraisal activity, and no commercial development and production of oil and gas.

16.3.5.3 *The Committee after detailed deliberations, in the first instant was not inclined to accept the proposals considering Ministry's Notification dated 16th January, 2020 for streamlining the project consideration and OM's/guidelines regarding appraisal of projects of category A/B, as the instant project requires appraisal under 'category B2' project by the concerned authority. **However, considering the submissions of the project proponent, the EAC has agreed for deliberations, however desired for requisite information/input on the following for further consideration of the proposal:***

- (i) The Committee mentioned that Seismic exploration is important steps to search the commercially economic subsurface deposits of crude oil, natural gas and minerals by the recording, processing, and interpretation of artificially induced shock waves in the earth. The Committee noted that PP has not still completed the Seismic Exploration Study in the allocated Block. PP has to fasten the Seismic Exploration Study to achieve the objective of this Project.
- (ii) Justification/clarity from Director General of Hydrocarbon regarding categorization of the present project, requirement for PEL/PML for production, etc.
- (iii) Comments from Director General of Hydrocarbon on the justification submitted by the project proponent against Ministry's Notification dated 16th January, 2020 and permission for production activity in the PEL as per the Revenue Contract Agreement.

- (iv) Addendum to the EIA/EMP report considering all the impacts and mitigation measures for Development and Production, in all terms, as proposed by the project proponent. The PP needs to revise the Report accordingly.
- (v) All the Permission received from the concerned authorities for development and production in the PEL (i.e. from MoPNG, DGH, State Govt., etc) needs to be submitted.
- (vi) Information regarding the public consultation vis-à-vis proposed development and production and clarification from SPCB needs to be submitted.
- (vii) The Public hearing is project specific and as ToR has been obtained Block wise, generally individual public hearing needs to be conducted w.r.t.project/ToR specific. However, in this instant case the PH was conducted for all projects falling in the same district under the Chairmanship of same ADM, however the project, are located in different blocks having separate ToR and EIA report.
- (viii) **The EAC observed that PH has not been not concluded due to public protest and adjourned by the Chairman.** In this regard the comments/clarifications from SPCB/ADM on whether public hearing was conducted and concluded as per the provisions of the EIA Notification, 2006 or not.
- (ix) The Committee has also listened the video of the public hearing and noted that the Public has raised various issues of the earlier EC granted to M/s Vedanta in the region. Public (in video) cited that M/s Vedanta has not complied the commitment made during earlier PH for getting earlier EC. In this regard the EAC suggested that the Ministry may seek the comments from the Regional Office of the MoEFCC in this regard.
- (x) The Committee noted that the block has the forest area and PP has not applied for Stage I FC. In this regard, FC Division of the Ministry may be consulted regarding the requirement of forest clearance for the project due to presence of forest area in the block in view of order of Hon'ble Supreme Court (Lafarge case).

The proposal was accordingly deferred for the needful.

Agenda No. 16.3.6

**Onshore Oil and Gas Exploration and Appraisal in RJ-ONHP-2017/7 block in Barmer District, Rajasthan by M/s Vedanta Limited(Division Cairn Oil & Gas)-
Consideration of Environmental Clearance**

[IA/RJ/IND2/99765/2019, IA-J-11011/97/2019-IA-II(I)]

16.3.6.1 The EAC before initiating the presentation and discussion has informed the project proponent that, after receipt of references requesting for exemption from requirement of prior environmental clearance under the provisions of the EIA Notification, 2006 for exploration drilling in respect of on-shore and off-shore oil and gas, the Ministry has, issued a Notification S.O. 236(E) dated 16th January, 2020 mentioning that "**All**

project in respect of off-shore and onshore oil and gas exploration are categorized as 'B2' projects". Accordingly, now, only projects in respect of off-shore and onshore oil and gas development and production except exploration, are listed at Category A, requiring appraisal at the Central by the Expert Appraisal Committee. The proposed project of the project proponent requires appraisal as category B2 by the concerned Committee.

In response, the project proponent has informed the Committee that their proposal is for exploration and appraisal which involves early production and is not covered under category B2 and requires appraisal by the EAC.

Thereafter, the Committee has agreed to hear the presentation. The project Proponent and their accredited Consultant M/s AECOM India Private Limited, made a detailed presentation on the salient features of the project.

16.3.6.2 During deliberations the EAC noted the following:

The proposal is for environmental clearance to the project for Onshore Oil and Gas Exploration and Appraisal in RJ-ONHP- 2017/7 Block, Barmer District, Rajasthan by M/s Vedanta Limited (Division: Cairn Oil & Gas).

Earlier, 'Offshore and onshore oil and gas exploration, development & production' projects were covered under category A of item 1(b) of the schedule to the Environment Impact Assessment (EIA) Notification, 2006. Now, all projects in respect of off-shore and onshore oil and gas development and production except exploration, are covered under category A and requires appraisal at central level by sectoral Expert Appraisal Committee (EAC) in the Ministry.

Standard ToR was issued by Ministry vide letter dated 20th April 2019. Public Hearing for the proposed project has been conducted by the State Pollution Control Board on 12th September 2019. The Committee has noted that one public hearing has been conducted for all projects falling in the same district under the Chairmanship of same ADM, however projects are located in different blocks having separate ToR and EIA report.

As per the Form 1/PFR, Form 2/EIA&EMP and public hearing report submitted by the project proponent, it appears that the project is for exploration and no commercial production has been envisaged. The project proponent has obtained PEL for exploratory activities and no PML has been obtained. The cost of the project, facilities/utilities proposed in the project, air/water quality parameters, impacts assessed in the EIA report, EMP report prepared for the projects considered only exploration and appraisal activity, and no commercial development and production of oil and gas.

16.3.6.3 *The Committee after detailed deliberations, in the first instant was not inclined to accept the proposals considering Ministry's Notification dated 16th January, 2020 for streamlining the project consideration and OM's/guidelines regarding appraisal of projects of category A/B, as the instant project requires appraisal under 'category B2' project by the concerned authority. However, considering the submissions of the project proponent, the EAC has agreed for deliberations, however desired for*

requisite information/input on the following for further consideration of the proposal:

- (i) The Committee mentioned that Seismic exploration is important steps to search the commercially economic subsurface deposits of crude oil, natural gas and minerals by the recording, processing, and interpretation of artificially induced shock waves in the earth. The Committee noted that PP has not still completed the Seismic Exploration Study in the allocated Block. PP has to fasten the Seismic Exploration Study to achieve the objective of this Project.
- (ii) Justification/clarity from Director General of Hydrocarbon regarding categorization of the present project, requirement for PEL/PML for production, etc.
- (iii) Comments from Director General of Hydrocarbon on the justification submitted by the project proponent against Ministry's Notification dated 16th January, 2020 and permission for production activity in the PEL as per the Revenue Contract Agreement.
- (iv) Addendum to the EIA/EMP report considering all the impacts and mitigation measures for Development and Production, in all terms, as proposed by the project proponent. The PP needs to revise the Report accordingly.
- (v) All the Permission received from the concerned authorities for development and production in the PEL (i.e. from MoPNG, DGH, State Govt., etc) needs to be submitted.
- (vi) Information regarding the public consultation vis-à-vis proposed development and production and clarification from SPCB needs to be submitted.
- (vii) The Public hearing is project specific and as ToR has been obtained Block wise, generally individual public hearing needs to be conducted w.r.t. project/ToR specific. However, in this instant case the PH was conducted for all projects falling in the same district under the Chairmanship of same ADM, however the project, are located in different blocks having separate ToR and EIA report.
- (viii) **The EAC observed that PH has not been not concluded due to public protest and adjourned by the Chairman.** In this regard the comments/clarifications from SPCB/ADM on whether public hearing was conducted and concluded as per the provisions of the EIA Notification, 2006 or not.
- (ix) The Committee has also listened the video of the public hearing and noted that the Public has raised various issues of the earlier EC granted to M/s Vedanta in the region. Public (in video) cited that M/s Vedanta has not complied the commitment made during earlier PH for getting earlier EC. In this regard the EAC suggested that the Ministry may seek the comments from the Regional Office of the MoEFCC in this regard.
- (x) The Committee noted that the block has the forest area and PP has not applied for Stage I FC. In this regard, FC Division of the Ministry may be consulted regarding

the requirement of forest clearance for the project due to presence of forest area in the block in view of order of Hon'ble Supreme Court (Lafarge case).

The proposal was accordingly deferred for the needful.

Agenda No. 16.3.7

Manufacturing of Synthetic organic chemicals at F/95, RIICO Grow Centre, Phase-II, Abu Road, Abu Road, Sirohi, Rajasthan by M/s Arbuda Industries- Consideration of Environmental Clearance.

[IA/RJ/IND2/134242/2019, IA-J-11011/61/2019-IA-II(I)]

The project proponent and their accredited consultant M/s Perfect Enviro Solutions Pvt. Ltd. made a detailed presentation on the salient features of the project.

16.3.7.1 During deliberations, the EAC noted the following:

The proposal is for environmental clearance to the project for Manufacturing Synthetic Organic Chemicals (Dyes Intermediate) of capacity 30 TPM by M/s Arbuda Industries in an area of 1977.3 sqm located at Plot No.F-95, RIICO Growth Centre, Phase-II, Village Maval, Tehsil Abu Road, District Sirohi, State Rajasthan.

The details of product and capacity as under:

S. No.	Product	Total (TPM)	Use
1	Sulpho Vinyl Sulphone (SVS)	4	Dyestuff & Dyestuff Intermediate
2	2, Naphthol 6,8 Di- Sulphonic Acid (G-Salt)	6	Dyestuff & Dyestuff Intermediate
3	4, Sulpho Ortho Aminobenzoic acid	5	Dyestuff Intermediate
4	4,4 Dinitro Stilbene 2,2 Disulphonic Acid (DNSDA)	5	Dyestuff Intermediate for Direct Dyes, Manufacturing of DSD Acid
5	Metanilic Acid	5	Dyestuff & Dyestuff Intermediate
6	MPDSA (Meta Pheny Di Amine Sulphonic Acid)	5	Dyestuff Intermediate
Total		30	

The project/activity is covered under category B of item 5(f) 'Synthetic organic chemicals industry' of the schedule to the Environment Impact Assessment (EIA) Notification, 2006. Due to applicability of general condition (Inter state boundary of Gujarat and Rajasthan within 5 km), project requires appraisal at central level by sectoral Expert Appraisal Committee in the Ministry.

Standard Terms of References (ToR) for the project was issued by the Ministry vide letter dated on 13th April, 2019.

Land area available for the project is 1977.3 sqm. Industry will develop greenbelt in an area of 652.5 m² covering 33% of total plot area. The estimated project cost is Rs 6 crores. Total capital cost earmarked towards environmental pollution control measures is Rs 80 lakhs and the recurring cost (operation and maintenance) will be about Rs 40 lakhs per annum. The project will provide employment for 25 persons directly and 50 persons indirectly. Industry proposes to allocate Rs. 12 lakhs which is 2% of total project cost towards Corporate Environment Responsibility.

The Jessore Sloth Bear Sanctuary and the Mount Abu Wildlife Sanctuary are located within 10 km from the project site. SuketNadi (1.74 km, E), Banas river (1.87 km, NNW), SewaranNadi (3.38 km, NEE), KaleriNadi (3.90 km, NW), Gomti Nadi (5.88 km, NW), TeliyaNadi (8 km, SEE) and Nadi near Khari (8.58 km, NW) flows within 10 km from the project area.

Ambient air quality monitoring was carried out at 8 locations during 24th November 2019-24th December 2019 and the baseline data indicates as: PM₁₀ (93.5- 120.7 µg/m³), PM_{2.5}(40.2- 62.9 µg/m³), SO₂ (8.8-16 µg/m³) and NO₂ (20.1 - 36.1 µg/m³). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.527 µg/m³, 0.397 µg/m³ and 1.84 µg/m³ with respect to PM₁₀, SO₂ and NO₂. The resulting concentrations are within the National Ambient Air Quality Standards.

Total water requirement is estimated to be 12 cum/day, which includes which fresh water requirement of 5.1 cum/day proposed to be met from RIICO water supply. Effluent of 7.3 cum/day will be treated through ETP followed by RO and evaporation of reject at MEE/ ATFD. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

Power requirement will be 125 KVA, which will be met from Jodhpur Viduyt Vitran Nigam Ltd. One DG set of 125 KVA capacity shall be used as standby during power failure. Stack (height 5m) will be provided as per CPCB norms to the proposed DG sets. Agro Waste fired boiler of capacity 3 TPH and Thermic Fluid Heater (6 Lac kcal) will be set up, with multicyclone and 30 m stack height for controlling the particulate emission within the statutory limit of 115 mg/Nm³.

Public hearing is exempted in accordance with the Ministry's OM dated 27th April 2018, as the project site is located inside the notified industrial area. There is no litigation pending against the project.

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have recommended for grant of Environmental Clearance (EC).

16.3.7.2 The EAC, after detailed deliberations, **recommended** the project for grant of environmental clearance, subject to compliance of terms and conditions as under, and general terms of conditions at **Annexure**:-

- (i) The environmental clearance is subject to obtaining prior clearance from the wildlife angle, including clearance from the Standing Committee of the National Board for Wildlife, as applicable, as per the Ministry's OM dated 8th August, 2019. Grant of environmental clearance does not necessarily imply that Wildlife Clearance shall be granted to the project and that their proposal for Wildlife Clearance will be considered by the respective authorities on its merit and decision taken.
- (ii) The project proponent shall prepare a Site-Specific Conservation Plan for conservation of peacocks in the study area and obtain approval from the State Wildlife Department. The recommendations of the approved Site-Specific Conservation Plan shall be implemented in consultation with the State Wildlife Department. The implementation report shall be furnished along with the six-monthly compliance report.
- (iii) Necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, shall be obtained from the State Pollution Control Board.
- (iv) As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. All the waste water to be collected and to be reused after treatment. Containment plan shall be developed to arrest all the spillage along the working area and storage in the collection tank of ETP.
- (v) Sulphuric acid and Oleum shall be handled with utmost precaution using chemical resistant pipe and pumps.

- (vi) Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.
- (vii) National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R.608(E) dated 21st July, 2010 and amended from time to time shall be followed. Fugitive emissions shall be controlled at 99.98% with effective chillers.
- (viii) No raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used.
- (ix) To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- (x) Solvent management shall be carried out as follows:
 - (a) Reactor shall be connected to chilled brine condenser system.
 - (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.
 - (c) The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery.
 - (d) Solvents shall be stored in a separate space specified with all safety measures.
 - (e) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.
 - (f) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.
 - (g) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.
- (xi) Total fresh water requirement shall not exceed 5.1 cum/day, proposed to be met from RIICO water supply. Prior permission in this regard shall be obtained from the concerned regulatory authority.
- (xii) Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system. All the vent pipes should be above the roof level.
- (xiii) Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps. Raw material and products should be stored in leakproof containers. Spent acid to be stored over the ground tank and to be sent to TSDF.

- (xiv) Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.
- (xv) The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.
- (xvi) Fly ash should be stored separately as per CPCB guidelines so that it may not adversely affect the air quality. Direct exposure of workers to fly ash and dust should be avoided.
- (xvii) The company shall undertake waste minimization measures as below:-
 - (a) Metering and control of quantities of active ingredients to minimize waste.
 - (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
 - (c) Use of automated filling to minimize spillage.
 - (d) Use of Close Feed system into batch reactors.
 - (e) Venting equipment through vapour recovery system.
 - (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xviii) The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.
- (xix) Based on the commitment made by PP at least 2% of the total project cost shall be allocated for Corporate Environment Responsibility (CER) and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.
- (xx) For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- (xxi) The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms.
- (xxii) Occupational health surveillance including dental check up of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- (xxiii) Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For ZLD, the unit shall install

web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

Agenda No. 16.3.8

Onshore Oil and Gas Exploration and Appraisal in RJ-ONHP-2017/6 Block, Barmer District, Rajasthan by M/s Vedanta Limited (Division Cairn Oil & Gas)- Consideration of Environmental Clearance

[IA/RJ/IND2/99109/2019, IA-J-11011/85/2019-IA-II(I)]

16.3.8.1 The EAC before initiating the presentation and discussion has informed the project proponent that, after receipt of references requesting for exemption from requirement of prior environmental clearance under the provisions of the EIA Notification, 2006 for exploration drilling in respect of on-shore and off-shore oil and gas, the Ministry has, issued a Notification S.O. 236(E) dated 16th January, 2020 mentioning that "**All project in respect of off-shore and onshore oil and gas exploration are categorized as 'B2' projects**". Accordingly, now, only projects in respect of off-shore and onshore oil and gas development and production except exploration, are listed at Category A, requiring appraisal at the Central by the Expert Appraisal Committee. The proposed project of the project proponent requires appraisal as category B2 by the concerned Committee.

In response, the project proponent has informed the Committee that their proposal is for exploration and appraisal which involves early production and is not covered under category B2 and requires appraisal by the EAC.

Thereafter, the Committee has agreed to hear the presentation. The project Proponent and their accredited Consultant M/s AECOM India Private Limited, made a detailed presentation on the salient features of the project.

16.3.8.2 During deliberations the EAC noted the following:

The proposal is for environmental clearance to the project for Onshore Oil and Gas Exploration and Appraisal in RJ-ONHP- 2017/6 Block, Barmer District, Rajasthan by M/s Vedanta Limited (Division: Cairn Oil & Gas).

Earlier, 'Offshore and onshore oil and gas exploration, development & production' projects were covered under category A of item 1(b) of the schedule to the Environment Impact Assessment (EIA) Notification, 2006. Now, all projects in respect of off-shore and onshore oil and gas development and production except exploration, are covered under category A and requires appraisal at central level by sectoral Expert Appraisal Committee (EAC) in the Ministry.

Standard ToR was issued by the Ministry vide letter dated 14th April 2019. Public Hearing for the proposed project has been conducted by the State Pollution Control Board on 12th September 2019. The Committee has noted that one public hearing has been

conducted for all projects falling in the same district under the Chairmanship of same ADM, however projects are located in different blocks having separate ToR and EIA report.

As per the Form 1/PFR, Form 2/EIA&EMP and public hearing report submitted by the project proponent, it appears that the project is for exploration and no commercial production has been envisaged. The project proponent has obtained PEL for exploratory activities and no PML has been obtained. The cost of the project, facilities/utilities proposed in the project, air/water quality parameters, impacts assessed in the EIA report, EMP report prepared for the projects considered only exploration and appraisal activity, and no commercial development and production of oil and gas.

16.3.8.3 *The Committee after detailed deliberations, in the first instant was not inclined to accept the proposals considering Ministry's Notification dated 16th January, 2020 for streamlining the project consideration and OM's/guidelines regarding appraisal of projects of category A/B, as the instant project requires appraisal under 'category B2' project by the concerned authority. **However, considering the submissions of the project proponent, the EAC has agreed for deliberations, however desired for requisite information/input on the following for further consideration of the proposal:***

- (i) The Committee mentioned that Seismic exploration is important steps to search the commercially economic subsurface deposits of crude oil, natural gas and minerals by the recording, processing, and interpretation of artificially induced shock waves in the earth. The Committee noted that PP has not still completed the Seismic Exploration Study in the allocated Block. PP has to fasten the Seismic Exploration Study to achieve the objective of this Project.
- (ii) Justification/clarity from Director General of Hydrocarbon regarding categorization of the present project, requirement for PEL/PML for production, etc.
- (iii) Comments from Director General of Hydrocarbon on the justification submitted by the project proponent against Ministry's Notification dated 16th January, 2020 and permission for production activity in the PEL as per the Revenue Contract Agreement.
- (iv) Addendum to the EIA/EMP report considering all the impacts and mitigation measures for Development and Production, in all terms, as proposed by the project proponent. The PP needs to revise the Report accordingly.
- (v) All the Permission received from the concerned authorities for development and production in the PEL (i.e. from MoPNG, DGH, State Govt., etc) needs to be submitted.
- (vi) Information regarding the public consultation vis-à-vis proposed development and production and clarification from SPCB needs to be submitted.
- (vii) The Public hearing is project specific and as ToR has been obtained Block wise, generally individual public hearing needs to be conducted w.r.t.project/ToR

specific. However, in this instant case the PH was conducted for all projects falling in the same district under the Chairmanship of same ADM, however the project, are located in different blocks having separate ToR and EIA report.

- (viii) **The EAC observed that PH has not been not concluded due to public protest and adjourned by the Chairman.** In this regard the comments/clarifications from SPCB/ADM on whether public hearing was conducted and concluded as per the provisions of the EIA Notification, 2006 or not.
- (ix) The Committee has also listened the video of the public hearing and noted that the Public has raised various issues of the earlier EC granted to M/s Vedanta in the region. Public (in video) cited that M/s Vedanta has not complied the commitment made during earlier PH for getting earlier EC. In this regard the EAC suggested that the Ministry may seek the comments from the Regional Office of the MoEFCC in this regard.
- (x) The Committee noted that the block has the forest area and PP has not applied for Stage I FC. In this regard, FC Division of the Ministry may be consulted regarding the requirement of forest clearance for the project due to presence of forest area in the block in view of order of Hon'ble Supreme Court (Lafarge case).

The proposal was accordingly deferred for the needful.

Agenda No. 16.3.9

Expansion of pesticides technical products in existing unit at plot no. E-442, 443 & 444, RIICO Industrial area, Chopanki, Taluka BHIWADI, District Alwar (Rajasthan) by M/s Insecticides India Limited – Reconsideration of Environmental Clearance

[IA/RJ/IND2/116690/2019, J-11011/253/2005-IA II(I), J-11011/63/2009-IA II (I)]

The project proponent and their consultant M/s Aqua-Air Environmental Engineers Pvt. Ltd. (with stay order from Hon'ble High Court of Gujarat) made a detailed presentation on the salient features of the project.

16.3.9.1 The proposal was earlier considered by the EAC (Industry-2) in its meeting held during 20-22 November, 2019. Additional information desired by the Committee and reply submitted by the project proponent is as under:

S. No.	Information desired by the EAC	Reply submitted by the PP& discussion by the EAC
1.	EIA report to be revised as per the terms of reference granted for the project, and shall conform to Appendix III	EIA Report is revised with compiling of all TORs points as per the terms of reference granted for the project, and conforms to the Appendix III of the EIA Notification, 2006. Revised EIA Report

	of the EIA Notification, 2006.	with Form-2 is attached with Additional Information file. The Committee deliberated the report and found in order.
2.	EAC noted that PP has not submitted adequately TOR compliance and PP needs to be resubmit the TOR compliance adequately.	EIA Report is revised and TOR compliance is adequately prepared. Revised EIA Report with adequate TOR Compliance with Form-2 is attached with Additional Information file. The Committee deliberated the report and found in order.
3.	Action plan in view of the project site being in Critically Polluted Area.	<p>Action plan in view of Critically Polluted Area is as below.</p> <ul style="list-style-type: none"> ➤ For Air- Adequate stack height of 30 m is provided and CEMS attached with Boiler to control flue gas emissions. Proposed for using Briquettes as fuel in proposed expansion scenario because of non-availability of consistent natural Gas in Chopanki area and will provide Multi-Cyclone Separator with Bag Filter as APCM for the Boiler using Briquettes as fuel. ➤ Provision of Adequate Two Stage Scrubbers to control process gas emissions. ➤ For Water- Total waste water generation will be 136 KL/Day. Total effluent will be treated in Stripper, MEE and ETP. 126 KLD final treated effluent will be recycled for industrial operations and unit is Zero Liquid Discharge. ➤ For Land- Increase in green belt to 4784 m² (40%) from 4000 m² (33%) of the total area of 11958 m². ➤ Additional Conditions- Contribution of Rs. 1 crores for socio economic development activities within 2 year. Monitoring of compliance of EC conditions will be submitted with third party audit every year. The Committee deliberated the report and found in order.
4.	PP needs to prepare the species specific conservation plan for schedule-I species along with budgetary allocation and PP to take approval for the Wildlife conservation and management plan from CWLW State Government.	<p>Presence of 12 Schedule-I Species in Alwar district. Conservation plan for schedule-I species along with budgetary allocation of Rs. 4,85,000/- submitted to District Forest Officer, Alwar, Rajasthan.</p> <p>The Committee deliberated the report and found in order.</p>

5.	Details of courts/NGT cases, if any, on the project area or against the project proponent.	There was 1 NGT Case (Manveer vs CPCB & Ors. dated 05/12/2018) in the project area dated 05/12/2018. Main point of complain was "Insecticide India Limited" is discharging effluent outside the factory. All the mitigation measures w.r.t complaint have been taken. The Committee deliberated the compliance of the Order and found in order.
6.	Details of existing production with supporting documents.	Company manufactures products as per the EC Granted and CTO. Company does not exceed the production capacity and it was confirmed by CPCB during the visit on January 11 th 2020. The Committee deliberated and found in order.
7.	Considering complaint against the project proponent regarding production without prior permission, pollution etc, report from SPCB and CPCB on the factual status.	CPCB has visited our site on January 11 th 2020 and verified all the relevant documents along with EMS compliance. The Committee deliberated the CPCB report and found in order.
8.	Revised water balance with details of total water and fresh water requirement, and permission from concerned regulatory authority.	Total raw water requirement will be is 188.0 KL/day out of which 62 KL/Day fresh water will be taken from RIICO Water Supply Authority. Permission for water requirement obtained vide Letter No. 3585 dated 31/12/2019.
9.	Effluent treatment mechanism with plan for Zero Liquid Discharge.	Total waste water generation will be 136 KL/Day. Total effluent will be treated in Stripper, MEE and ETP and 126 KL/Day final treated effluent will be recycled for industrial operations. Hence our Unit is Zero Liquid Discharge Unit.
10.	Onsite emergency plan as per MSIHC Rules.	<ul style="list-style-type: none"> ➤ As per rule number 13 of Manufacture, Storage and Import of Hazardous Chemical (MSIHC) Rules, 1989, Insecticides India Limited has prepared an on-site emergency plan and kept up-to-date detailing how major accidents will be dealt with on the site on which the industrial activity is carried on. This plan includes the name of the person who is responsible for safety on the site and the names of those who are authorized to take action in accordance with the plan in case of an emergency. ➤ It was ensured that the emergency plan is prepared in accordance with sub-rule (I) takes into account any modification made in the industrial activity and that every person on the site who is affected by the plan-is informed of its relevant provisions.

16.3.9.2 During deliberations the EAC noted the following:

The proposal is for environmental clearance to the project for Expansion of Pesticides Technical Products Manufacturing Unit from 1800 TPA to 9350 TPA by M/s Insecticides India Limited in an area of 11,958 sqm located at Plot No. E-442, 443 & 444, RIICO Industrial Area, Chopanki, Taluka Bhiwadi, District Alwar, Rajasthan.

The project/activities are covered under category A of item 5(b) 'Pesticides industry and Pesticide specific intermediates' of the Schedule to the Environment Impact Assessment Notification, 2006, and requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC) in the Ministry.

Standard Terms of References (TORs) for the Project has been issued by the Ministry vide letter dated 18th Feb, 2019.

Land area available for the project is 11,958 sqm. Industry has developed green belt in an area of 4000 sqm and will develop 784 sqm, covering 40% of total project area. The estimated project cost is Rs. 45.67 Crores including existing investment of Rs. 29.13 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 9.43 Crores and the Recurring cost (operation and maintenance) will be about Rs. 6 Crores per annum. The project will provide employment for 160 persons directly & indirect.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors, rivers etc. within 10 km distance.

Ambient air quality monitoring was carried out at 10 locations during December, 2018 to February, 2019 and the baseline data indicates the ranges of concentrations as: PM10 (99.18 – 62.12 µg/m³), PM2.5 (58.33 – 36.92 µg/m³), SO₂ (11.09 – 6.30 µg/m³) and NO₂ (15.59 – 6.09 µg/m³) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 1.149 µg/m³, 0.009 µg/m³, 0.012 µg/m³ & 0.007 µg/m³ with respect to PM10, SO_x, HCl & HBr. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is estimated to be 188 cum/day, which includes fresh water requirement of 62 cum/day and will be met from RIICO Water supply. Total waste water generation will be 136 KL/Day (Industrial: 129 KL/Day + Domestic: 7KL/Day). Out of 129 KL/Day industrial effluent, effluent from processes, scrubber and lab (49 KL/Day) will be sent to stripper and 47.75 KL/Day to MEE and MEE condensate (40 KLD) will be sent to ETP for further treatment. Total effluent (127 KL/Day) from septic tank, utilities, washing and MEE condensate will be sent to ETP and 126 KL/Day final treated effluent will be recycled for industrial operations. Domestic wastewater (7 KL/Day) will be sent to septic tank and then mixed with industrial effluent in ETP for further treatment. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

Power requirement after expansion will be 860 KW and will be met from JVVNL. Existing unit has 1 Nos. DG set of 380 KVA, additionally 2 Nos. DG sets of 500 KVA & 125 KVA capacities respectively shall be used as standby during power failure. Stack (height 6, 7 and 5.5 m) will be provided as per CPCB norms. Existing unit has 1 No. of 2 TPH Wood/ Briquettes fired Boiler. Additionally 1 Nos. of 4 TPH Briquettes fired Boiler will be installed. Multi cyclone separator with Bag filter & Scrubber with a stack of height of 30 m will be installed for controlling the Particulate emissions (within statutory limit of 800 mg/Nm³) respectively.

Public hearing is exempted in accordance with the Ministry's OM dated 27th April 2018, as the project site is located inside the notified industrial area.

Ministry has issued EC earlier vide letter no. IA-J-11011/63/2019-IA-II (I) dated 29th April, 2009. Certified report dated 5th July, 2019 on the compliance status of the EC conditions has been forwarded by the Ministry's Regional Office. The Committee deliberated the compliance report and found in order.

Details of products are as under:

SR NO	PRODUCT	CATEGORY	EXISTING	ADDITIONAL	TOTAL	CAS NOS.	LD ₅₀ (mg/kg)	
							CAPACITY (MT/ANNUM)	
A. PESTICIDE TECHNICAL								
1.	Phenoxy Herbicides	5(b)	20	280	300			
	Quizalofop	5(b)				76578-12-6	1670	>5000
	2,4-D Ethyl Ester	5(b)				533-23-3	>200 0	>2000
	2,4-D sodium salt	5(b)				2702-72-9;	>200 0	>2000
	Clodinafop propargyl	5(b)				114420-56-3	1392	>2000
2.	Imidazolinone Herbicide	5(b)	50	0	50			
	Imazethapyr	5(b)				81335-77-5	5000	>2000
3.	Sulfonyl Urea Herbicides	5(b)	20	380	400			
	Metsulfuron methyl	5(b)				744223-64-6	>500 0	>2000
	Sulfosulfuron	5(b)				141776-32-1	>500 0	>5000

	Tribenuron methyl	5(b)				10120 0-48-0	>500 0	>5000
	Flazasulfuron	5(b)				10404 0-78-0	>500 0	>2000
	Iodosulfuron	5(b)				14455 0-36-7	2678	>2000
	Nicosulfuron	5(b)				11199 1-09-4	>500 0	>2000
	Rimsulfuron	5(b)				12293 1-48-0	>500 0	>2000
4.	Organochlorine Herbicides	5(b)	200	0	200			
	Butachlor	5(b)				23184- 66-9	2000	>13000
	Pretilachlor	5(b)				51218- 49-6	6099	>3100
5.	Other Herbicides	5(b)	600	200	800			
	Oxyfluorfen	5(b)				42874- 03-3	>500 0	>10000
	Paraquate	5(b)				1910- 42-5	129	>911
	Diclofop methyl	5(b)				51338- 27-3	563- 693	>2000
	Diflufenican	5(b)				83164- 33-4	>200 0	>2000
	Sulcotrione	5(b)				99105- 77-8	>500 0	>4000
	Benfuresate	5(b)				68505- 69-1	3536	>5000
	Glufosinate ammonium	5(b)				77182- 82-2	2000	>4000
	Penoxsulam	5(b)				21971 4-96-2	>500 0	>5000
	Pinoxaden	5(b)				24397 3-20-8	>500 0	>5000
	Propanil	5(b)				709- 98-8	367	4830
	Tembotrione	5(b)				33510 4-84-2	>200 0	>5000
6.	Carbamate Insecticide	5(b)	10	90	100			
	Thiodicarb	5(b)				59669- 26-0	66	>2000
7.	Neo Nicotinoid	5(b)	100	2900	300 0			

	Insecticides							
	Acetamiprid	5(b)				13541 0-20-7	217	>2000
	Imidacloprid	5(b)				13826 1-41-3	450	>5000
	Thiacloprid	5(b)				11198 8-49-9	621	>2000
	Thiamethoxa m	5(b)				15371 9-23-4	1563	>2000
	Dinotefuran	5(b)				16525 2-70-0	2804	>2000
	Clothianidin	5(b)				21088 0-92-5	>500 0	>2000
	Imidaclothiz	5(b)				10584 3-36-5	>200 0	>2000
8.	Organophos phorus Insecticides	5(b)	300	0	300			
	Chlorpyriphos	5(b)				2921- 88-2	135	>5000
9.	Pyrethroid Insecticides	5(b)	150	2850	300 0			
	Allethrin	5(b)				584- 79-2	2150	2660
	Alpha cypermethrin	5(b)				67375- 30-8	57	>2000
	Cyfluthrin	5(b)				68359- 37-5	500	>5000
	Cypermethrin	5(b)				52315- 07-8	250- 4150	>4920
	Delta cypermethrin	5(b)				52918- 63-5	1965	>2000
	d- transallethrin	5(b)				28434- 00-6	370	1200
	Lambda cyhalothrin	5(b)				91465- 08-6	79	632
	Permethrin	5(b)				52645- 53-1	430- 4000	>2500
	Prallethrin	5(b)				23031- 36-9	640	>5000
	Transfluthrin	5(b)				11871 2-89-3	>500 0	>5000
	Bifenthrin	5(b)				82657- 04-3	54.5	>2000
	Metofluthrin	5(b)				24049 4-70-6	>500 0	>5000
10	Other	5(b)	100	200	300			

.	Insecticides							
	Fipronil	5(b)				12006 8-37-3	97	>2000
	Buprofezin	5(b)				95303 0-84-7	2198	>5000
	Cartap hydrochloride	5(b)				15263- 52-2	345	>1000
	Metalaxyl	5(b)				57837- 19-1	633	>3100
	Novaluron	5(b)				11671 4-46-6	>500 0	>2000
	Ethiprole	5(b)				18158 7-01-9	NA	NA
	Thiocyclam hydrogen oxalate	5(b)				31895- 22-4	3390 0	NA
	Pymetrozine	5(b)				12331 2-89-0	5820	>2000
	Fenpyroximat e	5(b)				13409 8-61-6	480	>2000
	Spirotetrama t	5(b)				20331 3-25-1	>200 0	>4000
	Flonicamid	5(b)				15806 2-67-0	>200 0	>2000
	Flubendiamid e	5(b)				27245 1-65-7	>200 0	>2000
	Indoxacarb	5(b)				14417 1-61-9	1732	>5000
11	Conazole Fungicides	5(b)	75	225	300			
	Difenoconazo le	5(b)				11944 6-68-3	1453	>2010
	Hexaconazole	5(b)				79983- 71-4	2189	>2000
	Ipconazole	5(b)				12522 5-28-7	888	>2000
	Paclobutrazol	5(b)				76738- 62-0	2000	>1000
	Propiconazole	5(b)				60207- 90-1	1517	>4000
	Tebuconazole	5(b)				10753 4-96-3	4000	>5000
	Tricyclazole	5(b)				41814- 78-2	314	>2000
	Probenazole	5(b)				27605- 76-1	NA	NA
	Prothioconaz	5(b)				17892	>200	>2000

	ole					8-70-6	0	
	Epoxiconazole	5(b)				13385 5-98-8	>200 0	>2000
12	Other Fungicides	5(b)	75	225	300			
	Thiophanate methyl	5(b)				23564- 05-8	7500	>10000
	Pyraclostrobin	5(b)				17501 3-18-0	>500 0	>2000
	Cyazofamid	5(b)				12011 6-88-3	>500 0	>2000
13	Fermentation Technology	5(b)	100	200	300			
	Abamectin	5(b)				71751- 41-2	10- 13.5	>2000
	Azoxystrobin	5(b)				13186 0-33-8	>500 0	>2000
	Picoxystrobin	5(b)				11742 8-22-5	>200 0	>2000
	Emamectin benzoate	5(b)				15556 9-91-8	56- 63	>2000
Total			1800	7550	9350			
B. PESTICIDE FORMULATIONS (KL/MT)								
1.	Pesticide formulation Bulk		1500	0	1500			
2..	Emulsifier formulation		500	0	500			
3.	Granule formulations		7500	0	7500			
4.	Liquid formulations		6000	0	6000			
5.	Powder formulations		4500	0	4500			
6.	R&D Unit		1 (Service)	0	1 (Service)			
Total			20,000	0	20,000			

The project proponent has ensured that VOC losses will be less than 0.5 % which will be going in the environment by installing primary condenser, secondary condenser, VOC trap condenser, reducing temperature from -10 °C to -35 °C and also adopting LDAR

system. It was also informed that continuous online monitoring system will be installed for incinerator and connected to CPCB server within next 6 months.

The project proponent has proposed an amount of Rs. 1 crore towards CER activities and the proposed activities are as below:

CER Activities	Fund (Rs.)
2020-2022	
Project Green School-clean toilet campaign in nearby schools	1,00,00,000/-
Providing fans, tube lights & civil work in primary school & repair work Rajkiya Sr. Secondary School, Jodiyamev, Tijara	
Medical Camp & distribution of medicines free of cost at Bhoodli, Bandapur, Chopanki, and Karenda Villages	
Water Purifier System in Village Chopanki& Village Bhoodli	

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data and incremental GLC due to the proposed project within NAAQ standards. The Committee has also deliberated on the CER plan and found to be addressing the issues in the study area. Additional information submitted by the project proponent to be satisfactory and addressing the concerns of the Committee. The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have recommended for grant of Environmental Clearance (EC).

16.3.9.3 The EAC, after detailed deliberations, **recommended** the project for grant of environmental clearance, subject to compliance of terms and conditions as under, and general terms of conditions at **Annexure**:-

- (i) Consent to Establish/Operate (CTE/CTO) for the project shall be obtained from the State Pollution Control Board (SPCB) as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974, and the SPCB shall follow the mechanism/protocol issued by the Ministry

vide letter no. Q-16017/38/2018-CPA dated 24th October, 2019 and forwarded by Central Pollution Control Board vide letter dated 25th October, 2019 to the SPCB's, while issuing the CTE/CTO for the project, for improvement of environmental quality in the area.

- (ii) Zero Liquid Discharge shall be ensured including existing facility and the proposed expansion facility and no waste/treated water shall be discharged outside the premises.
- (iii) VOC losses shall be less than 0.5 % and controlled by installing primary condenser, secondary condenser, VOC trap condenser, reducing temperature from -10 °C to -35 °C and also adopting LDAR system.
- (iv) Continuous online monitoring system shall be installed for incinerator and connected to CPCB server within 6 months.
- (v) Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.
- (vi) National Emission Standards for Pesticides Manufacturing Industry issued by the Ministry vide G.S.R.446(E) dated 13th June, 2011, as amended from time to time, shall be followed.
- (vii) No pesticides/chemicals banned by the Ministry of Agriculture and Farmers Welfare, or having LD₅₀<100 mg/kg shall be produced. Also, no raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used for production of pesticides.
- (viii) To control source and the fugitive emissions (at 99.98%), suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- (ix) Solvent management shall be carried out as follows:
 - (a) Reactor shall be connected to chilled brine condenser system.
 - (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.
 - (c) The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery.
 - (d) Solvents shall be stored in a separate space specified with all safety measures.
 - (e) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.
 - (f) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.

- (g) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.
- (x) Total fresh water requirement shall not exceed 62 cum/day and will be met from RIICO Water supply. Prior permission in this regard shall be obtained from the concerned regulatory authority.
- (xi) Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system
- (xii) Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps.
- (xiii) Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.
- (xiv) The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act, 1989.
- (xv) The company shall undertake waste minimization measures as below:-
 - (a) Metering and control of quantities of active ingredients to minimize waste.
 - (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
 - (c) Use of automated filling to minimize spillage.
 - (d) Use of Close Feed system into batch reactors.
 - (e) Venting equipment through vapour recovery system.
 - (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xvi) The green belt of at least 5-10 m width shall be developed in nearly 40% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. In addition, the project proponent shall develop greenbelt outside the plant premises also such as avenue plantation, plantation in vacant areas, social forestry etc.
- (xvii) As committed, fund allocation for the Corporate Environment Responsibility (CER) shall be Rs. 1 crore. The CER plan shall be completed within two years and activities as proposed like infrastructure for schools, toilet, green school campaign, medical facilities for the villages, drinking water etc shall be implemented.

- (xviii) Safety and visual reality training shall be provided to employees.
- (xix) For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- (xx) The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms.
- (xxi) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- (xxii) Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (xxiii) Mitigating measures suggested during process safety and risk assessment studies shall be undertaken accordingly.

Agenda No. 16.3.10

Expansion of Agro Chemicals Manufacturing Unit at Plot No.54 to 56, 58 to 61, Phase II IDA, Pashamylaram, Patancheru Mandal, Sangareddy District, Telangana by M/s Nichino Chemical India Pvt Ltd – Reconsideration of Environmental Clearance. [IA/TG/IND2/99362/2017, J-11011/87/2017-IA II (I)]

The project proponent and their consultant M/s Team Labs and Consultants, made a detailed presentation on salient features of the project

16.3.10.1 The proposal was earlier considered by the EAC in its meeting held during 29-31 July, 2019. The additional information desired by the Committee and response submitted by the project proponent are as under:

1. Impact of the Agrochemical products on human being

Nichino Chemical India Pvt. Ltd. manufacturing Insecticides, Herbicides and Fungicides only in agrochemicals. It is proposed to expand the manufacturing capacity of existing Insecticides, Herbicides and Fungicides from 2.33 TPD to 9 TPD.

The products proposed to manufacture have been registered in India with Central Insecticides Board [CIB] at Faridabad by the manufacturing companies and necessary manufacturing licences issued by the respective state agricultural departments for

formulation. It may be noted that all the products are listed by Food and agriculture organization (FAO-UN) for global usage.

The formulated products composition of the active ingredient is specified by CIB for each product and the composition varies from product to product, based on the dosages required for addressing the targeted crop diseases and pests. Concentration of active ingredient is diluted further down in the formulation products. Further these 'formulated products' are diluted to multi-fold in water, when they are sprayed/applied by the farmer as per the recommended dosage and dilution ratio specified and indicated through Leaflets and Instructions for usage for various crops are provided with each retail pack.

Overall, very much diluted form, agrochemicals are applied by the farmers, for controlling the loss of harvesting yields. The active ingredients at the application level over the crops is approximately from 10 ppm(mg/Litre) to 100 ppm level and the Half Life values would be less than a month and Zero residual values are attained, prior to harvesting the crops. The impacts on human beings are as mentioned in the respective MSDS, and none of the products are carcinogenic, teratogenic and mutagenic.

The following are engineering control to mitigate diffuse and fugitive emissions during transfer of raw materials, solvents and product packing and storage,

- Closed transfer of raw materials, solvents used in process.
- Closed hood collection system during collecting and packing of finished products
- Tertiary condensing system followed by vacuum pump
- Automatic powder transfer system
- Vents of reactors connected to scrubbers.

The following Personnel Protective equipment are provided for operators

- Skin: Long- Sleeved shirt and long pants, chemical-resistant headgear for overhead exposure
- Eye: Safety goggles with side face shields
- Hands/Feet: Chemical protective gloves
- Face: Dust/mist filtering respirators with suitable cartridges.

2. In view of the CEPI score for Patancheru Bollaram area identified as critically/severely polluted area, confirmation from SPCB/CPCB regarding applicability of the restrictions and/or moratorium, if any, for setting up any industrial unit or expansion thereof.

Nichino Chemical India Pvt. Ltd. is located at Phase II Pashamylaram IDA, Patancherumandal, Sangareddy district, Telangana. The unit is located at a distance of 6 km from critically polluted area Patancheru and Bollaram Industrial Areas. Confirmation of unit distance from critically polluted area obtained vide letter no. Lr. No. 108/PCB/RO-I: SRD/2019-5021 dated 06.08.2019 from TSPCB, Regional office, Sangareddy.

3. No Consistency between the base line air quality values and the incremental concentrations for the core air pollutants. Revised AAQ modelling and prediction of GLC.

During EIA stack emissions of existing boilers, DG sets and proposed thermic fluid heaters are considered for ambient air quality modeling and prediction of GLC.

Details of Stack Emissions

S. No.	Stack Connected to	Stack Ht (m)	Dia of stack at top(m)	Temp. of exhaust gases (°C)	Exit Velocity (m/sec)	Pollutant Emission Rate (g/sec)		
						PM	SO ₂	NO _x
Permitted								
1	1 x 5 TPH Coal Fired Boiler	30	0.65	146	5.57	0.4	0.52	0.18
2	1 x 3 TPH Coal Fired Boiler*	30	0.83	128	8.5	0.15	0.14	0.21
3	1 x 1.5 TPH Coal Fired Boiler	30	0.6	160	6	0.02	0.03	0.12
4	1 x 600 KVA DG set**	5	0.2	200	6.8	0.002	0.025	0.04
5	2 x 225 KVA DG sets**	4	0.2	150	7	0.001	0.02	0.03
6	1 x 125 KVA DG set	2.5	0.15	320	5	0.001	0.01	0.02
Proposed								
1	6 Lac K.cal/hr Coal fired Thermic Fluid Heater	20	0.8	170	12.5	0.07	0.15	0.18
2	2 Lac K.cal/hr HSD fired Thermic Fluid Heater	10	0.25	165	6.2	--	0.12	0.14

* Standby Boiler

**DG sets will be used during load shut down period

Maximum Predicted 24 hourly GLC's – As per EIA

S. No.	Parameter	Predicted GLC, µg/m ³	Distance, km	Direction
1	PM ₁₀	1.2	0.8	NE
2	PM _{2.5}	0.54	0.8	NE
3	SO ₂	6.9	0.8	NE
4	NO _x	8.13	0.8	NE

Revised AAQ modeling and predicted GLC is presented below by considering proposed stack emissions as existing stack emissions are reflected in existing ambient air quality.

Details of stack emissions - Proposed

S. No.	Stack Connected to	Stack Ht (m)	Dia of stack at top(m)	Temp. of exhaust gases (°C)	Exit Velocity (m/sec)	Pollutant Emission Rate (g/sec)		
						PM	SO ₂	NO _x

1	6 Lac K.cal/hr Coal fired Thermic Fluid Heater	20	0.8	170	12.5	0.07	0.15	0.18
2	2 Lac K.cal/hr HSD fired Thermic Fluid Heater	10	0.25	165	6.2	--	0.12	0.14

Maximum Predicted 24 hourly GLC's - Revised

S.No	Parameter	Predicted GLC, $\mu\text{g}/\text{m}^3$	Distance, km	Direction
1	PM ₁₀	0.34	0.4	E
2	PM _{2.5}	0.15	0.4	E
3	SO ₂	1.91	0.4	E
4	NO _x	2.25	0.4	E

Revised - Predicted GLC's at Monitoring Locations

S.No	Monitoring Location	Direction	Distance, km	Predicted GLC, $\mu\text{g}/\text{m}^3$				
				PM	PM ₁₀	PM _{2.5}	SO ₂	NO _x
1.	Mylaram	SE	1.5	0.190	0.077	0.034	0.431	0.509
2.	Isnapur	NE	1.4	0.590	0.238	0.106	1.339	1.581
3.	Indrakaran	SW	3.6	0.030	0.012	0.005	0.068	0.080
4.	Nandigam	SE	3.9	0.190	0.077	0.034	0.431	0.509
5.	Lakdaram	NE	4.7	0.140	0.057	0.025	0.318	0.375
6.	Yeddumylaram	SW	4.9	0.110	0.044	0.020	0.250	0.295
7.	Kaulampet	NW	5.8	0.080	0.032	0.014	0.182	0.214
8.	Kazipur	W	6.6	0.010	0.004	0.002	0.023	0.027

Cumulative Concentrations at Various Villages and Reserved Forests

Station	Direction	Distance, km	Baseline Concentration, $\mu\text{g}/\text{m}^3$				Predicted GLC, $\mu\text{g}/\text{m}^3$				Cumulative Concentration, $\mu\text{g}/\text{m}^3$			
			PM ₁₀	PM _{2.5}	SO ₂	NO _x	PM ₁₀	PM _{2.5}	SO ₂	NO _x	PM ₁₀	PM _{2.5}	SO ₂	NO _x
Mylaram	SE	1.5	53	22	16	18	0.08	0.03	0.43	0.51	53.08	22.03	16.43	18.51
Isnapur	NE	1.4	52	19	14	15	0.24	0.11	1.34	1.58	52.24	19.11	15.34	16.58
Indrakaran	SW	3.6	52	19	14	15	0.01	0.01	0.07	0.08	52.01	19.01	14.07	15.08
Nandigam	SE	3.9	51	19	14	14	0.08	0.03	0.43	0.51	51.08	19.03	14.43	14.51
Lakdaram	NE	4.7	54	18	14	14	0.06	0.03	0.32	0.38	54.06	18.03	14.32	14.38
Yeddumylaram	SW	4.9	53	18	14	14	0.04	0.02	0.25	0.29	53.04	18.02	14.25	14.29

Kaulampet	NW	5.8									52.0	19.0	14.1	14.2
			52	19	14	14	0.03	0.01	0.18	0.21	3	1	8	1
Kazipur	W	6.6									53.0	19.0	14.0	14.0
			53	19	14	14	0.00	0.00	0.02	0.03	0	0	2	3

4. Action plan for transport of chemicals

Action plan being followed and continued to follow while transporting of raw materials and finished products are as follows;

- Dedicated parking area of 0.13 acres is provided for transport vehicles.
- Check list for inspection of transport vehicle to make sure there was no leakage or container damage during transport.
- Safety signage are placed at various locations in the battery limit.
- The drivers of the vehicles are provided with TREM cards and are trained on measures to be taken during emergencies.
- MSDS copies are provided along with HAZCHEM stickers pasted over road tankers/trucks.
- GPS tracking systems are insisted for all the transporters, so as to keep track of the movement of various chemicals being transported.
- On-Site & Off-Site procedures are followed and Trained Emergency teams are deputed from either suppliers or by our company M/s Nichino Chemical, whichever is nearby to the accident /incident location while transporting the chemicals, to take mitigation measures.
- Spill control measures are followed and explained to the truck drivers through in-house awareness exercises.
- Public Liability Insurance policy are taken and renewed from time to time.

Action Plan during spillage of chemicals;

Following **three "C" s principle** (Control, Contain and Clean) during transportation

- **Control** the spill by stopping it from spreading further.
- **Contain** the spill by using absorbent material, such as kitty litter, to soak up the liquid.
- **Clean up** the spill by shovelings the contaminated material into a temporary plastic storage container.
- The drivers of the vehicles will be provided with TREM cards and will be explained the measure to be adopted during various emergencies.
- Spill control kit consists of chemical resistant gloves, absorbent material, gloves and coveralls, a shovel, and a temporary plastic storage container is provided with transporting vehicle.
- Information shall be provided to the Local Police & District Authorities, in case of any un-manageable situation of any sort, for necessary help to address suitably.

5. Ash Management plan:

- No additional boiler is proposed for expansion. It is proposed to establish 6 lack.cal coal fired and 2 lac k.cal HSD fired thermic fluid heaters for process requirement.
- The ash generated from existing boiler is stored under a covered shade area and water is sprinkled over to mitigate dust during handling.
- Presently ash is transported in trucks covered with tarpaulin with water sprayed over to avoid dust emission during transportation to nearby Brick manufacturers and same procedure shall be continued.

16.3.10.2 During deliberations, the EAC noted the following:

The proposal is for environmental clearance to the project for expansion of agro chemicals manufacturing unit from 2.33 TPD to 9 TPD by M/s Nichino Chemical India Pvt Ltd in an area of 5.31 acres located at Plot Nos. 54 to 56, 58 to 61, IDA Phase II, Pashamylaram, Patancheru Mandal, District Sangareddy, Telangana.

Details of products and by-products are as under:

S.No	Name of Product	CAS No.	Capacity (TPD)	
			Permitted*	After Expansion
1	Acephate	30560-19-1	0.83	2.53
2	Imidacloprid	138261-41-3	0.5	0.14
3	Thiomethoxam	153719-23-4	0.5	2.0
4	Acetamiprid	160430-64-8	0.33	0.07
5	Buprofezin	69327-76-0	0.15	2.25
6	Pretilachlor	51218-49-6	0.5	1.5
7	Tricyclazole	41814-78-2	0.28	0.14
8	Hexaconazole	79983-71-4	0.17	0.06
9	Clodinafop Propargyl	105512-06-9	0.33	0.72
10	Ethion	563-12-2	0.44	0.07
11	Cloquintocet Mexyl	99607-70-2	0.15	0.06
12	Sulfosulfuron	141776-32-1	0.1	0.06
13	Fipronil	120068-37-3	0.07	0.01
14	Dimethoate	60-51-5	0.15	0.25
15	Thiodicarb	59669-26-0	0.07	0.03
16	Bispyribac Sodium	125401-92-5	--	0.06
17	Quizalofop Ethyl	76578-14-8	--	0.04
18	Pymetrozine	123312-89-0	--	0.04
19	Azoxystrobin	131860-33-8	--	0.04
20	Bifenthrin	82657-04-3	--	0.04
Total Worst Case: 5 Products on campaign basis after expansion at any point of time			2.33	9
	R&D and Pilot Plant Products		--	0.1

	Formulations		16.67 KLM	80 KLM
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*** At any point of time only 5 products are manufactured**

List of By-Products

S.No	Product	By-Product	Quantity (Kg/day)
1	Acephate	Ammonium Acetate	1065.6
2	Thiomethoxam	Potassium chloride	1021
3	Buprofezin	Calcium Chloride (30%)	4267.5
4	Ethion	Sodium Bromide	37.6
5	Pretilachlor	Lean HCl (20-25%)	600

The project/activities are covered under category A of item 5(b) 'Pesticides industry and Pesticide specific intermediates' of the Schedule to the Environment Impact Assessment Notification, 2006, and requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC) in the Ministry.

The proposal was considered by the EAC (Industry-2) in its 21st meeting held on 27th-29th March, 2017 and recommended Terms of References (TORs) for the Project. The TOR was issued by Ministry vide letter dated 31st May, 2017. Public hearing is exempted in accordance with the Ministry's OM dated 27th April 2018, as the project site is located inside the notified industrial area.

Existing land area is 5.31 acres. No additional land will be required for proposed expansion. Industry has developed greenbelt in an area of 1.76 acres covering 33% of total project area. The estimated project cost is Rs.50 crores. Total capital cost earmarked towards environmental pollution control measures is Rs.7.3 crores and the recurring cost (operation and maintenance) will be about Rs. 4.54 crores per annum. The project will provide employment to 120 persons directly and 40 persons indirectly. Industry proposes to allocate Rs. 1.25 crores (@2.5%) towards Corporate Environmental Responsibility.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors, rivers etc. within 10 km distance from the project site. Nakkavagu stream is at 6.5 km (NE), Isnapurcheruvu is at 0.2 km (N), Kottacheruvu is at 1.5 km (NW), Lakdaramcheruvu is at 5 km (N) and Peddacheruvu is at 3.7 km (NE) from the project site.

Ministry has issued Ex-Post facto environmental clearance earlier vide letter no F. No. J-1011/183/2003-IA II (I) dated 21.03.2006 for existing project in favour of M/s. Hyderabad Chemical Products Ltd. The certified compliance letter from the regional office of MoEFCC, Bangalore is obtained vide letter no. F. No. EP /12.1/444/AP/1608 dated 06.10.2017. Transfer of EC from M/s. Hyderabad Chemical Products Ltd to M/s. Nichino Chemical India Pvt. Ltd. vide letter no. F.No. J-11011/183/2003-IA II (I) dated 20.11.2018

Ambient air quality monitoring was carried out at nine locations during October – December 2017 and submitted baseline data indicates that ranges of concentrations of PM10 (40-56 µg/m³), PM2.5 (15-36 µg/m³), SO₂ (9-19 µg/m³) and NO₂ (9-22 µg/m³)

respectively. AAQ modelling study for point source emissions indicates that the maximum incremental GLC_s after the proposed expansion would be $0.24 \mu\text{g}/\text{m}^3$, $0.43 \mu\text{g}/\text{m}^3$, and $051 \mu\text{g}/\text{m}^3$ with respect to PM_{10} , SO_x and NO_x . The resultant concentrations are within the National Ambient Air Quality Standards.

The total water requirement after expansion is 238.19 KLD out of which 183.19 KLD will be fresh water and 55 KLD is recycled water. Fresh water requirement shall be met from TSIIC (Industrial supply).

Total effluent of $58.28 \text{ m}^3/\text{day}$ will be treated through "Zero Liquid Discharge" based effluent treatment system. The high COD/TDS stream of $39.28 \text{ m}^3/\text{day}$ is segregated and sent to stripper followed by multiple effect evaporators (MEE), and agitated thin film dryer (ATFD). The condensate from stripper is sent to cement plants for co-incineration, while condensate from MEE and ATFD is mixed with low TDS/COD from utility blow downs and domestic wastewater of 19 KLD in biological treatment plant followed by Reverse Osmosis. The treated wastewater is reused for cooling towers make-up.

Power requirement will be met by TS Transco. DG sets of capacity 1 x 600 kVA, 2 x 225 kVA and 1 x 125 kVA existing caters the energy requirement during load shut down by Transco. Stack (height 5 m for 1x 600 kVA; 4 m for 2 x 225 kVA and 2.5 m for 1 x 125 kVA) is provided as per CPCB norms to the existing DG sets which will be used as standby during power failure.

Existing unit has 1 x 5 TPH, 1 x 3 TPH and 1 x 1.5 TPH coal fired boilers (1 x 3 TPH coal fired boiler will be kept as standby after expansion). No additional boilers are proposed for expansion. It is proposed to establish 1 x 6 Lac K.cal/hr coal fired thermic fluid heater and 1 x 2 Lac K.cal/hr HSD fired thermic fluid heater for process requirement. Bag filters with a stack of height of 20 m for 1 x 6 Lac K.cal/hr coal fired thermic fluid heater will be installed for controlling the Particulate emissions (within statutory limit of $115 \text{ mg}/\text{Nm}^3$). Bag filter is provided for existing 1 x 5 TPH and 1 x 3 TPH (standby) coal fired boilers with a stack height of 30m.

Process emissions contain Ammonia, Sulfur Dioxide, Carbon dioxide, Hydrogen Chloride. Ammonia, Sulfur Dioxide and Hydrogen Chloride are sent to scrubber in series and resultant scrubbing effluent sent to effluent treatment plant. Carbon dioxide is let out into atmosphere following a standard operating procedure.

Solid wastes are generated from process, solvent distillation, wastewater treatment and utilities. The effluent treatment system generates stripper distillate, ATFD salts and ETP sludge. The process operations generate process residue and recycling operation of distillation generates solvent residue and spent mixed solvents. The utilities i.e., coal fired boiler generates ash while DG sets generate waste oil and used batteries. The stripper distillate, process residue and solvent residue are sent to cement plants for co-incineration based on acceptability. If these wastes are not suitable for co-incineration, the same is sent to TSDF facility. The evaporation salts and ETP sludge are sent to TSDF. Waste oil and used batteries from the DG sets are sent to authorized recyclers. The other

solid wastes expected from the unit are containers, empty drums which are returned to the product seller or sold to authorize buyers after detoxification.

List of Utilities

S.No	Utility	Permitted	Proposed	After Expansion
1	Coal Fired Boilers (TPH)	1 x 5 1 x 3* 1 x 1.5	---	1 x 5 1 x 3* 1 x 1.5
2	Thermic Fluid Heater - Coal Based (Lac. K.cal/hr)		1 x 6	1 x 6
3	Thermic Fluid Heater - HSD Based (Lac. K.cal/hr)		1 x 2	1 x 2
4	DG Sets (kVA)**	1 x 600 2 x 225 1 x 125	---	1 x 600 2 x 225 1 x 125

* 3 TPH Boiler shall be kept as standby.

**DG sets will be used during load shut down by TRANSCO

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data and incremental GLC due to the proposed project within NAAQ standards. The Committee has also deliberated on the CER plan and found to be addressing the issues in the study area. Additional information submitted by the project proponent to be satisfactory and addressing the concerns of the Committee. The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have recommended for grant of Environmental Clearance (EC).

16.3.10.3 The EAC, after detailed deliberations, **recommended** the project for grant of environmental clearance, subject to compliance of terms and conditions as under, and general terms of conditions at **Annexure**:-

- (i) Consent to Establish/Operate (CTE/CTO) for the project shall be obtained from the State Pollution Control Board (SPCB) as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.
- (ii) Zero Liquid Discharge shall be ensured including existing facility and the proposed expansion facility and no waste/treated water shall be discharged outside the premises.
- (iii) Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.
- (iv) National Emission Standards for Pesticides Manufacturing Industry issued by the Ministry vide G.S.R.446(E) dated 13th June, 2011, as amended from time to time, shall be followed.
- (v) No pesticides/chemicals banned by the Ministry of Agriculture and Farmers Welfare, or having LD₅₀<100 mg/kg shall be produced. Also, no raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used for production of pesticides.
- (vi) To control source and the fugitive emissions (at 99.98%), suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- (vii) Solvent management shall be carried out as follows:
 - (a) Reactor shall be connected to chilled brine condenser system.
 - (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.
 - (c) The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery.
 - (d) Solvents shall be stored in a separate space specified with all safety measures.
 - (e) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.
 - (f) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.
 - (g) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.

- (viii) Total fresh water requirement shall not exceed 183.19 cum/day proposed to be met from TSIIC Industrial water supply. Prior permission in this regard shall be obtained from the concerned regulatory authority.
- (ix) Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system
- (x) Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps.
- (xi) Action plan proposed for transport of chemicals and spillage of chemicals shall be effectively implemented.
- (xii) Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.
- (xiii) The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act, 1989.
- (xiv) The company shall undertake waste minimization measures as below:-
 - (a) Metering and control of quantities of active ingredients to minimize waste.
 - (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
 - (c) Use of automated filling to minimize spillage.
 - (d) Use of Close Feed system into batch reactors.
 - (e) Venting equipment through vapour recovery system.
 - (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xv) The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. In addition, the project proponent shall develop greenbelt outside the plant premises also such as avenue plantation, plantation in vacant areas, social forestry etc.
- (xvi) As committed by PP, fund allocation for the Corporate Environment Responsibility (CER) shall be Rs. 1.25 crore. The CER plan shall be implemented and completed within three years/before operation of the project with proposed activities.
- (xvii) Safety and visual reality training shall be provided to employees.

- (xviii) For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- (xix) The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms.
- (xx) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- (xxi) Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (xxii) Mitigating measures suggested during process safety and risk assessment studies shall be undertaken accordingly.

Agenda No. 16.3.11

Installation of Polypropylene unit at Rasayani, Khalapur Taluka, Raigad district, Maharashtra and interconnecting pipelines from M/s BPCL Mumbai Refinery to Rasayani – Reconsideration of Environmental Clearance - reg.

[Proposal No: IA/MH/IND2/74952/2018, File No: IA-J-11011/168/2018-IA-II(I)]

*The proposal was earlier considered, and **recommended** for grant of environmental clearance by the EAC (Industry-2) in its meeting held during 30-31 December, 2019 & 1st January, 2020 (Agenda No.15.5.19) **subject to submission of Stage I FC.***

Agenda No. 16.3.12

Modernization/Product mix of existing Synthetic organic chemicals and Specialty Chemicals manufacturing facility at Roha by M/s Deepak Nitrite Limited- Reconsideration of Environmental Clearance

[IA/MH/IND2/63448/2016, - 11011/363/2016-IA.II(I)]

The project proponent and their accredited consultant M/s Aditya Environmental Services Pvt. Ltd. made a detailed presentation on the salient features of the project.

16.3.12.1 The proposal was earlier considered by the EAC in its meeting held during 20-22 November 2019. The additional information desired by the Committee and response submitted by the project proponent is as under:

(i) EAC noted that PP has not submitted adequately TOR compliance and PP needs to be resubmit the TOR Compliance adequately.

ToR compliance has been resubmitted. The Committee deliberated the Report and found in order.

(ii) Details of protected area/ESA within 10 km of the project area.

Details of status of Protected areas and Eco Sensitive Areas is provided in the Chapter 3 of the EIA report. The Committee deliberated the Report and found in order. There is no protected area within 10 km distance of project area. Village Dhatav wherein the Roha MIDC is located appears in the list of ESA (Ecological Sensitive Area) villages of Western Ghats as per draft notification dated 03.10.2018. However, MoEFCC vide letter No. IA-J-11011/579/2017-IA-II(I) dated 4th February 2019, Ministry clarified to SEIAA, Maharashtra to consider proposals in MIDC Dhatav for grant of Environment Clearance since the ESA areas are as yet not notified. The Committee deliberated the issues.

(iii) Details of rivers in the vicinity of the project site and details of mitigation measures to avoid pollution of rivers.

Details of rivers in the vicinity of the project site is given in Chapter 3 of EIA report. Kundalika River is flowing at a distance of 0.8 km in North direction. Mitigation measures for water environment given in Chapter 4 of EIA report. In existing facility, treated effluent is discharged through underground pipeline to Common Effluent Treatment Plant, Roha. There is no direct effluent discharge to river/ water body from proposed project.

The proposed project will be ZLD facility with following additional measures to ensure no impact on surface water bodies:

- 1) Storm Water drains will be kept separate from effluent network.
- 2) Garland drains will be provided around hazardous waste and hazardous chemicals storage areas– these drains will be taken to a storage pit from where any spillages collected will be pumped to ETP
- 3) During non-monsoon season, the Storm water drains leading out of factory will be blocked by mechanical gate valves. In case of any water in the drain, shall be collected in storage pit, which will be pumped to ETP.

In case of any spillage / contamination, the isolation process would be immediately activated and all the water from the storm water pits will be pumped to Effluent collection pits located at various points in the Plants

(iv) Plan for rain water harvesting

Detailed plan of rainwater harvesting is given at Chapter 4 of EIA report:

Catchment area	Area in sq m	Run off coefficient	Rainfall in mm	Rainwater collection potential, m3
Admin Building-1	155	0.8	3038	377
Admin Building-2 (New Building)	410	0.8		996
Raw Material & Finished Goods warehouse (New Building)	780	0.8		1896
TFMAP Building	360	0.8		875
Total	1,705	--		4,144

Approx. 4,144 cmd rainwater will be harvested during rainy season. (Assuming 100 rainy days in a year, average rainwater collection potential is ~ 41 m3/day). Rainwater will be stored at underground tank of 605 m3 capacity

(v) Revalidation of baseline data and incremental GLCs

Baseline data of Ambient air Quality is given in EIA report. Detailed Air modelling study for Fuel burning source & Incremental GLCs is provided in Chapter 4 of EIA report:

Sr. No	Location		PM ₁₀ µg/m ³	PM _{2.5} µg/m ³	SO ₂ µg/m ³	NO _x µg/m ³	NH ₃ µg/m ³	CO mg/m ³	HCl µg/m ³	nMHC ppm	VOC (Benzene) ppm
	Onsite	Min	61.2	29.4	11.6	19.5	14	0.2	<1.0	0.16	BDL
		Max	79.2	37.5	18.5	32.8	31.8	0.44	<1.0	0.36	BDL
		Average	71.3	34	15.3	26.1	21.2	0.32	<1.0	0.24	BDL

		98 th percentile	78.7	37.4	18	32.5	29	0.44	<1.0	0.35	BDL
	Bahevillage	Min	56.7	26.6	11.3	19.1	13	0.18	<1.0	0.16	BDL
		Max	76.3	35.9	17.5	28.9	26	0.41	<1.0	0.36	BDL
		Average	65.8	30.9	14.2	23.2	19.7	0.27	<1.0	0.22	BDL
		98 th percentile	75.8	35.6	17.4	28.2	25.4	0.4	<1.0	0.32	BDL
	Chambharwadi village	Min	55.2	23.2	9.5	15.3	14.9	0.18	<1.0	0.16	BDL
		Max	73.3	30.8	14.1	22.7	24.1	0.42	<1.0	0.32	BDL
		Average	65.3	27.5	12.1	19.4	19	0.28	<1.0	0.23	BDL
		98 th percentile	72.7	30.7	14.1	22.6	23.9	0.41	<1.0	0.31	BDL
	Dhatavillage	Min	59.4	24.2	10.3	16.9	13.8	0.18	<1.0	0.16	BDL
		Max	77.6	33.8	14.5	23.8	25.2	0.43	<1.0	0.35	BDL
		Average	65.7	30.2	12.8	20.8	20	0.31	<1.0	0.24	BDL
		98 th percentile	75	33.7	14.4	23.6	25.2	0.42	<1.0	0.35	BDL
	Location		PM10 µg/m³	PM2.5 µg/m ³	SO2 µg/m ³	NOX µg/m ³	NH3 µg/m ³	CO mg/m ³	HCl µg/m ³	nMHC ppm	VOC (Benzene) ppm
	Talaghar village	Min	58.9	20.7	9.6	15.4	13.7	0.17	<1.0	0.16	BDL
		Max	67.5	28.2	13.8	22	21.2	0.36	<1.0	0.33	BDL
		Average	63.7	26.2	11.9	18.9	18.1	0.26	<1.0	0.23	BDL

		98th percentile	67.2	28.1	13.8	21.9	21	0.36	<1.0	0.33	BDL
	Nivi village	Min	53.7	18.6	9.8	15.9	13.8	0.17	<1.0	0.16	BDL
		Max	66	27.1	13.7	23	20.7	0.35	<1.0	0.36	BDL
		Average	61.3	24.5	11.7	19.1	17.7	0.24	<1.0	0.22	BDL
		98th percentile	65.8	27	13.6	22.5	20.7	0.34	<1.0	0.34	BDL
	Roth Khurd village	Min	53	19.5	9.9	16.5	15.4	0.18	<1.0	0.16	BDL
		Max	68.3	30.7	13.8	22.8	22	0.34	<1.0	0.33	BDL
		Average	60.4	25.1	11.9	19.6	18	0.25	<1.0	0.23	BDL
		98th percentile	67	29.8	13.8	22.8	21.8	0.34	<1.0	0.33	BDL
	Udadavane village	Min	52.4	19.8	9.8	15.9	14.6	0.17	<1.0	0.16	BDL
		Max	65.7	28.3	14.1	22.5	21.2	0.32	<1.0	0.31	BDL
		Average	60	25.3	11.9	19.2	17.9	0.23	<1.0	0.21	BDL
		98th percentile	65.5	28.2	13.9	22.4	21.2	0.32	<1.0	0.31	BDL

(vi) Detailed layout plan with 33% green belt area.

Detailed layout plan is provided in the EIA report with Green belt area of 12281 sq. m (33% of plot area)

Sr. No.	Details of Land	Existing land Area (in sq.m)	Proposed land Area (in Sq.m)	Total

1	Built up Area	15432	4511	19943
2	Green Belt Area (Inside)	2968	708	3676
3	Parking Area	2662	675	3337
4	Road & Open Space Area	5562	2298	7860
	Total	26624	8192	34816

Note: DNL has survey no. 171/12, 21/3 & 206/4/D (8605 sq. m) where green belt will be developed.

Total Green Belt= 3676 (inside premises) + 8605 (Adjacent area) = **12281 sq.m**

Details of Schedule I species in the study area and its conservation and management plan and status of approval from CWLW State Govt. No schedule I species is observed during baseline survey. Species like *Panthera pardus* (Leopard), *Varanus bengalensis* (Monitor Lizard) and *Pavocristatus* (Peacock) are likely to occur in Reserve Forests. Conservation and Management Plan for Schedule I species is submitted to Chief Wildlife Warden for approval.

(vii) Raw material linkage

Details of Raw materials for proposed project, its source and mode of transportation are given in Chapter 2 of EIA report.

No	Description	Total, TPD	Mode of Transportation	Source	Distance KM
1	Methanol	22.6	Road	Local	< 300
2	Toluene	15.3	Road	Local	< 100
3	MEK	2.7	Road	Local	< 300
4	Methylene di chloride	4.7	Road	Local	< 500
5	MIBK	14.8	Road	Local	< 200
6	IPA	16.5	Road	Local	< 100
7	Carbon di sulphide	2.9	Road	Local	< 400
8	Ethyl acetate	2.7	Road	Local	< 100
9	Acetone	1.1	Road	Local	< 200
10	EDC	0.5	Road	Local	< 400
11	1 Propanol	11.1	Road	Local	< 200

12	DMS	4.9	Road	Local	< 150
13	BTF	17.3	Road/ Ship	Import	JNPT-100 KM
14	Cumene	14.4	Road	Local	< 300
15	M Xylene	19.9	Road/Ship	Imported	< 300

(viii) Details of hazardous waste management plan

Detailed Hazardous waste generation & its disposal are mentioned in the Chapter 4 of EIA report which is as below:

Sr. No.	Type of waste	Cat.	Generation		Total	UOM	Disposal
			Existing	Proposed			
1	Used/spent oil	5.1	91	25	116	MT/A	Collection, Storage, Transportation and disposal by selling to registered recyclers OR Reused as Lubricant within premises
2	Wastes or residues containing oil (cotton/gaskets/insulation materials)	5.2	0	1	1	MT/M	Sale to actual users having permissions/CHWTSDF
3	Dilute Sulfuric Acid	C2	836	2135	2971	MT/M	Sale to actual users
4	Spent Chemicals	32.1	91	0	91	MT/M	Sale to actual users/CHWTSDF
5	Sludge from treatment of wastewater	34.2	1778	2510	4288	MT/A	CHWTSDF/Co-processing/Sale to actual users
6	Discarded containers/barrels/liners	33.3	25	125	150	Nos./M	Collection, Storage, and Disposal by selling to registered scrap vendors
7	Waste from wastewater treatment	35.3	50	50	100	MT/M	Collection, Storage, Transportation and Disposal by landfilling at TSDF/ Co-processing
8	Spent Catalyst	29.5	0.07	14.23	14.3	MT/M	Collection. Storage, Regeneration & Re-use

9	Distillation Residues from contaminated organic solvent	38.1	28	298.8	326.8	MT/M	CHWTSDF/ co-processing
10	MEE salts	36.1	0	47	47	MT/M	Collection, Storage, Transportation and Disposal by landfilling at TSDF / Co-processing
11	Iron Sludge/ Iron Oxide	35.3	0	124	124	MT/M	Sale to actual users /TSDF
12	Charcoal Sludge	36.2	0	21.7	21.7	MT/M	Sale to actual users /TSDF
13	Spent / Mix Solvent	28.6	0	208	208	MT/M	Collection, Storage and sent for off-site distillation OR Recovered in-house and re-use OR Sell to authorized end-users
14	Filter pads/Bags	36.2	0	2	2	MT/M	Sale to actual users /TSDF

(ix) Certified compliance report/ATR on complied conditions to be forwarded by Ministry's Regional Office

Certified Compliance report from Regional office MoEF& CC, Nagpur was deliberated by the EAC. Copy of acknowledgement of next Six-monthly EC compliance report for period June to November 2019 submitted to RO, MoEFCC, Nagpur on 2nd December 2019. All conditions are fully complied

(x) Details of courts/NGT cases, if any, on the project area or against the project proponent, and affidavit conforming the same.

No Court/ NGT cases are filed or pending against our organization in the project area. Affidavit confirming the same is attached

(xi) Details of existing production, copy of CTO.

Details of existing production quantities is given at Page 1, Table 1.1, Chapter 1 of EIA report & same has been recorded in 14th EAC (Ind-2) meeting, section 14.7.8.1 (EC letter F No J-11011/363/2016-IA-II(I) dated 2nd January 2018 and 12th April 2018. Consent order number Format 1.0/BO/AST/UAN No. 00000/0/CC-1910000534 dated 10.10.2019, valid till 30.06.2024)

Sr No	Product / By products	Existing* (TPM)
1	Para cumidine (PC) OR 3 Amino Benzotri Fluoride (3 ATBF)	200
2	Ortho Anisidine (OA) OR Tri methyl hydro Quinine (TMHQ)	50
3	2,4 Xylidine and 2,6 Xylidine OR 2,3 Xylidine and 3,4 Xylidine OR 2,5 Xylidine OR 2,3 Xylenol OR 2, 4 Xylenol and 2,5 Xylenol	250
4	Diphenyl amine derivatives	50
5	Crystal diethyl Meta Amono Phenol (Cryst. DEMAP) OR Dibutyl Para Phenylene Di amine (DBPPDA) OR 3 NAP (3 Nitro Acetophenone) OR 3 AAP (3Amono Acetophenone) OR 3 HAP (3 Hydroxy Acetophenone)	40
6	TFMAP (3 Trifloromethyl acetophenone)	80
7	2 MePPDA Sulphate (2 Methyl p-Phenylene Diamine Sulphate) OR 1,3 CHD (1,3 Cyclohexanedione)	60
8	Pilot plant products (Synthetic orgaqaic chemicals)	10
9	Ortho nitro cumine (from p-Cumidiene) (By product)	150
10	2 NBTF (2 Nitro BTF) / 2 ATBF (2 Amino BTF) / 4 ATBF (4 Amino BTF) from 3 Amino BTF (By product)	41
11	PPO (Poly phenylene oxide / (By product)	135
12	OHBTF/OA BTF From TFMAP (By product)	20
13	Ortho Toludine (OT) (By product)	25
	Grant Total	1,111

(xii) Revised water balance with details of total water and fresh water requirement, and permission from concerned regulatory authority, along with Effluent treatment mechanism with plan for Zero Liquid Discharge.

Highlights of measures to be taken up to ensure ZLD system implementation are as below:

- Opting for processes which have low water pollution potential
- Segregation of High Concentration & Low Concentration effluent by installing suitable infrastructure (piping and drainage systems) to ensure such segregation
- Low concentration effluent will be treated in ETP comprising of Primary treatment followed by Aerobic treatment & Tertiary treatment.
- High concentration effluent will be treated in Reverse Osmosis followed by MEE

ZLD scheme will be implemented in phases-

- Additional expansion project will be ZLD plant.
- Implementation of ZLD in existing plant will require time & suitable infrastructure for segregation of Effluent streams
- Some of our effluent is coloured which will require extensive treatability studies to be undertaken

We will have to re-visit the manufacturing processes from pollution potential. Considering the above aspects, 5 years time for implementation of ZLD in existing plant may be provided

(xiii) Onsite emergency plan as per MSIHC Rules.

Onsite emergency plan as per MSIHC Rules is submitted.

(xiv) Plan for Corporate Environmental Responsibility.

Detailed Corporate Environmental Responsibility plan is as follows.

Area of Concern		Proposed Activities					
Education		Install E-learning setup in local schools Upgradation of local educational institutions by construction of toilets, classrooms, school building, compound wall, playground etc.					
Livelihood Enhancement-Skill Development		Distribution of sewing machines to women, distribution of cows for dairy development to marginal farmers or agricultural labours, distribution of goats & chicken for poultry development					
Health		Ambulance, Mobile health clinic etc.					
		upgradation of local health institutions with equipments & infrastructure					
Water, Sanitation & Hygiene		Potable water facility by providing RO plant Renovation of water pipeline. Construction of drains, closed the open drains, construction of underground drains & toilets etc.					
Development of Community Infrastructure		Construction & renovation of Road, Gym, playground, cemetery, temples, community halls etc.					
Sr. No.	Proposed Activity	Year wise allocation of Funds (Rs. In Lakhs) - April to March					Total
		1st	2nd	3rd	4th	5th	
1	Education & skill development	5	6	6	7	7	31
2	Health	3	4	5	6	6	24
3	Water & sanitation	3	3	3	4	4	17

4	Infrastructure development	5	5	7	8	8	33
5	Other social welfare activity	1	2	3	3	3	12
Total		17	20	24	28	28	117

16.3.12.2 During deliberations, the EAC noted the following:

The proposal is for environmental clearance to the project for Expansion of pesticide specific intermediate from and synthetic organic chemicals manufacturing facility by M/s Deepak Nitrite Limited in an area of 34,816 sqm located at Plot No 1 to 8, 26 to 34, MIDC Roha, Dist Raigad, Maharashtra.

The details of existing and proposed products and by-products are as under:

S.No	Product / By products	Existing (TPM)
1	Para cumidine (PC) OR 3 Amino Benzotri Fluoride (3 ATBF)	200
2	Ortho Anisidine (OA) OR Tri methyl hydro Quinine (TMHQ)	50
3	2,4 Xylidine and 2,6 Xylidine OR 2,3 Xylidine and 3,4 Xylidine OR 2,5 Xylidine OR 2,3 Xylenol OR 2, 4 Xylenol and 2,5 Xylenol	250
4	Diphenyl amine derivatives	50
5	Crystal diethyl Meta Amono Phenol (Cryst. DEMAP) OR Dibutyl Para Phenylene Di amine (DBPPDA) OR 3 NAP (3 Nitro Acetophenone) OR 3 AAP (3Amono Acetophenone) OR 3 HAP (3 Hydroxy Acetophenone)	40
6	TFMAP (3 Trifloromethyl acetophenone)	80
7	2 MePPDA Sulphate (2 Methyl p-Phenylene Diamine Sulphate) OR 1,3 CHD (1,3 Cyclohexanedione)	60
8	Pilot plant products (Synthetic orgaonic chemicals)	10
9	Ortho nitro cumine (from p-Cumidiene) (By product)	150
10	2 NBTF (2 Nitro BTF) / 2 ATBF (2 Amino BTF) / 4 ATBF (4 Amino BTF) from 3 Amino BTF (By product)	41
11	PPO (Poly phenylene oxide / (By product)	135
12	OHBTf/OA BTF From TFMAP (By product)	20
13	Ortho Toludine (OT) (By product)	25
Grant Total		1,111

Post expansion Products & By products

S.No	Product	Total after expansion (TPM)
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1	Para Nitro cumene (PNC) / Para cumidine (PC) OR Ortho Nitro cumene (ONC) /Ortho cumidine (OC)	300
2	2 Amino BenzotriFlouride (2ABTF) OR 3 Amino BenzotriFlouride (3ABTF) OR 2 Nitro BenzotriFlouride (2 NBTF) OR 3 Nitro BenzotriFlouride (3NBTF) OR 4 Nitro BenzotriFlouride (4NBTF)	400
3	Ortho Anisidine (OA) OR Tri methyl hydro Quinine (TMHQ)	100
4	2,3 Nitro-Xylene OR 2,4-Nitro-Xylene OR 3,4 Nitro-Xylene OR 2,6 Nitro-Xylene	1330
5	2,3 Xylenol OR 2,4 Xylenol OR 2,5 Xylenol	120
6	Phenyl hydrazine OR 4 -Methoxy 2 - Methyl Diphenyl Amine (MMDPA)	100
7	Aniline	10
8	3 NAP (3 Nitro AcetoPhenone)	60
9	3 AAP (3 Amino AcetoPhenone)	48
10	3 HAP (3 Hydroxy AcetoPhenone)	30
11	2 MePPDA Sulphate (2 Methyl p-Phenylene Diamine Sulphate) OR Di-Butyl Para Phenylene Diamine (DBPPDA) OR 1,3 CHD (1,3 Cyclohexane dione)	100
12	Ortho Toludine(OT)	46
13	SMIA (syn Methoximino(2 furanyl)acetic acid	25
14	Adenine OR PMPA OR S - Alcohol OR DBTZ OR Trimethyl phenol OR Chlorphenesin OR MethoxyMePPDA OR 2-Acetylfuran OR 2-Methyl-3-Amino Benzotrifluoride OR 4 Nitro 3 Methyl Benzoic acid OR N Methyl Duloxetine oxalate	30
15	Sodium Acetate	150
16	Pilot Plant	10
17	1,2,4-Triazinone	100
18	Thiocarbohydrazide (TCH)	
19	Dichloropnacolone (DCP)	
20	2-Cyanophenol	150
21	4-Chloro-6-methylanthramide	50
22	PPO (Poly Phenylene Oxide)	150
23	TFMAP (3-(Trifloromethyl) acetophenone)	200
24	CL-BTF / OHBTF / OA BTF from TFMAP	25
GRAND TOTAL		3534

The project/activities are covered under category A of item 5(b) 'Pesticides industry and Pesticide specific intermediates' and item 5(f) 'Synthetic organic chemicals industry' of the Schedule to the Environment Impact Assessment Notification, 2006, and requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC) in the Ministry.

Terms of references (TORs) to the project was issued by the Ministry vide letter dated 24th June 2019

Ministry has issued EC earlier vide letter No. F No J-11011/363/2016-IA-II(I) dated 2nd January 2018 and 12th April 2018 to the existing project of modernization with Change in product mix in favour of M/s. Deepak Nitrite Limited.

Existing land area is 26,624 sq. m, additional 8,192 sq. m land will be used for proposed expansion. Total plot area after expansion will be 34,816 sq. m. Entire land is within MIDC Roha. Industry will develop Greenbelt in an area of 3676 sq. m out of total area of the project. In addition, proponent has leased area of 8605 sq m within MIDC for green belt development. The estimated project cost is Rs. 156 Crores including existing investment of Rs. 44.54 crores. Total capital cost earmarked towards environmental pollution measures is Rs. 15 Crores & the Recurring cost (operation & maintenance) will be about Rs. 5.37 Crores per annum. Total employment will be 470 persons as direct & 1000 persons indirect after expansion. Industry proposes to allocate Rs. 117 Lakhs @ 0.75% towards Corporate Environmental Responsibility.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/ Elephant Reserves, Wildlife Corridors etc. lies within 10 km distance. Village Dhatav wherein the Roha MIDC is setup has appeared in the list of ESA village of Western Ghats (Ecological Sensitive Area Village) draft notification dated 14.03.2014, 04.09.2015, 27.02.2017 and 03.10.2018. Kundalika River is flowing at a distance of 0.8 km in north direction.

Ambient air quality monitoring was carried out at 8 locations during 1st March 2019 to 31st May 2019 and baseline data indicates that ranges of concentrations of PM₁₀ (52.4 to 79.2 µg/m³), PM_{2.5} (18.6 to 37.5 µg/m³), SO₂ (9.5 to 18.5 µg/m³), NOx (15.3 to 32.8 µg/m³), CO (0.17 to 0.44 mg/m³) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.48 µg/m³, 4.22 µg/m³ & 2.53 µg/m³ with respect to PM₁₀, SO₂ & NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

The revised Total water requirement is 1647 m³/day out of which fresh water requirement of 917 m³/day will be met from MIDC.

Treated effluent of 777 m³/day will be treated through ETP, RO, MEE with stripper. Entire treated effluent of 730 m³/day will be recycled within site. The plant will be based on Zero Liquid discharge system which will be implemented within 5 years. After deliberations with EAC, Industry has agreed for complete Zero Liquid Discharge (ZLD).

Power requirement after expansion will be 5000 KVA including existing 2500 KVA and will be met from Maharashtra State Electricity Distribution Company Limited (MSEDCL). Existing unit has 3 nos. DG sets of 750 KVA, 750 KVA & 500 KVA respectively, additionally 2 nos. of 1000 KVA DG sets are proposed as standby during power failure. Stack (height) will be provided as per CPCB norms to the proposed DG sets.

Existing unit has 2 nos. of 8 TPH Coal & FO fired boiler, 2 nos. of 4 Lakh Kcal/Hr each Hot oil units & 1 no. of 6 Lakh Kcal/Hr. Additionally 20 TPH coal Fired boiler & 10 Lakh Kcal/ HrThermopack will be installed.

Mechanical dust collector followed by ESP with a common stack height of 40 m will be installed for controlling the Particulate emissions within statutory limit of 50 mg/Nm³ for Proposed 20 TPH coal Fired boiler & 10 Lakh Kcal/ HrThermopack respectively.

Details of process emissions generation and its management

Sr. No.	Stack Attached to	Height & Dia. (m)	Pollutant	APCM
1	Scrubber SOx	8.5 m & 0.3 m	SO2 (< 50 ppm)	Water Scrubber followed by caustic scrubber
2	Scrubber HCl	8.5 m & 0.3 m	HCl (< 35 mg/nm3)	Water Scrubber followed by caustic scrubber

Details of solid waste/ Hazardous waste generation and its management.

Solid waste generation & it's disposal

Sr. No.	Type of Waste	Existing	Proposed	Total	UOM	Disposal
1	Insulation Material	2	2	4	MT/A	Sale to Authorized party
2	MS/SS scrap	0	7	7	MT/M	Sale to Authorized party
3	Wood, Paper, decontaminated plastic, Rubber material, PVC material, Tarpaulin, Filter Bags etc.	2	5	7	MT/A	Sale to Authorized party
4	Glass ware/ broken/discarded glass	1	1	2	MT/A	Sale to Authorized party
5	Boiler ash	2.5	8.5	11.0	MT/Day	Sale to brick manufacturing /Landfill
6	Thermo pack Ash	0	2	2	MT/M	Sale to brick manufacturing /Landfill
7	Canteen waste	0	0.7	0.7	MT/M	Send to viniculture

Hazardous waste generation & it's disposal

Sr. No.	Type of waste	Category	Generation		Total	UOM	Disposal
			Existing	Proposed			
1	Used/spent oil	5.1	91	25	116	MT/A	Collection, Storage, Transportation and disposal by selling to registered recyclers OR Reused as Lubricant within premises
2	Wastes or residues containing oil (cotton/gaskets/insulation)	5.2	0	1	1	MT/M	Sale to actual users having permissions/ CHWTSDF

	materials)						
3	Dilute Sulfuric Acid	C2	836	2135	297 1	MT/M	Sale to actual users
4	Spent Chemicals	32.1	91	0	91	MT/M	Sale to actual users /CHWTSDf
5	Sludge from treatment of waste water	34.2	177 8	2510	428 8	MT/A	CHWTSDf/Co-processing /Sale to actual users
6	Discarded containers/ barrels/ liners	33.3	25	125	150	Nos./ M	Collection, Storage, and Disposal by selling to registered scrap vendors
7	Waste from waste water treatment	35.3	50	50	100	MT/M	Collection, Storage, Transportation and Disposal by landfilling at TSDF / Co-processing
8	Spent Catalyst	29.5	0.07	14.23	14. 3	MT/M	Collection. Storage, Regeneration & Re-use
9	Distillation Residues from contaminated organic solvent	38.1	28	298.8	326 .8	MT/M	CHWTSDf/co-processing
10	MEE salts	36.1	0	47	47	MT/M	Collection, Storage, Transportation and Disposal by landfilling at TSDF / Co-processing
11	Iron Sludge/ Iron Oxide	35.3	0	124	124	MT/M	Sale to actual users /TSDF
12	Charcoal Sludge	36.2	0	21.7	21. 7	MT/M	Sale to actual users /TSDF
13	Spent / Mix Solvent	28.6	0	208	208	MT/M	Collection, Storage and sent for off-site distillation OR Recovered in-house and re-use OR Sell to authorized end-users
14	Filter pads/Bags	36.2	0	2	2	MT/M	Sale to actual users /TSDF

Public hearing is exempted in accordance with the Ministry's OM dated 27th April 2018, as the project site is located inside the notified industrial area.

Site Inspection for Compliance of earlier EC condition carried out by Regional Office, MoEF& CC, Nagpur on 05.09.2019. Detailed compliance report is deliberated by the EAC.

No litigation is pending against the proposal.

The industry has proposed funds of Rs 26 lakhs towards Conservation of Schedule I Fauna and has submitted proposal to Forest Department in this regard.

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data and incremental GLC due to the proposed project within NAAQ standards. The certified compliance report on the existing EC conditions found to be satisfactory. The Committee has also deliberated on the CER plan and found to be addressing the issues in the study area.

Additional information submitted by the project proponent to be satisfactory and addressing the concerns of the Committee. The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have recommended for grant of Environmental Clearance (EC).

16.3.12.3 The EAC, after detailed deliberations, **recommended** the project for grant of environmental clearance, subject to compliance of terms and conditions as under, and general terms of conditions at **Annexure**:-

- (i) Consent to Establish/Operate (CTE/CTO) for the project shall be obtained from the State Pollution Control Board (SPCB) as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.
- (ii) Zero Liquid Discharge shall be ensured including existing facility and the proposed expansion facility and no waste/treated water shall be discharged outside the premises. The existing facility shall achieve zero liquid discharge during commissioning of the expansion project or within 3 years.
- (iii) Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste

Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.

- (iv) National Emission Standards for Pesticides Manufacturing Industry issued by the Ministry vide G.S.R.446(E) dated 13th June, 2011, as amended from time to time, shall be followed.
- (v) No pesticides/chemicals banned by the Ministry of Agriculture and Farmers Welfare, or having LD₅₀<100 mg/kg shall be produced. Also, no raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used for production of pesticides.
- (vi) To control source and the fugitive emissions (at 99.98%), suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- (vii) Solvent management shall be carried out as follows:
 - (a) Reactor shall be connected to chilled brine condenser system.
 - (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.
 - (c) The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery.
 - (d) Solvents shall be stored in a separate space specified with all safety measures.
 - (e) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.
 - (f) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.
 - (g) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.
- (viii) Total fresh water requirement shall not exceed 917 cum/day, proposed to be met from MIDC water supply. Prior permission in this regard shall be obtained from the concerned regulatory authority.
- (ix) Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system
- (x) Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps.
- (xi) Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.

- (xii) The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act, 1989.
- (xiii) The company shall undertake waste minimization measures as below:-
 - (a) Metering and control of quantities of active ingredients to minimize waste.
 - (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
 - (c) Use of automated filling to minimize spillage.
 - (d) Use of Close Feed system into batch reactors.
 - (e) Venting equipment through vapour recovery system.
 - (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xiv) The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. In addition, the project proponent shall develop greenbelt outside the plant premises also such as avenue plantation, plantation in vacant areas, social forestry etc.
- (xv) As committed by the PP, fund allocation for the Corporate Environment Responsibility (CER) shall be Rs. 1.17 crore. The CER plan shall be implemented and completed within five years/before operation of the project with proposed activities (viz. health, infrastructure, education & skill development, water & sanitation, social welfare activities, etc).
- (xvi) As proposed Rs 26 lakhs shall be allocated towards Conservation of Schedule I species and plan shall be implanted with the coordination from Forest/Wildlife Department.
- (xvii) Safety and visual reality training shall be provided to employees.
- (xviii) For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- (xix) The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms.
- (xx) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.

- (xxi) Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (xxii) Mitigating measures suggested during process safety and risk assessment studies shall be undertaken accordingly.

16.4 Any Other

Agenda No. 16.4.1

Expansion of distillery unit from 60 KLPD to 150 KLPD & sugar unit from 7500 TCD to 12000 TCD at Ambikanagar, A/P Jagdamba Factory, Taluka Karjat, District Ahmednagar by Shiri Ambalika Sugar Pvt Ltd – For Amendment in ToR

[IA/MH/IND2/122264/2019, J-11011/35/2014-IA II (I)]

16.4.1.1 The proposal is for amendment in the Terms of Reference granted by the Ministry vide letter dated 18th October 2019 to the project for Expansion of distillery unit from 60 KLPD to 150 KLPD & sugar unit from 7500 TCD to 12000 TCD located at Ambika nagar , A/P Jagdamba Factory, Taluka Karjat, District Ahmednagar in favour of M/s Shiri Ambalika Sugar Pvt. Ltd.

16.4.1.2. The project proponent has requested for amendment in the ToR with the details are as under;

S. No.	Para of ToR issued by MoEF&CC	Details as per the ToR	To be revised/ read as	Justification/ reasons
1.	Para first	Standard TOR for the purpose of preparing environment impact assessment report and environment management plan for obtaining prior environment clearance is prescribed with public consultation	Exemption for conducting public hearing	Public hearing for earlier project (Expansion of sugar unit from 3300 TCD to 7500 TCD, Cogeneration unit from 15 MW to 38 MW & new 60 KLPD molasses based distillery unit) was conducted & subsequently environment clearance was granted by MoEF& CC vide letter No. F. No. J-11011/35/2014-IA II (I) dated 14 th February 2015

16.4.1.3. The EAC after detailed deliberations noted that the proposed expansion project is for ethanol production and as per the Notification dated 17th January, 2019 and policy decisions taken by the Ministry to support the EBP programme, and considering public hearing conducted for the existing project, the Committee has **recommended** for exemption from fresh public hearing for the proposed project as per para 7(ii) (a) of the EIA Notification, 2006.

Agenda No. 16.4.2

Expansion of Sugar Factory from 4500 to 7000 TCD, Co-gen Plant from 19 to 26 MW & Establishment of 105 KLPD Molasses at Dnyanshantinagar, Vesaraf-Palasangbe, Post. Asalaj, Tal. Gaganbavada, Dist. Kolhapur, Kolhapur-416206 Maharashtra M/s Padmashree Dr D Y Patil Sahakari Sakhar Karkhana Limited- For Amendment in ToR

[IA/MH/IND2/115032/2019, No.IA-J-11011/257/2019-IA-II(I)]

16.4.2.1 The proposal is for amendment in the Term of reference(ToR) granted by the Ministry vide letter dated 28th September, 2019 to the project for expansion of Sugar Factory from 4500 to 7000 TCD (increase by 2500 TCD), Co-gen from 19 MW to 26 MW (increase by 7 MW) & Establishment of 105 KLPD Molasses / Sugarcane juice based Distillery located at Dnyanshantinagar, Vesaraf - Palsambe, PostAsalaj, Taluka Gaganbavada, District Kolhapur (Maharashtra) in favour of M/s Padmashree Dr. D. Y. Patil SahakariSakharKarkhana Ltd.

16.4.2.2 The project proponent has requested for amendment in the ToR, with the details are as under;

Sr. No.	Para of ToR issued by MoEF&CC	Details as per theToR	To be Revised /Read as	Justification/reasons
1.	Page No. 2 Para No. 2	In this regard, under the provisions of the EIA Notification 2006 as amended, the Standard TOR for the purpose of preparing environment impact assessment report and	In this regard, under the Provisions of the EIA Notification 2006 as amended, the Standard TOR for the purpose of preparing environment impact assessment report and	PH was conducted on 16.04.2019 w.r.t to earlier our proposal (Proposal No. IA/MH/IND2/82802/2018 &ToR File No. IA-J-11011/333/2018-IA-II(I) of establishment 60 KLPD Distillery, expansion of Sugar factory (4500 TCD to 5500 TCD) & Cogen Plant (19 MW to 23 MW) and final EIA submitted to MoEFCC but the proposal was not taken ahead since management decided to change the capacities of project. The PH conducted earlier is valid till 16.04.2022 as per Ministry's OM No. J-11013/41/ 2006- IA-II (I) dated 29.08.2017. Accordingly, we hereby make an appeal to exempt our

	environment management plan for obtaining prior environment clearance is <u>prescribed with public consultation</u> as follows:	environment management plan for obtaining prior environment clearance. Exemption for Public Hearing.	new proposal of 105 KLPD Distillery and expansion of Sugar Factory (4500 to 7000 TCD), Co-gen Plant (19 MW to 26 MW) from conducting once again fresh public hearing.
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16.4.2.2 *The EAC during deliberations noted that the project proponent has not taken environmental clearance for which public hearing has been conducted. As such the proposed project is having different scope of the work vis-à-vis public hearing conducted earlier, and as such there is no provision available in the EIA Notification, 2006 for consideration of such proposals.*

Accordingly, the Committee has decided to **return the proposal in its present form.**

Agenda No. 16.4.3

Establishment of new natural and synthetic surfactant chemical manufacturing unit at MouzaKulepairi, P.S. Bangan, Dist-Howrah, West Bengal by M/s Detergeo Chem (East) Private Limited (DCEPL) - For amendment in ToR

[IA/WB/IND2/131494/2019, J-11011/299/2019-IA-II(I)]

*The project proponent did not attend the EAC meeting. The proposal was accordingly stands **deferred** by the Committee.*

16.4.4 Any Other with the Permission of the Chairman

Expansion of Bulk Drug and Intermediates Manufacturing Unit from 105 TPA to 5183 TPA at Sy.Nos. 240, 242, 243, 247, 248 & 249, Village Dothigudem, Mandal Pochampally, District YadadriBhuvanagiri (Telangana) by M/s Hazelo Lab Pvt Ltd – Reconsideration for Environmental Clearance-reg.

[IA/TG/IND2/36540/2015, F. No. J-11011/19/2016-IA-II (I)]

16.4.4.1 The proposal was earlier considered by the EAC (Industry-2) in its meetings held on and 25-27 June, 2018 and 29-31 July, 2019 in the Ministry, and has recommended the project for grant of EC subject to transfer of EC dated 23rd November, 2010 from M/s Venlar Labs (P) Ltd to M/s Hazelo Lab Pvt Ltd. Earlier EC, which was issued by the Ministry vide letter dated 23rd November, 2010 to the project for change in product mix from drug intermediate to bulk drug in favour of M/s Venlar Laboratories Pvt Ltd, was transferred in favour of M/s Hazelo Lab Pvt Ltd vide Ministry's 18th November, 2019.

Subsequent to transfer of EC in favour of the project proponent, additional information has been desired on the project proposal. The project proponent vide letter dated 10th January, 2020 has submitted a detailed reply.

16.4.4.2 Subsequent to submission of the reply by the project proponent. It was desired that the additional information submitted by the project proponent may be deliberated by the Committee for recommendations on the matter. The information desired by the Ministry and response submitted by the project proponent is as under:

(a) *The existing product list and production capacity made available and reflected in the minutes is not consistent with EIA report and the existing EC*

The project proponent has informed that during preparation of Draft EIA, the existing products mentioned in EIA was taken on valid CFO obtained by unit vide order no. TSPCB/RCP/NLG/16644/HO/2015 dated 14.08.2015 valid till 31.01.2018. Draft EIA submitted for public consultation to Regional office, Telangana Pollution control board (TSPCB) on 23.05.2017. The list of products mentioned in CFO dated 14.08.2015 is as follows;

S.No	Name of Product	Capacity	
		Kg/Day	TPA
Group A*			
1	α-Amino compound	100	30
2	Pyrazole	100	30
Total		200	60
Group B*			
3	Bromophthalide	100	30
4	Cyanodiol HBr	150	45
5	Cyanophthalide	100	30
Total		350	105

Note: The above products are manufactured on campaign basis, i.e. at any point of time only one group will be manufactured.

The unit subsequently obtained change in product mix CFO vide order no. TSPCB/RCP/NLG/HO/2017-810 dated 30.05.2017 valid till 31.01.2022. During EAC meeting valid CFO products list was mentioned as permitted/existing products. The list of products mentioned in CFO dated 30.05.2017 is as follows;

S.No	Name of Product	Quantity (Kg/day)
Group - A		
1	N-(2-Methyl-5-aminophenyl)-4-(3-pyridyl)-2-pyrimidine amine	116.7
2	4-[(4-Methylpiperazin-1-yl) methyl] benzoic acid dihydrochloride	133.3
3	2,3-Epoxy- 2- methyl-N-[4- cyano-3-(trifluoro methyl) phenyl] propanamide	61.1

4	Ethyl-N- phthaloyl-p-amino -L- phenyl alaninate Hydrochloride	16.7
5	2-Deoxy- 2,2- Difluoro -D- Erythro- Pentafuranousulose- 3,5- Dibenzoate	22.2
	Total Group -A	350
Group - B		
1	Bis- (2- Chloroethyl) Amine Hydrochloride	83.3
2	N-Acetyl Cytosine	41.7
3	Benzonitrile 4- (1h- 1,2,4 - Triazol-1-yl Methyl)	55.6
4	N-Phthaloyl,D, L Glutamic Acid anhydride	69.4
5	2', 3' - Di-O-acetyl - 5' - deoxy -5- fluorocytidine	100
	Total Group -B	350
<i>Total Production capacity on worst case i.e., for Group - A or Group - B</i>		350

(b). *The unit proposes to extract ground water for its operations; however, details of NOC/application status has not been provided:*

The project proponent has submitted that the total water requirement after expansion is 396.27 KLD out of which 236.27 KLD will be fresh water and 160 KLD is recycled water. The required water is drawn from Mission Bhagiratha (Industrial supply), Government of Telangana. The unit obtained permission from Mission Bhagiratha (Industrial supply) for supply of 300 KLD water vide letter no. T1/Bulk water connections/Bhongir Circle/2017-18 dated 03.08.2018.

(c). *As per the public hearing proceeding, there are serious concerns from many public regarding the project; however, the response, action plan and budgetary provisions found to be inadequate and not addressing the issues.*

The project proponent has submitted detailed response to public hearing issues, action plan with budgetary provision.

Action plan and budgetary provision for the concerns raised in Public Hearing

S. No	Concern	Proponent's Response	Action Plan	Time of Implementation	Budget (Rs. Lakhs)
1	Implementation of Pollution control measures	The proponent assured that the Industry will follow the standards prescribed by MoEFCC with respect to emissions and	1. APC: Bag Filter, Scrubbers, condensers, vacuum pumps, Closed Hoods and AOD pumps, Spill control kits, Dust Collectors, Coal handling system, Ash	Equipment and machinery of pollution control to be installed before trial run for production.	392

		<p>effluents by adopting latest technology using condensers, scrubbers, zero liquid discharge based effluent treatment system, closed operations etc., without causing any pollution problems to the surroundings area. He also informed that the plant management is taken over by Hetero Group which has experience in implementing effective pollution control measures.</p>	<p>handling system</p> <p>2. Recovery of by-products, 100% reuse of treated wastewater using zero liquid discharge facility.</p> <p>3. Recovery of by-products, Hazardous waste storage, disposal to TSDF, reuse of hazardous waste as auxiliary fuel in cement plants, reuse of ash for brick manufacturing.</p>	<p>Continuous implementation of environment management measures during operation</p> <p>Continuous implementation of environment management measures during operation</p>	<p>682</p> <p>55</p>
2	Air Pollution impact on health	<p>Proponent assured to adopt latest technology using 2 stage condensers (RT water and chilled water) followed by dry vacuum pump, scrubbers, bag filters as APC for boilers, closed operations etc., without</p>	<p>Provision of following air pollution control equipment/measures;</p> <p>1. Bag filters for boilers</p> <p>2. Coal & Ash handling system</p> <p>3. Condensers</p> <p>4. Two stage scrubbers</p> <p>5. Vacuum pumps</p> <p>6. Dust collectors</p> <p>7. Online AAQ and</p>	<p>Before commencement of trial production</p>	<p>70</p> <p>35</p> <p>72</p> <p>90</p> <p>105</p> <p>12</p>

		causing any air pollution problems to the surroundings area.	VOC monitoring		20
3	Water Pollution	Proponent assured that effluents are treated in Zero Liquid discharge based Effluent treatment system. The treated wastewater will be reused for cooling tower and boiler makeup. No ground water abstraction for plant operations.	Provision of following facilities for water pollution 1. Installation of ZLD based effluent treatment system 2. Storm water storage tank 3. Water requirement for plant operations: Mission Bhagiratha	Before commencement of trial production	625 30
4	Odor Nuisance	Adoption of latest technology using 2 stage condensers (RT water and chilled water) followed by dry vacuum pump, scrubbers, closed operations, local exhaust ventilation, nitrogen blanketing of storages, closed storage of raw effluent with vent connection to	Provision of following control measures to mitigate odor nuisance; 1. Dual condensing system followed by dry vacuum pumps 2. Two stage scrubbing system. 3. Effluent and sewage transfer lines 4. Storage area for hazardous waste. 5. Closed hood and AOD pumps	Before commencement of trial production	72 90 25 40 7.5

		scrubber, and Closed above ground HW storage facility.			
4	Local employment	Proponent assured that the employment would be given to the people who possessed requisite qualifications	80% local employment 75% local skilled people	Construction Phase Operation Phase	
5	CSR funds for development activities	The management assured to spend Rs. 1.125 crores as part of CER activity in local development activity, in consultation with public representatives and revenue authorities	1. Establishment of Drinking RO plants 2. Skill development programs. 3. Health Camps 4. Infrastructure development	From initiation of the project for 7 years as part of CER	29 31 28.5 24

Responsibility of implementing, monitoring, taking corrective actions if necessary and ensure adaptive management lies with the management of Hazelo Lab Pvt. Ltd

16.4.4.3 The EAC during deliberations noted that the project proponent has earlier informed the Committee regarding changes in the product in the EIA report and presented during the meeting, and the same has been deliberated in detail. During EAC meeting products list having valid consent to operate was mentioned as permitted/existing products. The Committee has noted that the products mentioned in the EIA report and products discussed in the Committee are of similar nature and total production capacity remains the same.

The Committee has also deliberated on the pollution load potential and deviation in scope of work after the conduct of public consultation. After deliberations the Committee has observed that due to the change in product mix, there is no change in pollution load and as there is no change in scope of the project for which public hearing was conducted earlier, as total production capacity and pollution load remaining the same.

The Committee has also noted that public hearing issues has earlier been deliberated by the EAC. The Committee has considered the detailed action plan submitted by the project proponent with budgetary provisions.

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. Additional information submitted by the project proponent to be satisfactory and addressing the concerns raised and was earlier deliberated by the Committee. The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have again recommended for grant of Environmental Clearance (EC).

16.4.4.4 The EAC, after detailed deliberations, reiterated its earlier **recommendation** to the project for grant of environmental clearance, subject to compliance of terms and conditions mentioned in the minutes of the EAC meeting held during **29-31 July, 2019**, and general terms of conditions at **Annexure**.

DAY 2: 22nd January 2020 (Wednesday)

16.5 Consideration of Environmental Clearance

Agenda No. 16.5.1

Proposed Active Pharmaceutical Ingredients (APIs) Manufacturing (180 TPA) at Rahimkhanpet (V), Atmakur (M) Yadadri-Bhuvanagiri District, Telangana State by M/s Prasanthee Laboratories Private Limited- Consideration of Environment Clearance.

[IA/TG/IND2/71472/2017, J-11011/561/2007-IA-II(I)]

The project proponent and their accredited consultant M/s KKB Envirocare Consultants Pvt. Ltd. made a detailed presentation on the salient features of the project.

16.5.1.1 During deliberations, the EAC noted the following:

The proposal is for environmental clearance to the project for Setting up Active Pharmaceutical Ingredients (APIs) manufacturing unit of capacity 180 TPA by M/s Prasanthee Laboratories Private Limited in an area of 26507 sqm located at Sy. No. 93, Village Rahimkhanpet, Mandal Atmakur, District Yadadri-Bhuvanagiri, Telangana.

The details of products and capacity are as under:

S. No.	Product	Quantity (TPA)
1.	Itraconazole	60
2.	Omeprazole	60
3.	Terbinafine Hydrochloride	60
4.	Levetiracetam	24
5.	Cyproheptadine Hydrochloride	12
6.	Amitriptyline Hydrochloride	36
7.	Topiramate	12
8.	Tramadol Hydrochloride	60
9.	Fexofenadine Hydrochloride	24
10.	Pioglitazone	12
11.	Cyclobenzaprine Hydrochloride	6
12.	Glimepride	6
Any 3 products on campaign basis out of 12 products at a time		180

List of By-products

By-Product	Quantity		Generation from the product
	kg/day	TPA	
Dilute Sulfuric Acid	1013.3	364.8	Omeprazole
Hydrogen Bromide Solution	270	97.2	Levetiracetam

The project/activity is covered under category A of item 5(f) 'Synthetic organic chemicals industry' of the schedule to the Environment Impact Assessment (EIA) Notification, 2006 and requires appraisal at central level by sectoral Expert Appraisal Committee in the Ministry.

Standard ToR for the project was issued by the Ministry vide letter dated 10th February, 2018. Amendment in ToR exempting public hearing was issued by the Ministry vide letter dated 25th November, 2019.

Ministry had issued EC earlier vide letter no. F.No. J-11011/523/2007-IA-II(I) dated 26-12-2007 to the existing project "Bulk Drugs" in favour of M/s Prasanthee Laboratories Private Limited. However, project got delayed due to delay in issue of Consent for Establishment (CFE) from SPCB and project could not be implemented and the validity of the EC was expired.

The land area available for the project is 2.6507 ha (26507 sqm). Industry will develop greenbelt in an area of 36.5% i.e. 9677 m² out of total area of the project. The estimated project cost is Rs.4.85 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 50 lakhs and the Recurring cost (Operation and maintenance) will be about Rs.120 lakhs per annum. Total Employment will be 55 persons as direct & 15 persons indirect. Industry proposes to allocate @ 3% on gross investment towards Corporate Environment Responsibility.

There are No National parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/ Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. River Bukleru is flowing at a distance of 2.3 km in NNW direction and River Aler is flowing at a distance of 5 km (NE). Water bodies viz., Virlacheruvu- 7.7 km in WNW direction; Pond near Plant site - 0.7 km in NW direction; Pond near Rahimkhanpet- 2 km in NNW direction; Pond near Paladugu- 5 km in S direction; Pond near Sri Kanchanbhavi- 2.1 km in E direction; Pond near Kurella - 5.2 km in SSW direction.

Ambient air quality monitoring was carried out at 8 locations during December 2017 to February 2018 and the baseline data indicates that ranges of concentrations as: PM₁₀ (27-48 µg/m³), PM_{2.5} (10-29 µg/m³), SO₂ (BDL-16 µg/m³) and NO₂ (BDL-18 µg/m³). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.733 µg/m³, 9.99 µg/m³ and 6.92 µg/m³ with respect to PM₁₀, SO_x and NO_x. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is 64.88 m³/day of which fresh water requirement of 35.18 m³/day and will be met from Mission Bhagiratha. Effluent of 32.95 m³/day quantity will be treated through Effluent Treatment plant-ZLD. The plant will be based on Zero Liquid Discharge system.

Power requirement after expansion will be 250 HP and will be met from Telangana State Power Distribution Corporation Limited (TSPDCL). 2 nos. of 125 KVA capacity DG sets are used as standby, during power failure. Stack (height 7 m) will be provided as per CPCB norms to the proposed DG sets.

2 TPH coal fired boiler will be installed. Multi cyclone separator & bag filter with a stack of height of 30 m will be installed for controlling the Particulate emissions within statutory limit of 115 mg/Nm³ for the proposed boiler. 2 lakh K.cal/hr Diesel fired Thermic Fluid Heater (TFH) will also be installed.

Details of process emissions generation and its management are given below.

Sl. No.	Process Emission	Maximum Quantity on various combinations (kg/day)	Treatment
1.	HCl	14.4	Scrubbed with water / caustic solution
2.	H ₂	7.74	Diffused with flame arrestor
3.	SO ₂	41.67	Scrubbed using caustic solution
4.	N ₂	3.33	Dispersed into atmosphere
5.	CO ₂	77.83	Dispersed into atmosphere

Details of solid waste/ hazardous waste generation and its management is given below

Sl. No.	Description	Proposed Quantity* (TPD)	Stream	Handling Method	Disposal
1.	Organic residue from Process	0.55	28.1 of Schedule -I	HDPE Drums	Sent to SPCB Authorized Cement industries or to TSDF for Incineration
2.	Spent carbon	0.05	28.3 of Schedule -I		
3.	Inorganic & Evaporation salt (Process)	0.91	28.1 of Schedule -I	HDPE Bags	Sent to SPCB Authorized Cement industries or to TSDF for Incineration
4.	Evaporation salt (Non-process)	0.2	28.1 of Schedule -I		
5.	ETP Sludge	0.02	35.3 of Schedule -I		
6.	Boiler ash	3.2	--	HDPE Bags	Sent to Brick Manufacturers
7.	Waste oils & Grease	1 KL/annum	5.1 of Schedule -I	MS Drums	Sent to SPCB Authorized agencies for reprocessing

Note: *Hazardous / Solid waste quantities maximum on 3 products at a point of time.

Regional Office of the Ministry has monitored the project site on 09-09-2018 and issued a Certified copy of compliance report on the status of the project vide F.No. EP/12.1/896/AP/1813 dated 20-11-2018. No litigation is Pending against the proposal, if any.

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of

data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have recommended for grant of Environmental Clearance (EC).

16.5.2.2 The EAC, after detailed deliberations, **recommended** the project for grant of environmental clearance, subject to compliance of terms and conditions as under, and general terms of conditions at **Annexure**:-

- (i) Necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, shall be obtained from the State Pollution Control Board.
- (ii) As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. All the waste water to be collected and to be reused after treatment.
- (iii) Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.
- (iv) National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R.608(E) dated 21st July, 2010 and amended from time to time shall be followed. Fugitive emissions shall be controlled at 99.98% with effective chillers.
- (v) No raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used.
- (vi) To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- (vii) Solvent management shall be carried out as follows:
 - (a) Reactor shall be connected to chilled brine condenser system.
 - (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.

- (c) The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery.
 - (d) Solvents shall be stored in a separate space specified with all safety measures.
 - (e) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.
 - (f) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.
 - (g) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.
- (viii) Total fresh water requirement shall not exceed 35.18 cum/day, proposed to be met from Mission Bhagiratha water supply. Prior permission in this regard shall be obtained from the concerned regulatory authority.
 - (ix) Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system. All the vent pipes should be above the roof level.
 - (x) Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps. Raw material and products should be stored in leakproof containers. Spent acid to be stored over the ground tank and to be sent to TSDF.
 - (xi) Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.
 - (xii) The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.
 - (xiii) Fly ash should be stored separately as per CPCB guidelines so that it may not adversely affect the air quality. Direct exposure of workers to fly ash and dust should be avoided.
 - (xiv) The company shall undertake waste minimization measures as below:-
 - (a) Metering and control of quantities of active ingredients to minimize waste.
 - (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
 - (c) Use of automated filling to minimize spillage.
 - (d) Use of Close Feed system into batch reactors.
 - (e) Venting equipment through vapour recovery system.

- (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xv) The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.
- (xvi) At least 3% of the total project cost shall be allocated for Corporate Environment Responsibility (CER) and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.
- (xvii) For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- (xviii) The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms.
- (xix) Occupational health surveillance including dental check up of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- (xx) Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For ZLD, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

Agenda No. 16.5.2

Proposed Active Pharmaceutical Ingredients (APIs) Manufacturing (384 TPA) at Rahimkhanpet (V), Atmakur (M) Yadadri-Bhuvanagiri District, Telangana by M/s Tejashrri Intermediates Pvt. Ltd.- Consideration of Environment Clearance.

[IA/TG/IND2/70378/2017, J-11011/515/2017-IA-II(I)]

The project proponent and their accredited consultant M/s. KKB Envirocare Consultants Pvt. Ltd., made a detailed presentation on the salient features of the project.

16.5.2.1 During deliberations, the EAC noted the following:

The proposal is for Environmental Clearance to the project for Setting up Active Pharmaceutical Ingredients (APIs) manufacturing unit of capacity 384 TPA by M/s Tejashrri Intermediates Private Limited in an area of 59488 sqm located at at Sy. No. 94, Rahimkhanpet (V), Atmakur (M), Yadadri-Bhuvanagiri District, Telangana State.

The details of products and capacity as under:

S. No.	Product	Quantity (TPA)
1.	Rabeprazole Sodium	24
2.	Lansoprazole	24
3.	Pantoprazole	24
4.	Bromopheniramine	12
5.	Carisoprodol	120
6.	Phenylphrine Hydrochloride	144
7.	QuetlapineHemifumarate	12
8.	Sertraline Hydrochloride	120
9.	Citalopram Hydrobromide	24
10.	Propranolol	24
11.	Aripiprazole	12
12.	Oxatomide	12
Any 3 products on campaign basis out of 12 products at a time		384

List of By-products

By-Product	kg/day	TPA	Product
Dilute Sulfuric Acid	621.9	223.88	Rabeprazole Sodium, Lansoprazole
Hydrogen Bromide Solution	1104.3	397.56	Phenylephrine Hydrochloride, Aripiprazole

The project/activity is covered under category A of item 5(f) 'Synthetic organic chemicals industry' of the schedule to the Environment Impact Assessment (EIA) Notification, 2006 and requires appraisal at central level by sectoral Expert Appraisal Committee in the Ministry.

Standard ToR for the project was issued by the Ministry vide letter dated 9th December, 2017. Amendment in ToR exempting public hearing was issued by the Ministry vide letter dated 25th November, 2019.

The Ministry has issued EC earlier vide letter no. F.No. J-11011/515/2007-IA-II (I)23-10-2007 to the existing project Bulk Drugs in favour of M/s Tejashrri Intermediates Private Limited. However, project got delayed due to delay in issue of Consent for Establishment (CFE) from SPCB. Hence project could not be implemented and the EC got lapsed.

The land area available for the project is 5.9488 Ha (59488 sqm). Industry will develop greenbelt in an area of 33% i.e. 19662 m² out of total area of the project. Total Greenbelt area include greenbelt of 33% 1.96 Ha and open area of 1.04 Ha (17.4%) i.e. 3 Ha (50.4% of 5.9488 Ha).The estimated project cost Rs.4.85 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 50 lakhs and the Recurring cost (Operation and maintenance) will be about Rs.10 lakhs per annum. Cost overruns between 2007 and 2020 may be considered due to escalation in market

conditions. Total Employment will be 62 persons as direct & 35 persons indirect. Industry proposes to allocate @ 3% on gross investment towards Corporate Environment Responsibility.

There are no National parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/ Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. River Bukleru is flowing at a distance of 2.6 km in N direction and River Aler is flowing at a distance of 4.79 km (ENE). Water bodies viz., Virlacheruvu – 7.5 km in WNW direction; Pond near Plant site – 0.8 km in NW direction; Pond near Rahimkhanpet – 2.05 km in NNW direction; Pond near Paladugu – 6 km in W direction; Pond near Sri Kanchanbhavi – 2 km in E direction; Pond near Kurella – 5.2 km in SSW direction.

Ambient air quality monitoring was carried out at 8 locations during December 2017 to February 2018 and the baseline data indicates that ranges of concentrations as: PM₁₀ (27-48 µg/m³), PM_{2.5} (10-29 µg/m³), SO₂ (BDL-16 µg/m³) and NO₂ (BDL-18 µg/m³). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.733 µg/m³, 9.99 µg/m³ and 6.92 µg/m³ with respect to PM₁₀, SO_x and NO_x. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is 62.12 m³/day of which fresh water requirement of 34.12 m³/day and will be met from Mission Bhagiratha. Effluent of 31.31 m³/day quantity will be treated through Effluent Treatment plant – ZLD. The plant will be based on Zero Liquid Discharge system.

Power requirement after expansion will be 250 HP and will be met from Telangana State Power Distribution Corporation Limited (TSPDCL). 2 nos. of 125 KVA capacity DG sets are used as standby, during power failure. Stack (height 7 m) will be provided as per CPCB norms to the proposed DG sets. 2 TPH coal fired boiler will be installed. Multi cyclone separator & bag filter with a stack of height of 30 m will be installed for controlling the Particulate emissions within statutory limit of 115 mg/Nm³ for the proposed boilers. 2 lakh Kcal/hr Diesel fired Thermic Fluid Heater (TFH) will also be installed.

Details of process emissions generation and its management are given below.

Sl. No.	Process Emission	Maximum Quantity on various combinations (kg/day)	Treatment
1.	HCl	54.26	Scrubbed with water / caustic solution
2.	H ₂	35.2	Diffused with flame arrestor
3.	SO ₂	42.47	Scrubbed using caustic solution
4.	NH ₃	11.6	Scrubbed with water / dilute H ₂ SO ₄ solution
5.	CO ₂	36.54	Dispersed into atmosphere

Details of solid waste/ hazardous waste generation and its management is given below

Sl. No.	Source	*Proposed Quantity (TPD)	Handling Method	Disposal
1.	Organic residue	2.51	HDPE Drums	Sent to SPCB Authorized Cement industries (or) to TSDF for Incineration
2.	Spent Carbon	0.097		
3.	Inorganic & Evaporation salt (Process)	0.78	HDPE Bags	Sent to TSDF for Landfill (or) Incineration (or) to SPCB Authorized Cement industries
4.	ETP Sludge	0.02		
5.	Boiler Ash	3.2	Stored in covered area	Sold to Cement Brick Manufacturers

Note: * Solid waste quantities maximum on 3 products at a point of time.

Regional Office of the Ministry monitored the project site on 28-02-2018 and issued a letter on the status of the project vide F.No. EP/12.1/624/AP/0653 dated 08-05-2018. No litigation is pending against the proposal.

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have recommended for grant of Environmental Clearance (EC).

16.5.2.2 The EAC, after detailed deliberations, **recommended** the project for grant of environmental clearance, subject to compliance of terms and conditions as under, and general terms of conditions at **Annexure**:-

- (i) Necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, shall be obtained from the State Pollution Control Board.

- (ii) As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. All the waste water to be collected and to be reused after treatment.
- (iii) Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.
- (iv) National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R.608(E) dated 21st July, 2010 and amended from time to time shall be followed. Fugitive emissions shall be controlled at 99.98% with effective chillers.
- (v) No raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used.
- (vi) To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- (vii) Solvent management shall be carried out as follows:
 - (a) Reactor shall be connected to chilled brine condenser system.
 - (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.
 - (c) The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery.
 - (d) Solvents shall be stored in a separate space specified with all safety measures.
 - (e) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.
 - (f) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.
 - (g) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.
- (viii) Total fresh water requirement shall not exceed 34.12 cum/day, proposed to be met from Mission Bhagiratha water supply. Prior permission in this regard shall be obtained from the concerned regulatory authority.
- (ix) Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system. All the vent pipes should be above the roof level.
- (x) Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps. Raw material and products should be stored in leakproof containers. Spent acid to be stored over the ground tank and to be sent to TSDF.

- (xi) Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.
- (xii) The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.
- (xiii) Fly ash should be stored separately as per CPCB guidelines so that it may not adversely affect the air quality. Direct exposure of workers to fly ash and dust should be avoided.
- (xiv) The company shall undertake waste minimization measures as below:-
 - (a) Metering and control of quantities of active ingredients to minimize waste.
 - (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
 - (c) Use of automated filling to minimize spillage.
 - (d) Use of Close Feed system into batch reactors.
 - (e) Venting equipment through vapour recovery system.
 - (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xv) The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.
- (xvi) At least 3% of the total project cost shall be allocated for Corporate Environment Responsibility (CER) and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.
- (xvii) For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- (xviii) The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms.
- (xix) Occupational health surveillance including dental check up of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- (xx) Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For ZLD, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

Agenda No. 16.5.3

Synthetic Organic Chemicals Manufacturing Unit located at Plot no. - E-67, RIICO,Phase-II, Maval, Abu Road, Dist: Sirohi, Rajasthan M/s Paras Industries- Consideration of Environment Clearance.

[IA/RJ/IND2/86809/2018, IA/J-11011/388/2018-IA-11(I)]

The project proponent has requested for deferment of the proposal. Accordingly, the EAC has not considered the proposal and based on the request of PP the proposal is **deferred**.

Agenda No. 16.5.4

Proposed manufacturing unit of Formaldehyde (37%) (100 TPD), Melamine Formaldehyde Resin (42.5 TPD), Phenol Formaldehyde Resin (15.0 TPD), Urea Formaldehyde Resin (42.5 TPD) at Village- Hambran, Near Murti Agro Foods, Hambran Road, Tehsil & District -Ludhiana, Punjab by M/s Balaji Overseas- Consideration of Environmental Clearance

[IA/PB/IND2/127321/2019, IA-J-11011/56/2019-IA-II (I)]

The project proponent has requested for deferment of the proposal. Accordingly, the EAC has not considered the proposal and based on the request of PP the proposal is **deferred**.

Agenda No. 16.5.5

Setting up of technical grade pesticides manufacturing unit by M/s Bharat Products Limited at Killa No.12 KA, 3/1, 3/2, 8/2, Industrial Sector-2, Village Joshi Jat, Tehsil Rai, District Sonipat (Haryana) - Consideration of Environmental Clearance

[IA/HR/IND2/92940/2019 , IA-J-11011/33/2019-IA-II(I)]

The project proponent and their consultant M/s Shivalik Solid Waste Management Ltd, made a detailed presentation on the salient features of the project.

During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for setting up technical grade pesticides manufacturing unit of capacity 3032 TPA and pesticide intermediates of capacity 2800 TPA by M/s Bharat Products Limited in an area of 8000 sqm at Killa No.12 KA, 3/1, 3/2, 8/2, Industrial Sector-2, Village Joshi Jat, Tehsil Rai, District Sonipat (Haryana).

The details of products and capacity are as under:

S. No.	Products	Quantity (TPM)	Quantity (TPA)
A	Herbicides		
1	Pendimethalin Technical	20	240.0
2	Atrazine Technical	10	120.0
3	Metribuzin Technical	10	120.0
4	Glyphosate Technical	10	120.0
5	Clodinafop-Propargyl Technical	10	120.0
6	Pretilachlor Technical	9	108.0
7	2,-4, Dichlorophenoxy Acetic Acid	9	108.0
8	Bispyribac Sodium	4	48.0
9	Dicamba Technical	4	48.0
10	Oxyfluorfen Technical	4	48.0
	Total	90	1080.0
B	Fungicides		
11	Tricyclazole Technical	10	120
12	Hexaconazole Technical	10	120
13	Difenoconazole Technical	5	60
14	Propiconazole Technical	5	60
15	Tebuconazole Technical	5	60
16	Azoxystrobin Technical	10	120
	Total	35	540
C	Insecticides		
17	Thiamethoxam Technical	22	264
18	Diafenthiuron Technical	5	60
19	Imidacloprid Technical	8	96
20	Fipronil Technical	8	96
21	Chlorpyrifos Technical	10	120
22	Metalaxyl Technical	5	60
23	Cypermethrin Technical	10	120
24	Lambda Cyhalothrin Technical	15	180
25	Novaluron	5	60
26	Abamectin Technical	10	120
27	Emamectin Benzoate Technical	10	120
28	Acetamiprid Technical	4.5	54

29	Propargite Technical	5	60
	Total	117.5	1410
D	Pesticide Intermediates		
30	CCMT	30	360
31	MNIO	32	384
32	4 NITRO O'XYLENE	25	300
33	LAMBDA ACID	40	480
34	PMIDA	15	180
35	CMAC	17	204
36	MPBD	25	300
37	CCMP	25	300
38	Triazoles	24.5	294
	Total	233.5	2802
E	Biopesticide		54
	Total Quantity (A+B+C+D+E)		6480.0

The project/activities are covered under category A of item 5(b) 'Pesticides industry and Pesticide specific intermediates' of the Schedule to the Environment Impact Assessment Notification, 2006, and requires appraisal at central level by the sectoral EAC in the Ministry.

Standard ToR for the project was granted on 2nd March, 2019. Public hearing for the project was conducted by the State Pollution Control Board on 19th August, 2019. The Public hearing was chaired by the Deputy Commissioner. The issues raised during PH and action plan made by PP were deliberated by the Committee.

Total land area is 8000 m². Green belt will be developed in an area of 33 % i.e. 2640 m² out total area of the project. The estimated project cost is Rs.20 crores. Total capital cost earmarked towards environmental pollution control measures is Rs.170 lakhs and the recurring cost (operation and maintenance) will be about Rs.75 lakhs per annum. Total employment will be 50 nos. of persons as direct (construction phase) & 100 nos. of persons indirect (operation phase).

There are no National parks, Wildlife sanctuaries, Biosphere reserves, Tiger/Elephant reserves, Wildlife corridors, rivers etc. within 10 km from the project site. The details of water bodies within 10 Km area are as under:

Name/ Identity	Aerial distance (within 10 km.), Proposed project location boundary
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Water Bodies	Distance & Direction
1 L Minor	1.85 km E
Rajpur Distributary	1.93 km W
Harsana Distributary	3.82 km SW
Main Drain No. 6	4.50 km W
East Juan Drain	5.10 km SW
Drain No.8	6.56 km S
Nahri Major Distributary	8.56 km SSW
Rohat Drain	9.43 km SWW
Yamuna River	9.68 km NE

Total water requirement will be 157 cum/day out of which 155 cum/day will be met from treated water. 60 KLD treated water from nearby Sewage treatment Plant shall be treated in ETP, MBBR based Biological Treatment, AOP Polishing (to remove recalcitrants)} along with 101 cum/day trade effluent of the unit. This 153 cum/day treated water will pass through a 3 stage RO system.

Effluent of 101 KLD will be treated through ETP, 3-stage RO & MEE. Treated water shall be used in all plant operations. The MEE concentrate will be further dried in ATFD and the resulting salts shall be sent to TSDF. The plant will be based on Zero liquid discharge system.

Power requirement will be 500 kVA proposed to be met from Uttar Haryana Bijli Vitran Nigam (UHBVH). One DG set of 400 kVA capacity will be installed and the same will be used as standby during power failure. Stack (height 30m) will be provided as per CPCB norms.

One coal fired boiler of 2 TPH capacity will be installed. Multi cyclone separator followed by bag filter with a stack height of 30 m will be provided to control the particulate emissions within the statutory limit of 115 mg/Nm³.

Ambient air quality monitoring was carried out at 8 locations (2- Core Zone and 6- Buffer Zone) during December-2018 to February- 2019. The range of concentration as: PM₁₀ (118.8 - 258.4 µg/m³), PM_{2.5} (41.2 - 93.5 µg/m³), NO₂ (24.8 - 43.5 µg/m³), SO₂ (5.4 - 15.2 µg/m³), AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 1.2 µg/m³, 2.46 µg/m³, 0.393 µg/m³ and 1.88 µg/m³ with respect to PM_{2.5}, PM₁₀, SO₂ and NO₂.

The expenditure towards CER for the project would be Rs.60 Lakhs of the project cost as committed by the project proponent. The project proponent has submitted the activity wise revised CER plan.

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components.

The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have recommended for grant of Environmental Clearance (EC).

The EAC, after detailed deliberations, **recommended** the project for grant of environmental clearance, subject to compliance of terms and conditions as under, and general terms of conditions at **Annexure**:-

- (i). Consent to Establish/Operate (CTE/CTO) for the project shall be obtained from the State Pollution Control Board (SPCB) as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.
- (ii). As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.
- (iii). Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.
- (iv). National Emission Standards for Pesticides Manufacturing Industry issued by the Ministry vide G.S.R.446(E) dated 13th June, 2011, as amended from time to time, shall be followed.
- (v). No pesticides/chemicals banned by the Ministry of Agriculture and Farmers Welfare, or having LD₅₀<100 mg/kg shall be produced. Also, no raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used for production of pesticides.
- (vi). No raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used.
- (vii). To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous

emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.

- (viii). Solvent management shall be carried out as follows:
- a) Reactor shall be connected to chilled brine condenser system.
 - b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.
 - c) The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery.
 - d) Solvents shall be stored in a separate space specified with all safety measures.
 - e) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.
 - f) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.
 - g) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.
- (ix). Total fresh water requirement for domestic purpose shall not exceed 5 cum/day to be met from local drinking water supplier. Also, treated water of 60 cum/day by STP shall be met from Rail High Risers Society, Sonipat to cater the water demand of the unit. Prior permission in this regard shall be obtained from the concerned regulatory authority.
- (x). Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system
- (xi). Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps.
- (xii). Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.
- (xiii). The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act, 1989.
- (xiv). The company shall undertake waste minimization measures as below:-
- a) Metering and control of quantities of active ingredients to minimize waste.
 - b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
 - c) Use of automated filling to minimize spillage.
 - d) Use of Close Feed system into batch reactors.
 - e) Venting equipment through vapour recovery system.

- f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xv). The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.
- (xvi). As committed, funds allocation for the Corporate Environment Responsibility (CER) shall be Rs. 60 lakhs of the total project cost. Item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.
- (xvii). Safety and visual reality training shall be provided to employees.
- (xviii). For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- (xix). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms.
- (xx). Occupational health surveillance and urological assessment of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- (xxi). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (xxii). Mitigating measures suggested during process safety and risk assessment studies shall be carried out.

Agenda No. 16.5.6

Proposed New Project for Manufacturing of Pharmaceutical API's and Intermediates with Production Capacity of 413 MT/Month at Plot No. 180, Near SardarChowk, Phase II, GIDC, Vapi – 396185, Gujarat by M/s Punagri Organics and Lifesciences Pvt. Ltd-Consideration of Environmental Clearance

[IA/GJ/IND2/63871/2017, IA-J-11011/176/2017-IA-II(I)]

The project proponent and their accredited consultant M/s. ENPRO Enviro Tech and Engineers Pvt. Ltd, made a detailed presentation on the salient features of the project.

During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for setting up of API's and intermediates manufacturing unit of capacity 413 TPM by M/s Punagri Organics and Lifesciences Pvt. Ltd. in an area of 10556 sqm located at Plot No. 180, Near Sardar Chowk, Phase II, GIDC Vapi, District Valsad (Gujarat).

The project/activity is covered under category A of item 5(f) 'Synthetic Organic Chemicals' of schedule to the Environment Impact Assessment (EIA) Notification, 2006, and requires appraisal at Central level in the Ministry.

The ToR for the project was granted on 4th August, 2017 followed by amendment recommended by the EAC on 27th June, 2019. Public hearing is exempted as per para 7(i), III. Stage (3), (i)(b) of the EIA Notification, 2006, and in accordance with the Ministry's OM dated 27th April 2018, as the project site is located in the notified industrial area.

Total land area for the proposed project is 10,556 sqm. Green belt in an area of 33% i.e., 3484 sqm out of total area of the project. The estimated project cost is Rs.60 crores. Total capital cost earmarked towards environmental pollution control measures is Rs.5 Crores and the recurring cost (operation and maintenance) will be about Rs.2.23 Crores per Annum. Total Employment will be 120 persons as direct & indirect after proposed project.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance of the project site. Daman Ganga River is at a distance of 4.5 km in South direction.

Ambient air quality monitoring was carried out at six locations during 18th September, 2017 to 31st December, 2017 and the baseline data indicates the ranges of concentrations as: PM10 (63.1 – 121.7 µg/m³), PM2.5 (22.9 -58.3 µg/m³), SO₂ (8.6 – 75.7 µg/m³) and NO_x (8.4 – 55.4 µg/m³). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be TSPM -0.57 µg/m³, SO₂ – 1.12 µg/m³, NO_x – 0.35 µg/m³, NH₃ – 0.21 µg/m³, HCl – 0.09 µg/m³, H₂S – 0.05 µg/m³. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

The EAC, during deliberations noted that the project details mentioned in the EIA report were not consistent with that presented during the meeting. The EAC, after detailed deliberations decided to **defer the proposal** for clarification/inputs, in respect of the following: -

- (i) EAC noted that PP has not submitted adequately TOR compliance and PP needs to be resubmit the TOR Compliance adequately.
- (ii) Revised layout plan with 40% greenbelt area.
- (iii) Onsite emergency plan as per MSIHC Rules and occupational health plan.

- (iv) Revised water balance with details of total water and fresh water requirement and reduction in fresh water demand atleast 20%. Also plan to construct RCC tank to collect rain water from the roof top.
- (v) Commitment to install 4 unit of MEE.
- (vi) Baseline data showing higher range and not matching with the CPCB data. Clarification need to be submitted in this regard.
- (vii) Revised prediction of GLC due to the proposed project.
- (viii) The project proponent has not carried out Traffic study as mentioned in the ToR, the same need to be carried out.
- (ix) Details of Bird Sanctuary needs to be recheck within study area.
- (x) Submit plan for storage of hazardous raw material @ 3 day for those available locally and 7 days for imported ones.
- (xi) Details of VOC recovery techniques needs to be submitted so as to achieve 99.7% recovery.

The proposal was accordingly **deferred** for the needful on the above lines.

Agranda No. 16.5.7

Expansion of synthetic organic chemical manufacturing unit by M/s Chemtech Intermediates Pvt Ltd at Plot C1-128/13,14,15,16 GIDC Estate, Nandesari, Distt. Vadodara (Gujarat) - Consideration of Environmental Clearance

[IA/GJ/IND2/126380/2019, IJ-J-11011/456/2019-IA-II(I)]

The project proponent and their consultant M/s Jyoti Om Chemical Research Centre Pvt Ltd (High Court Stay), made a detailed presentation on the salient features of the project.

During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for Expansion of synthetic organic chemical manufacturing unit by M/s Chemtech Intermediates Pvt Ltd. in an area of 3096.85sqm located at Plot C1-128/13,14,15,16 GIDC Estate, Nandesari, Distt. Vadodara (Gujarat).

The project/activity is covered under category A of item 5(f) 'Synthetic Organic Chemicals' of schedule to the Environment Impact Assessment (EIA) Notification, 2006, and requires appraisal at Central level in the Ministry.

The standard ToR for the project was granted on 19th June, 2019. Public hearing is exempted as per para 7(i), III. Stage (3), (i)(b) of the EIA Notification, 2006, and in accordance with the Ministry's OM dated 27th April 2018, as the project site is located in the notified industrial area.

Total land area is 3096.85 sqm. Industry will develop greenbelt in an area of 22 % (681.21 sq.m.) inside and 25% (774.21 sq. m.) out of total area of the project. The estimated project cost is Rs. 11.27 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs 106 lacs and the Recurring cost (operation and maintenance) will be about Rs 257 lacs per annum. Total Employment will be 122 persons.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc within 10 km distance of the project site.

Ambient air quality monitoring was carried out at 9 locations during March 2019 to May 2019. All the sampling locations were monitored for PM10, PM2.5, SO2, NOX, VOC, HCl, Cl2, NH3, HBr, Br2 and CO on 24 hrs. basis to enable the comparison with ambient air quality standards prescribed by the CPCB. Based on data obtained, it could be stated that, during the study period the value of PM10 at monitored locations is ranged between 64-88 µg/m³ while the value PM 2.5 fluctuates in the range of 36-52 µg/m³. The value of SO2 and NOx were observed to be in the range of 13-26 µg/m³ and 10-23 µg/m³ respectively. The values of NH3, HCl, Cl2 and HBr were found in the range of 2-1.2 µg/m³, 1.02 to 0.9 µg/m³ & 2.3 to 1.2 µg /m³. The value of VOC at monitored locations is ranged between 0.2-1.0 ppm. The value of CO at monitored locations is range between 1.8 to 0.6 µg/m³. The average concentration of PM 2.5, SO2 and NOx are within prescribed limit at all locations. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

The EAC, during deliberations noted that the project details mentioned in the EIA report were not consistent with that presented during the meeting. The EAC, after detailed deliberations decided to **return in present form** and PP needs to revise the EIA/EMP Report and submit the clarification/inputs, in respect of the following:-

- (i) Submit action plan as per the Ministry's office memorandum 31st October, 2019 regarding projects located in Critically Polluted Area.
- (ii) EAC noted that TOR compliance is not adequate in EIA/EMP report and need to revise as per the terms of reference granted for the project, and shall conform to Appendix III of the EIA Notification, 2006.
- (iii) Revised layout plan with 40% greenbelt area.
- (iv) Onsite emergency plan as per MSIHC Rules and occupational health plan.
- (v) Revised water balance with details of total water and fresh water requirement and reduction in fresh water demand. Also plan to construct RCC tank to collect rain water from the roof top.

- (vi) The project proponent has not carried out Traffic study as mentioned in the ToR, the same need to be carried out.
- (vii) CER plan @ 3% to be submitted.
- (viii) Carrying capacity of the area needs to be carried out.

Agenda No. 16.5.8

Expansion of Bulk Drugs and Bulk Drug Intermediates manufacturing unit by M/s Apicore Pharmaceuticals Private Limited at Block No. 252-253, Village: Dhobikuwa, Opposite Jain Irrigation, Padra Jambusar Road, Taluka Padra, District Vadodara (Gujarat) - Consideration of Environmental Clearance

[IA/GJ/IND2/127500/2007, J-11011/454/2007-IA-II(I)]

The project proponent and their accredited consultant M/s En-vision Enviro Technologies Pvt. Ltd, made a detailed presentation on the salient features of the project.

During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for Expansion of Bulk Drugs and Bulk Drug Intermediates manufacturing unit by M/s Apicore Pharmaceuticals Private Limited. in an area of 32,000 sqm located at Block No. 252-253, Village Dhobikuwa, Opposite Jain Irrigation, Padra-Jambusar Road, Taluka Padra, District Vadodara (Gujarat).

The project/activity is covered under category A of item 5(f) 'Synthetic Organic Chemicals' of schedule to the Environment Impact Assessment (EIA) Notification, 2006, and requires appraisal at Central level in the Ministry.

The EAC noted that it was requested in the agenda of EAC meeting that Consultant shall come with FAE along with Laboratory person who had monitored/analyzed the environmental parameters samples. However, during meeting the project proponent and their consultant has informed that their EIA coordinator and laboratory person is not present due to some reason. Accordingly, the EAC has **deferred** the proposal.

The proposal is therefore **deferred**.

Agenda No.16.5.9

Expansion of synthetic organic chemical manufacturing unit by M/s Blitzkrieg Organics & Biochemicals Industries at Plot No. 5067, GIDC Industrial Estate, Ankleshwar, District Bharuch (Gujarat) - Consideration of Environmental Clearance

[IA/GJ/IND2/128389/2018, IA-J-11011/403/2019-IA-II(I)]

The project proponent and their accredited consultant M/s. Envirocare Technocrats Pvt. Ltd, made a detailed presentation on the salient features of the project.

During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for Expansion of synthetic organic chemical manufacturing unit by M/s Blitzkrieg Organics & Biochemicals Industries in an area of 1128 sqm located at Plot No. 5067, GIDC Industrial Estate, Ankleshwar, District Bharuch (Gujarat).

The project/activity is covered under category A of item 5(f) 'Synthetic Organic Chemicals' of schedule to the Environment Impact Assessment (EIA) Notification, 2006, and requires appraisal at Central level in the Ministry.

The EAC noted that it was requested in the agenda of EAC meeting that Consultant shall come with FAE along with Laboratory person who had monitored/analyzed the environmental parameters samples. However, during meeting the project proponent and their consultant has informed that their EIA coordinator and laboratory person is not present due to some reason.

The EAC, after detailed deliberations decided to **return in present form** and have asked the PP to revise the Report alongwith following clarification/inputs:-

- (i) Proof to establish that existing unit is operating with proper prior permission and to confirm that unit is not violating the provision contained in EIA Notification, 2006. In this regard PP needs to submit all the old CTE/CTO to verify the violation, if any.
- (ii) TOR compliance is not adequate in EIA/EMP report and need to revise as per the terms of reference granted for the project, and shall conform to Appendix III of the EIA Notification, 2006.
- (iii) PP needs to revise the report as per as per the Ministry's office memorandum 31st October, 2019 regarding projects located in Critically Polluted Area.
- (iv) Revised layout plan with 40% greenbelt area. PP needs to revise the plan.
- (v) Onsite emergency plan as per MSIHC Rules and occupational health plan.
- (vi) ZLD plan needs to be submitted.

Agenda No. 16.5.10

Expansion of Synthetic Organic Chemicals by M/s Chemox International at Plot No.6605, GIDC Estate Ankleshwar, District Bharuch (Gujarat) - Consideration of Environmental Clearance

[IA/GJ/IND2/126408/2015, IA-J-11011/457/2019-IA-II(I)]

The project proponent and their consultant M/s Jyoti Om Chemical Research Centre Pvt Ltd (High Court Stay), made a detailed presentation on the salient features of the project.

During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for expansion of synthetic organic chemical manufacturing unit by M/s Chemox International in an area of 1000 sqm located at Plot No. 6605, GIDC Industrial Estate, Taluka Ankleshwar, District Bharuch (Gujarat).

The EAC noted that it was requested in the agenda of EAC meeting that Consultant shall come with FAE along with Laboratory person who had monitored/analyzed the environmental parameters samples. However, during meeting the project proponent and their consultant has informed that their EIA coordinator and laboratory person is not present due to some reason. Accordingly, the EAC has **deferred** the proposal.

Agenda No. 16.5.11

Expansion of Ethyl Chloride (From Ethyl Alcohol), Ethyl Chloride (From Mixed Solvent of Existing Process), Methyl Chloride (From Methyl Alcohol) & Hydroxy Propyl Methyl Cellulose (HPMC) from 96.54 TPM to 1028.54 TPM at S. No. 303/2, 303/P, 273/2, 275/1 Village: Abrama, Ta: Valsad, District: Valsad, (Gujarat) by M/s Asha Cellulose (I) Pvt Ltd - Consideration of Environmental Clearance [IA/GJ/IND2/118582/2019, J-11011/316/2011-IA II (I)]

The project proponent and their accredited consultant M/s Eco Chem Sales & Services, made a detailed presentation on the salient features of the project.

During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for expansion of Ethyl Chloride (From Ethyl Alcohol), Ethyl Chloride (From Mixed Solvent of Existing Process), Methyl Chloride (From Methyl Alcohol) & Hydroxy Propyl Methyl Cellulose (HPMC) manufacturing unit from 96.54 TPM to 1028.54 TPM by M/s Asha Cellulose (I) Pvt Ltd in an area of 31,874 sqm at S. No. 303/2, 303/P, 273/2, 275/1 Village Abrama, Taluka Valsad, District Valsad, (Gujarat).

The project/activity is covered under category A of item 5(f) 'Synthetic Organic Chemicals' of schedule to the Environment Impact Assessment (EIA) Notification, 2006, and requires appraisal at Central level in the Ministry.

The standard ToR for the project was granted on 18th March, 2019. Public hearing was conducted by the State Pollution Control Board on 20th August, 2019. The Public hearing was chaired by the Collector & District Magistrate.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance of the project site. Auranga River is at a distance of 0.24 km in North direction.

Ambient air quality monitoring was carried out at 8 Nos. locations during December 2018 to February 2019 and the baseline data indicates the ranges of concentrations as: PM10 (62.5–87.3µg/m³), PM2.5 (32.1 – 48.4µg/m³), SO₂ (8.6 – 17.8µg/m³) and NO₂ (13.2 – 23.6µg/m³). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be a. 1.14µg/m³, b. 1.83µg/m³ and 1.70µg/m³ with respect to PM10, Sox and NO_x. The resultant concentrations are within the National Ambient Air Quality Standards. (NAAQS).

The EAC, after detailed deliberations decided to **defer the proposal** for requisite information/inputs, in respect of the following: -

- (i) CRZ map to be submitted to establish the fact whether CRZ is involved in the project. The comments from CRZ division of this Ministry may be obtained.
- (ii) Onsite emergency plan as per MSIHC Rules and occupational health plan.
- (iii) Alternate source of fresh water other than ground water to be submitted.
- (iv) Action Taken Report on non-compliance points in the existing EC conditions to be forwarded by the Regional Office of the Ministry.
- (v) Issues raised during public hearing, response by the project proponent, action plan with budgetary allocation and its time lines needs to be submitted.
- (vi) Committee noted that there is no qualified person in the EMC. PP needs to submit the clarification and appoint the adequate person in the EMC.
- (vii) PP needs to identify the alternate source of water.
- (viii) Details of activities related to CER, as committed @ 5%, needs to be submitted.

The proposal was accordingly **deferred** for the needful on the above lines.

Agenda No.16.5.12

Proposed Expansion of Monochloro Acetic Acid (MCA) plant at Village Atul, District Valsad, Gujarat by M/s Anaven LLP - Reconsideration of Environmental Clearance

[IA/GJ/IND2/79197/2018, IA-J-11011/286/2018-IA-II(I)]

The project proponent and their accredited consultant M/s Kadam Environmental Consultant, made a detailed presentation on the salient features of the project.

The proposal was earlier considered by the EAC in its meeting held during **20-22 November, 2019, 2019**, wherein the EAC, *asked for clarifications and inputs in respect of certain points.*

In response of the same the project proponent has submitted point wise reply as under:

S. No.	<i>clarifications and inputs sought by the EAC</i>	Reply submitted by the project proponent	Remark of the EAC
1.	<i>The Committee noted that there are Schedule I species in the study area. PP needs to prepare the species specific conservation plan along with budgetary allocation and PP to take approval for the Wildlife conservation and management plan from CWLW State Government.</i>	Conservation plan of Indian Peafowl (Schedule species) has been submitted to District Forest Department of Valsad for approval.	EAC deliberated the Plan and found in order.
2.	Issues raised during public hearing, response by the project proponent, action plan with budgetary allocation. Public hearing proceedings to be forwarded by the Member Secretary, SPCB along with complete public hearing/consultation documents	Action plan in respect of each of the observation raised during public hearing has been submitted	EAC found the reply to be satisfactory
3.	<i>Plan for Corporate Environment Responsibility.</i>	The Project proponent has submitted the CER plan of Rs.1.65625 Crores.	The EAC has suggested to increase the CER amount @2% of the project cost. The project proponent has submitted their confirmation that CER for the project would be Rs. 3.31 crores
4.	<i>Revised water balance with reduction in fresh water demand</i>	Earlier in the ToR stage fresh water requirement was 499.4 KLD and	EAC found the reply to be satisfactory

		wastewater generation was 317.9 KLD. Later we considered recycling option by which 186.1 KLD fresh water will be required from 499.4 KLD total water requirement and unit will be ZLD.	
5.	Details of raw material linkage needs to be submitted	Out of four raw materials, two (Hydrogen and Chlorine) will be procured from neighboring industries including Atul Ltd whereas other two (acetic anhydride and acetic acid) will be purchased preferably from indigenous sources.	EAC found the reply to be satisfactory
6.	Incremental GLC values in the EIA/Form 2 were reported to be very lower side, and needs to be redone/confirmed	Proposed project involves increase of 1 no. of DG Set, 4 no. of process stacks (emitting HCL) and additional 80 truck movement. After rechecking the GLC results, it is confirmed that GLC values provided in EIA/Form 2 were correct.	EAC sought clarifications and input on Incremental GLC values in the EIA/Form 2 were reported to be very lower side, and needs to be redone/confirmed. "The Consultant during presentation has confirmed after rechecking, the GLC values provided in EIA /Form 2 were correct" <u><i>This statement of the consultant is not correct and amount to concealing the facts.</i></u> Observations of the EAC are as follows w.r.t. <u>Air quality (data and impact prediction)</u>

			<p>1. The NOx emission rate and PM emission rate from 500 KVA DG Set given in Report (NOx - 0.0203 g/s and PM₁₀ - 0.0023 g/s) are not correct (abnormally low). Normal NOx emission from DG set is greater than 1000 mg/Nm³ and PM emission is greater than 75 mg/Nm³ (Table 4.6) and corresponding emission rates will be much higher. Therefore input data used in air quality modelling is not correct.</p> <p>PM from DG mostly comprises PM2.5, not PM10. (Table 4.6). Therefore impact should be superimposed on baseline level of PM2.5.</p> <p>3. Stack height and its corresponding diameter of process vents given in report needs to be rechecked. (for 45m tall stack, 10 cm diameter seems incorrect as far as Good Engineering Practice is concerned). (Table 4.7) <u>Sub Committee can check during the site visit.</u></p> <p>4. How line source (80 trucks) has been included in point source modelling is not described. (Table</p>
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			<p>4.8 and Table 4.9, column 5 – shows combined for DG flue gas (1 stack), process vents (4 stacks) and vehicular movement- 80 trucks). Model input and output file needs to be provided for checking.</p> <p>5. The emission factor applied for calculating PM, CO, NOx and HC from 80 truck movements is not mentioned in Table 4.8.</p> <p>6. From Figure 3.2- wind rose diagram, it is observed that the predominant wind direction is from NE and E direction. Therefore, the downwind direction will be SW and W wrt the stacks/ process vents. The Maximum GLC will occur 6-10 times distance of stack height (if stack height is 30m, MGLC will occur between 180 m to 300 m distance from the stack).</p> <p>7. No air quality monitoring station has been fixed on SW and W direction of the plant, hence no baseline data was generated in the downwind direction that will be impacted due to emissions from plant. Therefore, impact assessment on air quality due to the project is</p>
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			<p>inconclusive, not done as per standard practice following CPCB guidelines. CPCB guidelines was not followed for selecting the air quality monitoring network (8 stations).</p> <p>8. The ambient air locations mentioned as downwind direction in Table 3.10 with respect to wind rose given in Figure 3.2 and referred in Table 3.6 is not correct.</p> <p>9. The emission concentration applied for Cl₂ is 9 mg/Nm³ and HCL is 20 mg/Nm³ (Table 4.7 column 11 and 13). The concentration seems too low. What is the reference?.</p> <p><u><i>This act of the consultant has been viewed very seriously and it has been found concealing the facts, therefore shall be reported to the NABET/QCI. The consultant to redo the Impact Assessment as per the CPCB guidelines as mentioned at serial no. 7. Including submission of Addendum to AIR ENVIRONMENT w.r.t. serial no. 1-9 as given above.</i></u></p>
7.	Details of land ownership	Lease agreement	EAC found the reply to

	paper needs to be submitted	papers has been submitted	be satisfactory
8.	Onsite emergency plan as per MSIHC Rules needs to be submitted	Onsite emergency plan as per MSIHC rules has been submitted	EAC found the reply to be satisfactory

During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for expansion of Monochloro Acetic Acid (MCA) manufacturing unit from 5100 TPA to 32000 TPA by M/s Anaven LLP in an area of 6630.32 sqm at Village Atul, District Valsad, Gujarat.

The project/activity is covered under category A of item 5(f) 'Synthetic Organic Chemicals' of schedule to the Environment Impact Assessment (EIA) Notification, 2006, and requires appraisal at Central level in the Ministry.

The details of products and capacity as under:

S. No.	Name of Products	Production capacity in MTPA		
		Existing	Proposed	Total
1	Monochloro acetic acid	5100	26900	32000
2	36% HCl	6630	34970	41600
3	HE- Di-chloro and Tri-chloro acetic acid	71.4	376.6	448.0

The standard ToR for the project was granted on 28th October, 2018. Public hearing for the project was conducted by the State Pollution Control Board on 25th June 2019. The Public hearing was chaired by the District Magistrate. The main issues raised during the public hearing are related to employment, air pollution and management of hazardous waste.

Existing land area is 6630.32m². Industry has already developed greenbelt in an area of 9.8 % i.e., 647 sqm. out of total area of the project. Additional 24% greenbelt is developed at Atul Village. The estimated project cost is Rs 187.5 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 2048.24 Lacs and the Recurring cost (operation and maintenance) will be about Rs. 647.95 Lacs per annum. Total Employment will be ~72 persons as direct & indirect after expansion.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance of the project site. River Par flows at a distance of 0.42 km in South West.

Total water requirement is 499.4 m³/day including existing requirement of 84.3 KLD of which fresh water requirement of 186.1m³/day will be met from river Par. Effluent

of 318 quantity will be treated through ETP from that 313.3 KLD will recycled back from RO- MEE. The plant will be Zero Liquid discharge.

Power requirement after expansion will be 1360 KVA(86,10,000 kW/Annum) including existing 217 KVA and will be met from Dakshin Gujarat Vij Company Limited (DGVCL). Existing unit has No DG set, additionally 1 DG set of 500 kVA is used as standby during power failure. Stack (height 10m) will be provided as per CPCB norms to the proposed DG sets.

Ambient air quality monitoring was carried out at 8 locations during December, 2017 to February, 2018 and the baseline data indicates the ranges of concentrations as: PM10 (32-93 $\mu\text{g}/\text{m}^3$), PM2.5 (14-45 $\mu\text{g}/\text{m}^3$), SO2 (6-11 $\mu\text{g}/\text{m}^3$) and NO2 (12- 23 $\mu\text{g}/\text{m}^3$). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.11 $\mu\text{g}/\text{m}^3$, 5.2 $\mu\text{g}/\text{m}^3$ and 1.32 $\mu\text{g}/\text{m}^3$ with respect to PM10, Sox and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

PP reported that permission was granted to M/s Atul Ltd. before EIA notification came into existence and later CCA was split and transferred to Anaven LLP in April 2018. Unit has received CTO from GPCB vide dated 23rd April, 2018.

The expenditure towards CER for the project would be Rs. 3.31 crores of the project cost as committed by the project proponent.

The EAC, after deliberations, noted that the Consultant needs to submit correct information as desired against query at serial no. 6 raised by the EAC. This act of the consultant is treated as concealing the facts and shall be reported to the NABET/QCI. The Committee suggested tha project site may be visited to verify the facts of PH and issues of Air Environment as per EIA report and presentation.

The EAC, after deliberations, recommended that **a sub-Committee may visit the project site** as there are many issues related to PH and accordingly **deferred** the proposal for site visit.

16.6 Any Other

Agenda No. 16.6.1

Addition of 20 MW Turbine and Standby Flare System with Carbon Black Manufacturing Facility at Village Paddhar, Taluka Bhuj, District Kuchchh (Gujarat) by M/s Balkrishna Industries Limited- For Amendment in ToR

[IA/GJ/IND2/134467/2019, IA-J-11011/162/2017-IA-II (I)]

The proposal is for amendment in the term of reference granted by the Ministry vide letter 20th December, 2019 to the project for capacity expansion of CPP from 20 MW

to 40 Mw in Mehsana Asset, Mehsana (Gujarat) in favour of M/s Balkrishna Industries Limited.

The project proponent has requested for amendment in the TOR to exempt public hearing as earlier public hearing was conducted on 26th September, 2017 which is within 3 years and there will be no additional pollution load due to generation of additional power using waste/excess steam. Hence, Amendment in Terms of Reference has been applied for exemption from Public Hearing under Section 7(ii)-a of EIA Notification, 2006.

The EAC, after detailed deliberation, **recommended** for exemption from public hearing as per the provisions contained in para 7 (ii) of EIA Notification, 2006 as earlier public hearing was conducted on 26th September, 2017 which is within 3 years and as informed by the project proponent that there will be no additional pollution load due to generation of additional power using waste/excess steam.

Agenda No. 16.6.2

Development drilling of 406 wells in Mehsana Asset, Mehsana Gujarat by M/s ONGC Ltd. – For amendment in ToR

[IA/GJ/IND2/126188/2019 , J- 11011/352/2016-IA.II(I)]

The proposal is for amendment in the term of reference granted by the Ministry vide letter 15th March, 2017 to the project for development drilling of 406 wells in Mehsana Asset, Mehsana (Gujarat) in favour of M/s ONGC Ltd.

The project proponent has requested for amendment in the TOR with the details are as under:-

S. No.	Para of TOR issued by MoEF&CC	Details as per the TOR	To be revised/read as	Justification/reasons
1	Subject of the TOR:- Development drilling of 406 wells in Mehsana Asset, Mehsana, Gujarat in favour of M/s ONGC Ltd.	Development drilling of 406 wells in Mehsana Asset, Mehsana, Gujarat of M/s ONGC Ltd.	Development drilling of 406 wells located in four districts i.e. Mehsana, Ahmedabad, Gandhinagar and Patan of Mehsana Asset, Mehsana, Gujarat of M/s	As per directions of Gujarat Pollution Control Board, Gandhinagar office, amendment of existing TOR is required to conduct public hearings in all four districts viz. Mehsana, Patan, Ahmedabad & Gandhinagar and complete the process of obtaining EC.

			ONGC Ltd.	
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During presentation the project proponent has also requested for validity extension of ToR dated 15th March, 2017 for one more year.

The EAC, after detailed deliberation, **recommended** the amendment in ToR as proposed above. The EAC has also **recommended for validity extension of ToR** dated 15th March, 2017 for one more year i.e. till 15th March, 2021.

[DAY 3: 23rd January 2020 \(Thursday\)](#)

DAY 3: 23rd January 2020 (Thursday)

16.7 Consideration of Environmental Clearance

Agenda No. 16.7.1

Setting up of technical grade pesticides manufacturing unit by M/S Bonageri Life Science Limited located at Plot No. 546/A, Belur Industrial Area, Dharwad, (Karnataka)- Consideration of Environmental Clearance

[IA/KA/IND2/88463/2018, IA-J-11011/410 /2018-IA-II(I)]

The project proponent and their consultant M/s. Wolkem India Limited, made a detailed presentation on the salient features of the project.

During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for setting up technical grade pesticides manufacturing unit of capacity 5000 TPA by M/S Bonageri Life Science

Limited in an area of 13741 sqm located at Plot No. 546/A, Belur Industrial Area, Belur, District Dharwad (Karnataka).

The details of products and capacity are as under:

S. No.	Product	Proposed capacity(MTPA)
1.	Chlorpyrifos	100
2.	Paclobutrazol	50
3.	Thiram	50
4.	Ziram	50
5.	Glyphosate	50
6.	Fipronil	50
7.	Difenoconazole	50
8.	Chlorothalonil	50
9.	Bispyribac Sodium	50
10.	Tebuconazole	50
11.	Myclobutanil	50
12	Aluminium Phosphide	1500
13	Zinc Phosphide	600
14	Lambdacylothrins Acid & TC	300
15	2,4 D Amine Salt TC	2000
	Total	5000

The project/activities are covered under category A of item 5(b) 'Pesticides industry and Pesticide specific intermediates' of the Schedule to the Environment Impact Assessment Notification, 2006, and requires appraisal at central level by the sectoral EAC in the Ministry.

Standard ToR for the project was granted on 14th January, 2019. Public hearing is exempted as per para 7(i), III. Stage (3), (i)(b) of the EIA Notification, 2006, and in accordance with the Ministry's OM dated 27th April 2018, as the project site is located in the notified industrial area.

Total land area is 13741 sqm. Green belt will be developed in an area of 33.18 % area of the project site. The estimated project cost is Rs.12 crores. Total capital cost earmarked towards environmental pollution control measures is Rs.40 lacs and the recurring cost (operation and maintenance) will be about Rs.10.3 lacs per annum. Total Employment will be 85 persons as direct.

There are no National parks, Wildlife sanctuaries, Biosphere reserves, Tiger/Elephant reserves, Wildlife corridors, rivers etc. within 10 km from the project site.

Total water requirement is 52 m³/day of which fresh water requirement of 25m³/day will be met from Malaprabha river. Effluent of 28 KLD quantity will be treated through ETP. The plant will be based on Zero Liquid discharge system (if applicable). Power requirement for proposed project will be 750 kVA from Karnataka State power distribution corporation limited (...SPDCL). 2 nos. of DG sets of 62.5 kVA capacity, used as standby during power failure. Stack (height 30 m) will be provided as per CPCB norms to the proposed DG sets.

Unit will be proposed 2TPH Rice Husk briquette fired boiler. Multi cyclone separator/bag filter with a stack of height of 30 m will be installed for controlling the particulate emissions within the statutory limit of 115mg/Nm³ for the proposed boilers.

Ambient air quality monitoring was carried out at 8 locations during 1st March 2018 to 30th May 2018 and the baseline data indicates the ranges of concentrations as: PM₁₀ (67.02 to 54.28µg/m³), PM_{2.5} (39.86 to 31.07 µg/m³), SO₂ (9.47 to 7.08µg/m³) and NO₂ (23.59 to 13.22µg/m³). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 1.6µg/m³, 0.4µg/m³ and 1.2µg/m³ with respect to PM₁₀, SO_x and NO_x. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

The expenditure towards CER for the project would be 3% of the total project cost as committed by the project proponent.

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components.

The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have recommended for grant of Environmental Clearance (EC).

The EAC, after deliberations, **recommended** the project for grant of environmental clearance, subject to compliance of terms and conditions as under:-

- (i) Necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, shall be obtained from the State Pollution Control Board.
- (ii) As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.
- (iii) Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.
- (iv) National Emission Standards for Pesticides Manufacturing Industry issued by the Ministry vide G.S.R.446(E) dated 13th June, 2011, as amended from time to time, shall be followed.
- (v) No pesticides/chemicals banned by the Ministry of Agriculture and Farmers Welfare, or having LD₅₀<100 mg/kg shall be produced. Also, no raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used for production of pesticides.
- (vi) No raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used.
- (vii) To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- (viii) Solvent management shall be carried out as follows:
 - (a) Reactor shall be connected to chilled brine condenser system.
 - (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.
 - (c) The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery.
 - (d) Solvents shall be stored in a separate space specified with all safety measures.

- (e) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.
 - (f) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.
 - (g) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.
- (ix) Total fresh water requirement shall not exceed 25m³/day proposed to be met from Malaprabha river. Prior permission in this regard shall be obtained from the concerned regulatory authority.
- (x) Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system.
- (xi) Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps.
- (xii) Fluidized bed combustion technique shall be adopted in the boiler.
- (xiii) Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.
- (xiv) The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act, 1989.
- (xv) The company shall undertake waste minimization measures as below:-
- (a) Metering and control of quantities of active ingredients to minimize waste.
 - (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
 - (c) Use of automated filling to minimize spillage.
 - (d) Use of Close Feed system into batch reactors.
 - (e) Venting equipment through vapour recovery system.
 - (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xvi) The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department

- (xvii) 50000 Number of trees shall be planted around the vicinity of the plant/ transportation route of 2.5 km and their status report should be submitted along with the certified compliance report.
- (xviii) As committed, funds allocation for the Corporate Environment Responsibility (CER) shall be 3% of the total project cost. Item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.
- (xix) Safety and visual reality training shall be provided to employees.
- (xx) For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- (xxi) The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms.
- (xxii) Occupational health surveillance and urological assessment of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- (xxiii) Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (xxiv) Mitigating measures suggested during process safety and risk assessment studies shall be carried out.

Agenda No. 16.7.2

Onshore Oil and Gas Exploration and Appraisal in CB-ONHP-2017/3 block in Bharuch district of Gujarat by M/s Vedanta Limited(Division Cairn Oil & Gas) - Consideration of Environmental Clearance.

[IA/GJ/IND2/99849/2019, J-11011/100/2019-IA-II(I)]

The EAC before initiating the presentation and discussion has informed the project proponent that, after receipt of references requesting for exemption from requirement of prior environmental clearance under the provisions of the EIA Notification, 2006 for exploration drilling in respect of on-shore and off-shore oil and gas, the Ministry has, issued a Notification S.O. 236(E) dated 16th January, 2020 mentioning that "**All project in respect of off-shore and onshore oil and gas exploration are categorized as 'B2' projects**". Accordingly, now, only projects in respect of off-shore and onshore oil and gas development and production except exploration, are listed at Category A, requiring appraisal at the Central by the Expert Appraisal Committee. The proposed

project of the project proponent requires appraisal as category B2 by the concerned Committee.

In response, the project proponent has informed the Committee that their proposal is for exploration and appraisal which involves early production and is not covered under category B2 and requires appraisal by the EAC.

Thereafter, the Committee has agreed to hear the presentation. The project proponent and their accredited consultant M/s. ABC Techno Labs India Pvt. Ltd., made a detailed presentation on the salient features of the project.

During deliberations, the EAC noted the following:

The proposal is for environmental clearance to the project for Onshore Oil and Gas Exploration and Appraisal by M/s Vedanta Limited (Division Cairn Oil & Gas) in CB-ONHP-2017/3 block in District Bharuch (Gujarat).

The project/activity is covered under category 'A' of item 1(b) of the Schedule to the EIA Notification, 2006, and requires appraisal at central level by EAC in the Ministry.

Terms of Reference (ToR) for the project was granted on 20th April, 2019. Public Hearing for the proposed project has been conducted by the Gujarat State Pollution Control Board on 18th October 2019. The main issues raised during the public hearing are related to CSR implementation, Employment Generation, Land Requirement.

Total land requirement will be 300 m x 300 m for each well pad, approach road and for installing Early Production Unit (EPU) / Quick Production Unit (QPU). The estimated project cost is Rs.315.42 crore.

The Committee observed that as per the Form 1/PFR, Form 2/EIA&EMP and public hearing report submitted by the project proponent, it appears that the project is for exploration and no commercial production has been envisaged. The project proponent has obtained PEL for exploratory activities and no PML has been obtained. The cost of the project, facilities/utilities proposed in the project, air/water quality parameters, impacts assessed in the EIA report, EMP report prepared for the projects considered only exploration and appraisal activity, and no commercial development and production of oil and gas.

*The Committee after detailed deliberations, in the first instant was not inclined to accept the proposals considering Ministry's Notification dated 16th January, 2020 for streamlining the project consideration and OM's/guidelines regarding appraisal of projects of category A/B, as the instant project requires appraisal under 'category B2' project by the concerned authority. **However, considering the submissions of the project proponent, the EAC has agreed for deliberations, however desired for requisite information/input on the following for further consideration of the proposal:***

- (i) The Committee mentioned that Seismic exploration is important steps to search the commercially economic subsurface deposits of crude oil, natural gas and

minerals by the recording, processing, and interpretation of artificially induced shock waves in the earth. The Committee noted that PP has not still completed the Seismic Exploration Study in the allocated Block. PP has to fasten the Seismic Exploration Study to achieve the objective of this Project.

- (ii) Justification/clarity from Director General of Hydrocarbon regarding categorization of the present project, requirement for PEL/PML for production, etc.
- (iii) Comments from Director General of Hydrocarbon on the justification submitted by the project proponent against Ministry's Notification dated 16th January, 2020 and permission for production activity in the PEL as per the Revenue Contract Agreement.
- (iv) Addendum to the EIA/EMP report considering all the impacts and mitigation measures for Development and Production, in all terms, as proposed by the project proponent. The PP needs to revise the Report accordingly.
- (v) All the Permission received from the concerned authorities for development and production in the PEL(i.e. from MoPNG, DGH, State Govt., etc) needs to be submitted.
- (vi) Information regarding the public consultation vis-à-vis proposed development and production and clarification from SPCB needs to be submitted.
- (vii) The Committee noted that the block has the forest area and PP has not applied for Stage I FC. In this regard, FC Division of the Ministry may be consulted regarding the requirement of forest clearance for the project due to presence of forest area in the block in view of order of Hon'ble Supreme Court (Lafarge case).

The proposal was accordingly deferred for the needful.

Agenda No.16.7.3

Onshore Oil and Gas Exploration and Appraisal in CB-ONHP-2017/2 block in Jambasur Taluk, Bharuch District, Gujarat by M/s Vedanta Limited(Division Cairn Oil & Gas)- Consideration of Environment Clearance

[IA/GJ/IND2/99828/2019, IA-J-11011/98/2019-IA-II(I)]

The EAC before initiating the presentation and discussion has informed the project proponent that, after receipt of references requesting for exemption from requirement of prior environmental clearance under the provisions of the EIA Notification, 2006 for exploration drilling in respect of on-shore and off-shore oil and gas, the Ministry has, issued a Notification S.O. 236(E) dated 16th January, 2020 mentioning that "**All project in respect of off-shore and onshore oil and gas exploration are categorized as 'B2' projects**". Accordingly, now, only projects in respect of off-shore and onshore oil and gas development and production except exploration, are listed at Category A, requiring appraisal at the Central by the Expert Appraisal Committee. The proposed

project of the project proponent requires appraisal as category B2 by the concerned Committee.

In response, the project proponent has informed the Committee that their proposal is for exploration and appraisal which involves early production and is not covered under category B2 and requires appraisal by the EAC.

Thereafter, the Committee has agreed to hear the presentation. The project proponent and their accredited consultant M/s. ABC Techno Labs India Pvt. Ltd., made a detailed presentation on the salient features of the project.

During deliberations, the EAC noted the following:

The proposal is for environmental clearance to the project for Onshore Oil and Gas Exploration and Appraisal by M/s Vedanta Limited (Division Cairn Oil & Gas) in CB-ONHP-2017/2 block in District Bharuch (Gujarat).

The project/activity is covered under category 'A' of item 1(b) of the Schedule to the EIA Notification, 2006, and requires appraisal at central level by EAC in the Ministry.

Total land requirement will be 300 m x 300 m for each well pad, approach road and for installing Early Production Unit (EPU) / Quick Production Unit (QPU).

The Committee observed that as per the Form 1/PFR, Form 2/EIA&EMP and public hearing report submitted by the project proponent, it appears that the project is for exploration and no commercial production has been envisaged. The project proponent has obtained PEL for exploratory activities and no PML has been obtained. The cost of the project, facilities/utilities proposed in the project, air/water quality parameters, impacts assessed in the EIA report, EMP report prepared for the projects considered only exploration and appraisal activity, and no commercial development and production of oil and gas.

*The Committee after detailed deliberations, in the first instant was not inclined to accept the proposals considering Ministry's Notification dated 16th January, 2020 for streamlining the project consideration and OM's/guidelines regarding appraisal of projects of category A/B, as the instant project requires appraisal under 'category B2' project by the concerned authority. **However, considering the submissions of the project proponent, the EAC has agreed for deliberations, however desired for requisite information/input on the following for further consideration of the proposal:***

- (i) The Committee mentioned that Seismic exploration is important steps to search the commercially economic subsurface deposits of crude oil, natural gas and minerals by the recording, processing, and interpretation of artificially induced shock waves in the earth. The Committee noted that PP has not still completed the Seismic Exploration Study in the allocated Block. PP has to fasten the Seismic Exploration Study to achieve the objective of this Project.

- (ii) Justification/clarity from Director General of Hydrocarbon regarding categorization of the present project, requirement for PEL/PML for production, etc.
- (iii) Comments from Director General of Hydrocarbon on the justification submitted by the project proponent against Ministry's Notification dated 16th January, 2020 and permission for production activity in the PEL as per the Revenue Contract Agreement.
- (iv) Addendum to the EIA/EMP report considering all the impacts and mitigation measures for Development and Production, in all terms, as proposed by the project proponent. The PP needs to revise the Report accordingly.
- (v) All the Permission received from the concerned authorities for development and production in the PEL (i.e. from MoPNG, DGH, State Govt., etc) needs to be submitted.
- (vi) Information regarding the public consultation vis-à-vis proposed development and production and clarification from SPCB needs to be submitted.
- (vii) The Committee noted that the block has the forest area and PP has not applied for Stage I FC. In this regard, FC Division of the Ministry may be consulted regarding the requirement of forest clearance for the project due to presence of forest area in the block in view of order of Hon'ble Supreme Court (Lafarge case).

The proposal was accordingly deferred for the needful.

Agenda No.16.7.4

Expansion of Synthetic Organic Chemicals manufacturing unit by M/s Cab Chemicals at Plot No. 221 - 222, GIDC Industrial Estate, Taluka Ankleshwar District Bharuch (Gujarat) - Consideration of Environment Clearance.

[IA/GJ/IND2/128116/2019, IA-J-11011/421/2019-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Envirocare Technocrats Pvt. Ltd., made a detailed presentation on the salient features of the project .

During deliberations, the EAC noted the following:

The proposal is for environmental clearance to the project for expansion Synthetic Organic Chemicals manufacturing unit from 17.5 TPM to 62.5 TPM M/s Cab Chemicals in an area of 1406 sqm at Plot No. 221 - 222, GIDC Industrial Estate, Taluka Ankleshwar District Bharuch, Gujarat.

The project/activity is covered under category B of item 5(f) 'Synthetic Organic Chemicals' of schedule to the Environment Impact Assessment (EIA) Notification, 2006,

and requires appraisal at State level. However being the project is located inside the Critically polluted area, the project appraised at Central level in the Ministry

Terms of Reference (ToR) for the project was granted by the SEIAA, Gujarat vide letter No. SEIAA/GUJ/TOR/1054/2019 dated 12th July, 2019. Public hearing is exempted as per para 7(i), III. Stage (3), (i)(b) of the EIA Notification, 2006, and in accordance with the Ministry's OM dated 27th April 2018, as the project site is located in the notified industrial area.

The EAC noted that it was requested in the agenda of EAC meeting that Consultant shall come with FAE along with Laboratory person who had monitored/analyzed the environmental parameters samples. However, during meeting the project proponent and their consultant has informed that their EIA coordinator and laboratory person is not present due to some reason. Accordingly, the EAC has deferred the proposal.

The proposal is therefore **deferred**.

Agenda No. 16.7.5

Expansion of molasses/grain based Distillery from 60 KLD to 120 KLD and Cogeneration power from 1.2 Mw to 6.2 MW by M/s Shamanur Sugars Limited at Survey Nos. 234/235/112/113/114, village Duggavathi, Taluk Harapanahalli, District Davanagere (Karnataka)- Consideration of Environment Clearance.

[IA/KA/IND2/131365/2019, J-11011/91/2008-IA-II(I)]

The project proponent and their accredited consultant M/s Samrakshan made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project for expansion of molasses/grain based Distillery from 60 KLD to 120 KLD and Cogeneration power from 1.2 Mw to 6.2 MW by M/s Shamanur Sugars Limited at Survey Nos. 234/235/112/113/114, village Duggavathi, Taluk Harapanahalli, District Davanagere, Karnataka.

The project/activity is covered under category A of item 5 (g) 'Distilleries' of the Schedule to the EIA Notification, 2006, and requires appraisal at central level by the sectoral EAC in the Ministry.

Ministry had issued earlier EC on 9th April, 2008 to the existing project of 60 KPLD Molasses and Grain Based Distillery and 1.2 MW captive Cogeneration power plant.

The details of products and capacity as under:

S. No.	Product	Existing	Proposed	Total

1	a. Sugar	2500 TCD	Nil	2500 TCD
	b.Co- generation	22 MW	Nil	22 MW
2	Distillery	60 KLPD (Molasses based or grain based)	60 KLPD (Molasses Based)	120 KLPD (60 KLPD molasses and 60 KLPD grain based or 120 KLPD Molasses based)
3	Distillery Co-Gen	1.2 MW	5.0 MW	6.2 MW
Total		Distillery and Co-Gen capacity after expansion		120 KLPD and 6.2 MW

Existing land area is 183565.41 m², no additional land will be required for proposed expansion. Industry has already developed greenbelt in an area of 33% i.e., 65300 m² out of total area of the project. The estimated project cost is Rs 269 crores including existing investment of Rs 168 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 2.2 crores and the Recurring cost (operation and maintenance) will be about Rs.2.06 crores per annum. Total Employment will be 100 persons as direct & 20 persons indirect after expansion.

The Rannebennur Black Buck Sanctuary is at a distance of 6.5 km from the project site. Tungabhadra river flows at 3.5km in west direction. The EAC noted that the EC was granted in 2008 however at that time there was no mention any condition related to NBWL clearance. Also, it is noted that the project proponent has operated the plant between 2009 to 2017 without obtaining prior NBWL clearance from the standing committee of the NBWL. At present the Ministry has notified the ESZ Notification on 6th July, 2017 and as per the Ministry's OM dated 8th August, 2019, the project located outside the ESZ boundary, clearance from standing Committee of the NBWL may not be applicable now.

Total water requirement is 1660 m³/day of which fresh water requirement of 686 m³/day proposed to be met from River Tungabhadra. The permission for water withdrawal has been obtained from Irrigation Department, G.O.K for 1000KLD.

Effluent of 960 m³/day spent wash & 1201 m³/day other effluents(condensate, spent lees, boiler blowdown, cooling tower blow down & RO reject) will be treated through MEE (spent wash concentrated in MEE and used as fuel for Incineration Boiler) remaining effluent will be treated in CPU viz., Biological ETP & RO). The plant will be based on Zero Liquid discharge system.

Power requirement after expansion will be 6200 kW including existing 1015 kW and will be met from Captive power. Existing unit has 2 DG sets of 500 KVA capacity, No additional DG set will be required for proposed expansion.

Existing unit has 16 TPH concentrated spent wash fired boiler. Additionally 46 TPH concentrated spent along with paddy husk or coal fired boiler will be installed. Electrostatic Precipitator with a stack of height of 73 m will be installed for controlling the particulate emissions within the statutory limit of 115 mg/Nm³ for the proposed boilers.

The certified compliance report dated 31st January, 2019 forwarded by the Ministry's Regional office at Bangalore. The Committee deliberated the compliance status of earlier EC and found the same to be satisfactory. PP is reported that there is no Litigation Pending against the proposal.

The EAC also noted that the Ministry vide Notification No. S.O. 345(E) dated 17th January 2019, published certain relaxation in procedure for grant of environmental clearance for such units propose to produce ethanol under EBP program. One of the provision is to consider the applications seeking prior environmental clearance for production of ethanol as B2 project for appraisal under the EIA notification, 2006. The project proponent has submitted affidavit on 23rd January, 2020 wherein it is mentioned that they have applied to the Ministry of Petroleum and Natural gas for issuing certificate that proposed product of ethanol from 60 to 120 KLD is for the purpose of blending bioethanol with petrol. M/s IOCL, HPCL and BPCI have been procuring ethanol from this unit for blending with petrol.

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form. The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the report. If any part of data/information submitted is found to be false/misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have recommended for grant of Environmental Clearance (EC).

The EAC, after detailed presentation noted that the proposal has been submitted as per Ministry's Notification dated 17th January, 2019, for expediting production of Ethanol for its limited purpose of blending with petrol exclusively for its usage as bio-fuel and considered under category B2 projects specified in the EIA Notification, 2006.

*The EAC, after deliberations, **recommended** the project for grant of environmental clearance under category B2 providing exemption from public hearing and preparation of EIA report, subject to compliance of terms and conditions as under:-*

- (i) Grain unfit for human consumption shall only be used for industrial operations.

- (ii) The project proponent has submitted affidavit on 23rd January, 2020 wherein it is mentioned that they have applied to the Ministry of Petroleum and Natural gas for issuing certificate that proposed product of ethanol from 60 to 120 KLD for the purpose of blending bioethanol with petrol. M/s IOCL, HPCL and BPCI have been procuring ethanol from this unit for blending with petrol. This EC is subject to obtaining certificate from the Ministry of Petroleum and Natural Gas.
- (iii) Necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, shall be obtained from the State Pollution Control Board as required.
- (iv) As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. The reuse of treated effluent in gardening/ horticulture shall not be considered as ZLD.
- (v) Concentrated spent wash shall be incinerated and not to be released in open space.
- (vi) Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.
- (vii) To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- (viii) Odour shall be prevented at the source and effective odour management scheme shall be implemented.
- (ix) Total fresh water requirement shall not exceed 686 m³/day proposed to be met from River Tungabhadra. Prior permission shall be obtained from the concerned regulatory authority/CGWA.
- (x) Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm and the solvent transfer through pumps.
- (xi) Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.
- (xii) The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.
- (xiii) The company shall undertake waste minimization measures as below:-
 - (a) Metering and control of quantities of active ingredients to minimize waste.

- (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
 - (c) Use of automated filling to minimize spillage.
 - (d) Use of Close Feed system into batch reactors.
 - (e) Venting equipment through vapour recovery system.
 - (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xiv) The green belt of 5-10 m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.
- (xv) As committed, funds allocation for the Corporate Environment Responsibility (CER) shall be 1.5% of the total project cost. Item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.
- (xvi) For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- (xvii) The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.
- (xviii) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- (xix) There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places.
- (xx) Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (xxi) Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For ZLD, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises. For continuous discharge the unit shall install pH, TSS, BOD,COD and flow meter at the ETP outlet.
- (xxii) CO₂ generated from the process shall be bottled/made solid ice and sold to authorized vendors.
- (xxiii) The project proponent shall strictly comply the sector specific conditions as mentioned in the Ministry's Office Memorandum No. 22-34/2018-IA.III, dated 9th August, 2018. The said OM is available at the Ministry's website (PARIVESH portal i.e. www.parivesh.nic.in). The grant of Environmental Clearance is further subject

to compliance of generic conditions as mentioned in the Ministry's Office Memorandum No. 22-34/2018-IA.III, dated 9th August, 2018.

Agenda No.16.7.6

Setting up of pharmaceutical bulk drugs & intermediates manufacturing unit of capacity 43.20 TPM by M/s Livmore Life Sciences Private Limited located at Survey No. 424, 431, village Ganpatpura taluka Karjan, District Vadodara (Gujarat) - Consideration of Environment Clearance.

[IA/GJ/IND2/90366/2019 , IA-J-11011/5/2019-IA-II(I)]

The project proponent and the accredited consultant M/s Envisafe Environment Consultants, made a detailed presentation on the salient features of the project.

During deliberations, the EAC noted the following:

The proposal is for environmental clearance to the project for setting up of pharmaceutical bulk drugs & intermediates manufacturing unit of capacity 43.20 TPM by M/s Livmore Life Sciences Private Limited in an area of 28,567 sqm located at Survey No. 424, 431, village Ganpatpura taluka Karjan, District Vadodara (Gujarat)

The project/activity is covered under category 'A' of item 5(f) of the Schedule to the EIA Notification, 2006, and requires appraisal at central level by EAC in the Ministry.

Terms of reference (ToR) for the project was granted on 4th February, 2019. Public hearing for the proposed project has been conducted by Gujarat Pollution Control Board on 18th October, 2019.

The EAC noted that it was requested in the agenda of EAC meeting that Consultant shall come with FAE along with Laboratory person who had monitored/analyzed the environmental parameters samples. However, during meeting the project proponent and their consultant has informed that their EIA coordinator and laboratory person is not present due to some reason. Accordingly, the EAC has deferred the proposal.

The proposal is therefore **deferred**.

Agenda No. 16.7.7

Setting up Dyes intermediates & Pharmaceuticals manufacturing unit of capacity 36 TPM by M/s Rishabh Dye Chem Industries at Plot No.223, GIDC Industrial Estate, GIDC Ankleshwar, District Bharuch (Gujarat) - Consideration of Environment Clearance.

[IA/GJ/IND2/127752/2018, IA-J-11011/435/2019-IA-II(I)]

The project proponent and the accredited consultant M/s. Envirocare Technocrats Pvt. Ltd, made a detailed presentation on the salient features of the project.

During deliberations, the EAC noted the following:

The proposal is for environmental clearance to the project for Setting up Dyes intermediates & Pharmaceuticals manufacturing unit of capacity 36 TPM by M/s Rishabh Dye Chem Industries in an area of 704 sqm at Plot No.223, GIDC Industrial Estate, Taluka Ankleshwar, District Bharuch (Gujarat).

The project/activity is covered under category B of item 5(f) 'Synthetic Organic Chemicals' of schedule to the Environment Impact Assessment (EIA) Notification, 2006, and requires appraisal at State level. However being the project is located inside the Critically polluted area, the project appraised at Central level in the Ministry

Terms of Reference (ToR) for the project was granted by the SEIAA, Gujarat vide letter No. SEIAA/GUJ/TOR/5(f)/291/2019 dated 4th February, 2019. Public hearing is exempted as per para 7(i), III. Stage (3), (i)(b) of the EIA Notification, 2006, and in accordance with the Ministry's OM dated 27th April 2018, as the project site is located in the notified industrial area.

The EAC noted that it was requested in the agenda of EAC meeting that Consultant shall come with FAE along with Laboratory person who had monitored/analyzed the environmental parameters samples. However, during meeting the project proponent and their consultant has informed that their EIA coordinator and laboratory person is not present due to some reason. Accordingly, the EAC has deferred the proposal.

The proposal is therefore **deferred**.

Agenda No.16.7.8

Expansion of Viscose Staple Fibre (1,44,175 TPA to 2,33,600 TPA), Sulphuric Acid (1,47,825 TPA to 2,20,825 TPA), Captive Power Plant (30 MW to 55 MW) along with production of Solvent Spun Cellulosic Fibre (36,500 TPA) at Village - Mehatwas, Birlagram, Tehsil - Nagda, District - Ujjain (Madhya Pradesh) by M/s Grasim Industries Ltd. (Staple Fibre Division) - Consideration of Environmental Clearance.

[IA/MP/IND2/58856/2016, J- 11011/322/2016-IA.II(I)]

The project proponent and the accredited consultant M/s J.M. Enviro Net Pvt. Ltd., made a detailed presentation on the salient features of the project.

During deliberations, the Committee noted the following:

The proposal is for environmental clearance to the project for expansion of Viscose Staple Fibre (1,44,175 TPA to 2,33,600 TPA), Sulphuric Acid (1,47,825 TPA to 2,20,825 TPA), Captive Power Plant (30 MW to 55 MW) along with production of Solvent Spun Cellulosic Fibre (36,500 TPA) by M/s Grasim Industries Ltd. (Staple Fibre Division) in an area of 196.08 at Village Mehatwas, Birlagram, Tehsil Nagda, District Ujjain (Madhya

Pradesh).

The details of existing/proposed products are as under:-

S. No.	Name of Products (Units)	Existing	Additional	Total
1.	Viscose Staple Fibre (TPA)	1,44,175	89,425*	2,33,600
2.	Solvent Spun Cellulosic Fibre (TPA) (Excel Fibre)	Nil	36,500	36,500
3.	Sulphuric Acid (TPA)	1,47,825	73,000	2,20,825
4.	Carbon-Disulphide (TPA)	31,025	No change	31,025
5.	Sodium Sulphate (By-Product) (TPA)	93,714	67,500	1,61,214**
6.	Captive Power Plant (MW)	30	25	55

**Out of the proposed capacity of VSF i.e. 89,425 TPA; 16,425 TPA will be done by Debottlenecking and 73,000 TPA by installation of new machines.*

****Total Capacity may vary from 1,61,214 to 1,86,814 TPA depending on the recovery of Sodium Sulphate as per Specific ToR Point No. (ix)**

The project/activity is covered under category A of item 5(d) 'Manmade Fibre manufacturing unit and 1(d) 'Thermal Power plant' of the schedule to the Environment Impact Assessment (EIA) Notification, 2006 under category 'A' and requires appraisal/approval at Central level in the Ministry.

The terms of reference for the project was granted on 17th February, 2017. Public Hearing for the proposed expansion project was conducted by State Pollution Control Board on 5th September, 2019. The Public hearing was chaired by the ADM, Ujjain. The main issue raised during the public hearing is related to Employment, Environmental (Air & Water) pollution, Effluent discharge, CSR etc. The Project Proponent has submitted the action plan on the issues raised during PH. The Committee deliberated the action plan and found in order.

Total project area is 196.08 ha (1960800 m²) (out of which 127.53 ha is Plant & Colony area and remaining 68.55 ha is captive air strip and other facilities outside the plant premises). No additional land will be required for proposed expansion as the same will be done within existing area. Approx. 77.04 ha of total plant area i.e. 127.53 ha has already been developed under greenbelt, plantation and landscaping. The estimated project cost for expansion project is Rs. 2500 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 123 Crores and the recurring cost (operation and maintenance) will be about Rs. 24 Crores/ annum. Total Employment after expansion will be 6,486 persons as direct and 500 persons indirect after expansion.

There is no National Park, Wildlife Sanctuary, Biosphere Reserve, Tiger/Elephant Reserve, and Wildlife Corridor within 10 km distance from the project site. Dam on Chambal River (adjacent to plant site in W direction), Chambal River flows at 0.1 km in West and Bangeri Nadi flows at 1 km in West.

Total water requirement after expansion will be 49,158 m³/day of which fresh water requirement of 15,450 m³/day is being/will be met from Chambal River and remaining 33,708 m³/day is being/will be met from Recycled water. Effluent of 12,500m³/day quantity is being/ will be treated in Effluent Treatment Plant. The plant will be based on Zero Liquid discharge system after January, 2021. The committee suggested to achieve ZLD with this expansion project, PP agreed with it.

Power requirement after expansion will be 55 MW including existing 30 MW and will be met from Captive Power plant (55 MW). Existing unit has 3 nos. 75TPH (each) coal fired boilers. Additionally, 2 nos. 100 TPH (each) coal fired boilers will be installed. ESP with stack height of 125m will be installed for controlling the particulate emissions within the statutory limit for proposed boilers.

Ambient air quality monitoring was carried out at 8 locations during Winter Season (Dec., 2016 to Feb., 2017) and the baseline data indicates the ranges of concentrations as: PM₁₀ (63.2 to 90.1 µg/m³), PM_{2.5} (28.2 to 47.4 µg/m³), SO₂ (7.3 to 36.2 µg/m³), NO_x (12.6 to 30.1 µg/m³), CS₂ (<6.0 to 27.8 µg/m³), H₂S (<1.0 to 23.4 µg/m³) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed expansion project would be 0.24 µg/m³, 2.31 µg/m³, 0.12 µg/m³, 13.38 µg/m³, 4.04 µg/m³, 0.24 with respect to PM, SO₂, NO₂, CS₂ & H₂S. The resultant concentration of PM is within the National Ambient Air Quality Standards (NAAQS). The Committee deliberated the data.

The expenditure towards CER for the project would be Rs. 25 crore of the project cost as committed by the project proponent.

The existing unit is operating prior to EIA Notification, 2006 on Consent to Operate basis and no prior environmental clearance was required at that time for operation, accordingly, no Certified compliance report for the existing operation is required.

Details of Litigation/ court case is as under:-

S. No.	Name of the Court	Case / Diary No.	Status of the case / Orders or directions of the court
1.	High Court of MP	1310/2017	Review petition related to BCI land has been decided in favour of Company on 3 rd April, 2018.
2.	Supreme Court	47633/2018 (SLP(c) No. 015837/2019)	In Challenge to the above order of High Court, Indore passed on 3 rd April 2018 in RP No. 1310/2017 in favor of Company, an SLP was filed by the State Government before the Hon'ble Supreme Court, which is still pending.
3.	National Green Tribunal	77/2017 CZ	A case was filed in High court through RTI and transferred to NGT (Case no.77/2017 CZ) regarding pollution being caused in the river Chambal due to effluents from the industries

			<p>against following:</p> <ol style="list-style-type: none"> 1. Member Secretary, MP Govt. Department of Environment, Vallabh Bhawan, Bhopal (M.P) 2. Member Secretary, MPPCB, E-5 Arera Colony, Bhopal (M.P) 3. Regional Officer MPPCB, 17, Bharatpuri, Ujjain 4. Management, Grasim Industries Ltd. Nagda, Dist., Ujjain (M.P) 5. Management, Grasim Chemical division Nagda, Dist., Ujjain (M.P) 6. Management, Lenxess Industries Nagda, Dist., Ujjain (M.P) 7. Chief Municipal Corporation officer Nagda Dist., Ujjain (M.P) <p>Hearing of the case was held on 15th Nov., 2017 and 01st July, 2019 and the matter stands adjourned. Case will now be heard through video conferencing; date of Hearing through VC is yet to be fixed.</p>
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The Committee deliberated the various court case and is of the view that the Environmental clearance is subject to final outcome of Hon'ble Court and any other Court of Law as applicable to this Project.

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report and public hearing process. If any part of data/information submitted is found to be false/misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. Issues raised during the public hearing has been properly addressed in the EIA/EMP report.

The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have recommended for grant of Environmental Clearance (EC).

The EAC, after detailed deliberations, **recommended** the project for grant of environmental clearance, subject to compliance of terms and conditions as under, and general terms of conditions at **Annexure**:-

- (i). The Environmental clearance is subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this Project.
- (ii). Necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, shall be obtained from the State Pollution Control Board.
- (iii). As already committed by the project proponent, Zero Liquid Discharge shall be ensured and to be completed by December 2021 and no waste/treated water shall be discharged outside the premises.
- (iv). PP shall conduct the study regarding the pollution in the Chambal River and take necessary mitigation measures.
- (v). Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.
- (vi). To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- (vii). Solvent management, if any, shall be carried out as follows:
 - a) Reactor shall be connected to chilled brine condenser system.
 - b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.
 - c) The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 98% recovery.
 - d) Solvents shall be stored in a separate space specified with all safety measures.
 - e) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.
 - f) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.

- (viii). Total fresh water requirement shall not exceed 15,450 m³/day proposed to be met from Chambal river. Prior permission in this regard shall be obtained from the concerned regulatory authority.
- (ix). Rain water harvesting structures shall be provided to reduce dependency of fresh surface water for industrial purposes. In any case, no ground water shall be used for the plant.
- (x). The storm water from the premises shall be collected and discharged through a separate conveyance system.
- (xi). Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps.
- (xii). ETP sludge, process inorganic & evaporation salt shall be disposed through Captive Secured Landfill.
- (xiii). The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.
- (xiv). The company shall undertake waste minimization measures as below:-
 - a) Metering and control of quantities of active ingredients to minimize waste.
 - b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
 - c) Use of automated filling to minimize spillage.
 - d) Use of Close Feed system into batch reactors.
 - e) Venting equipment through vapour recovery system.
 - f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xv). The green belt of at least 5-10 m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.
- (xvi). 2.0 Lacs trees shall be planted around the vicinity of the plant and their status report should be submitted along with the certified compliance report.
- (xvii). As proposed and committed by the PP, Rs. 25 crores shall be allocated for Corporate Environment Responsibility (CER).The CER funds shall be utilized for greenbelt development, skill development and check dam construction, as suggested during public hearing. The CER plan shall be completed before commissioning of the project.

- (xviii). For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- (xix). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.
- (xx). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (xxi). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (xxii). The energy sources for lighting purposes shall preferably be LED based.
- (xxiii). Transportation of Hazardous materials/products should be carefully performed using GPS enabled vehicles.
- (xxiv). Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act. PP shall submit the six monthly compliance report to the Regional Office of the Ministry.
- (xxv). PP shall conduct advanced modeling for risk management and mitigation measures as the flammable and hazardous chemicals are being stored and processed in the Plant. PP shall conduct a study comprise the details of detectors and its locations and outcome of the study shall be implemented and the compliance shall be submitted six monthly to the Regional Office of the Ministry.
- (xxvi). No construction shall be carried out in dispute land

Agenda No.16.7.9

Setting up Active Pharmaceutical Ingredients (API) manufacturing unit of capacity 41.1 TPM by M/s Solisom Healthcare LLP located at Survey No. 99/P1, Rajpar-Nashitpar Road, Village Nashitpar, Taluka Tankara, District Morbi (Gujarat) - Consideration of Environment Clearance.

[IA/GJ/IND2/92443/2019,IA-J-11011/28/2019-IA-II(I)]

The project proponent and the accredited consultant M/s. T R Associates, made a detailed presentation on the salient features of the project.

During deliberations, the EAC noted the following:

The proposal is for environmental clearance to the project for Setting up Active Pharmaceutical Ingredients (API) manufacturing unit of capacity 41.1 TPM by M/s Solisom

Healthcare LLP in an area of 7689 sqm located at Survey No. 99/P1, Rajpar-Nashitpar Road, Village Nashitpar, Taluka Tankara, District Morbi (Gujarat).

The project/activity is covered under category A of item 5(f) 'Synthetic Organic Chemicals' of schedule to the Environment Impact Assessment (EIA) Notification, 2006, and requires appraisal at Central level in the Ministry.

The EAC noted that it was requested in the agenda of EAC meeting that Consultant shall come with FAE along with Laboratory person who had monitored/analyzed the environmental parameters samples. However, during meeting the project proponent and their consultant has informed that their EIA coordinator and laboratory person is not present due to some reason. Accordingly, the EAC has deferred the proposal.

The proposal is therefore **deferred**.

Agenda No. 16.7.10

Capacity expansion of J-18/LAB Revamp/nButanol project for IOCL Gujarat Refinery at Koyali, District Vadodara (Gujarat) by M/s Indian Oil Corporation Limited (IOCL) - Consideration of Environment Clearance.

[IA/GJ/IND2/60736/2016,J-11011/96/2015-IA II(I)]

The project proponent did not attend the meeting the EAC decided to **defer** the proposal.

Agenda No. 16.7.11

Setting up Dyes & Dye Intermediates manufacturing unit of capacity 715 TPM by M/s Metachem Industries located at Survey No.391 & 393, Village Neja, Taluka Khambhat, District Anand (Gujarat) - Consideration of Environment Clearance.

[IA/GJ/IND2/100131/2019, J-11011/109/2019-IA-II(I)]

The project proponent and the accredited consultant M/s San Envirotech Pvt. Ltd, made a detailed presentation on the salient features of the project.

During deliberations, the EAC noted the following:

The proposal is for environmental clearance to the project for setting up Dyes & Dye Intermediates manufacturing unit of capacity 715 TPM by M/s Metachem Industries located in an area of 12428 sqm at Survey No.391 & 393, Village Neja, Taluka Khambhat, District Anand (Gujarat).

The project/activity is covered under category A of item 5(f) 'Synthetic organic chemicals industry' of schedule to the Environment Impact Assessment (EIA) Notification, 2006, and requires appraisal at Central level in the Ministry.

The EAC noted that it was requested in the agenda of EAC meeting that Consultant shall come with FAE along with Laboratory person who had monitored/analyzed the environmental parameters samples. However, during meeting the project proponent and their consultant has informed that their EIA coordinator and laboratory person is not present due to some reason. Accordingly, the EAC has deferred the proposal.

The proposal is therefore **deferred**.

Agenda No. 16.7.12

Expansion of Synthetic Resin Adhesive from capacity by M/s Jyoti Resins & Adhesives Ltd at Gandhi Nagar (Gujarat) - Consideration of Environmental Clearance.

[IA/GJ/IND2/67445/2017 ,IA-J-11011/429/2017-IA-II(I)]

The project proponent and their accredited consultant M/s Green Circle, Inc, made a detailed presentation on the salient features of the project.

The proposal was earlier considered by the EAC in its meeting held during 30-31 December, 2019 and 1st January, 2020, wherein the EAC, *asked for clarifications and inputs in respect of certain points.*

In response of the same the project proponent has submitted point wise reply as under:

S. No.	clarifications and inputs sought by the EAC	Reply submitted by the project proponent	Remark of the EAC	Submissions of project proponent
1.	One season baseline data and prediction for air quality to be carried out by recognized labs/institution	The baseline survey has been conducted for one season i.e. 1 st June to 30 th June, 2019 by M/s Green Circle, Inc.	EAC found the reply to be satisfactory	Baseline data collected and study carried out in October to December, 2017 one month additional carried out in June, 2019. This is small scale industrial unit with maximum of 634 kg/day of fuel consumption.
2.	Action taken on report on observations	Action plan on observations of the Regional office has	The Action plan has not duly certified by the Ministry's	Regional office already requested for further process

	of the Regional Office during their site visit on 15th June, 2018 and as per the monitoring report dated 2nd November, 2018.	been submitted	Regional office at Bhopal	of compliance report
3.	Details of different pollution control measures and detailed justification for their efficacy and adequacy.	Details of different pollution control measures and detailed justification for their efficacy has been submitted	EAC found the reply to be satisfactory	
4.	Details of effluent treatment plan/scheme as to achieve ZLD.	There will not be any waste water generation. There is only waste water generated from washing of vessel which will be carried with product. Therefore there is no requirement of ETP plant. And generated sewage is disposed of through septic tank & soak pit.	Reply is not satisfactory	There is no industrial effluent generation due to the existing product manufacturing and from proposed expansion of product manufacturing.
5.	Status of wildlife clearance	The project doesn't come under general condition and it does not require wildlife clearance.	Reply is not satisfactory	The Eco-Sensitive Zone boundary of Thol Bird Sanctuary is 4.66 km away from the project site. Hence there is no need of

				clearance from the Standing Committee of the NBWL.
6.	Wildlife conservation management and air quality monitoring in ESZ	Submitted	Reply is not satisfactory	Unit is not falling in ESZ of Thol.
7.	Socio-economic action plan	Submitted	Reply is not satisfactory	Plan submitted
8.	Compliance of TOR point 6 (ii) shall be done by setting up one Air Quality monitoring station in Sensitive receptor zone since Thol Sanctuary is extremely nearby i.e. within 6 Km. Therefore PP is advised to resubmit at least one month AAQ monitoring data of all the stations within 10 Km radius	The baseline survey has been conducted.	Reply is not satisfactory	-
9.	Results of Faecal Coliform and E. Coli has been reported ABSENT in surface water sample inTable	The baseline survey has been conducted.	-	The Faecal Coliform value ranges from 2 to 8.2 MPN/100 ml and E.coli from 1.8 to 4

	<p>3.19 of EIA whereas contrary to this under sub head of "Observation on Surface Water Quality" page 86 of EIA it is mentioned that "facial coliform are observed high at all locations....." This need to be reanalyzed and resubmitted.</p>			
10.	<p>Biodiversity Index is required to be mentioned against TOR Point 6 (X)once the Flora fauna studies are carried out.</p>	<p>Details of Biodiversity Index is attached</p>	<p>Reply is not satisfactory</p>	<p>Unit is not falling in ESZ of Thol.</p>
11.	<p>Predicted GLC of PM 10, SO2,NOx has been reported "0.00" for AAQ station no.2,3,4,6 & 7 which is not matching with the given wind rose. This need to be resubmitted.</p>	<p>As one Month baseline survey for the month of June - 2019 has been done, The PP has revised Air Quality Modelling.</p>	<p>Reply is not satisfactory</p>	<p>The project proponent has summarized the impact concentration of the pollutants with baseline concentration.</p>
12.	<p>Project proponent shall be required to</p>	<p>As one Month baseline survey for</p>	<p>Reply is not satisfactory</p>	<p>Report has been submitted</p>

	submit an original analysis reports for AAQ monitoring & Modeling results of GLC in respect to AAQ station no.2,3,4,6 & 7 including analysis report of surface water sample.	the month of June - 2019 has been done, The PP has submitted revised report.		
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During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for expansion of Synthetic Resin Adhesive Manufacturing from 750 TPM to 1650 TPM by M/s Jyoti Resins & Adhesive Ltd in an area of 7016 sqm located at S.No.873, Village Santej, Taluka Kalol, District Gandhinagar (Gujarat).

The details of products are as under:

S. No	Product	Existing (TPM)	Proposed (TPM)	Total (TPM)
1	Synthetic Resin Adhesive (PVAA)	600	900	1500
2	Adhesive SH (By mixing process)	150	-	150
	Total	750	900	1650

The project/activity is covered under category A of item 5(f) 'Synthetic Organic Chemicals' of schedule to the Environment Impact Assessment (EIA) Notification, 2006, and requires appraisal at central level by the EAC in the Ministry.

Standard Terms of Reference for the project was granted on 29th September, 2017. Public hearing is exempted as per para 7(i), III. Stage (3), (i)(b) of the EIA Notification, 2006, and in accordance with the Ministry's OM dated 27th April 2018, as the project site is located in the notified industrial area.

Existing land area is 7016 sqm. No additional land will be required for the proposed expansion. Industry will develop greenbelt in an area of 2519 sqm, covering 33% of total project area. The estimated project cost is Rs.2.80 crores including existing investment of Rs. 2 crores. Total capital cost earmarked towards environmental pollution control measures is Rs.12 lakhs and the recurring cost (operation and maintenance) will be about

Rs. 5.5 Lakhs per annum. Employment will be for 95 persons directly & indirectly after expansion.

Thol Bird Sanctuary is located at 5.45 km (WNW) from the project site. Sabarmati river is flowing at a distance of 14 km in ESE direction.

Total water requirement is estimated to be 38.225 cum/day, proposed to be met from tanker supply. Effluent of 2.44 cum/day will be treated through septic tank & soak pit. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

Power requirement after expansion will be 180 KVA, which will be met from UGVCL. Existing unit has 1 DG sets of 62.5 KVA capacity, used as standby during power failure. There is no process emission in the proposed unit. The expenditure towards CER for the project would be 1.5% of the project cost as committed by the project proponent.

Earlier, the SEIAA Gujarat has issued the EC vide letter no. SEIAA/GUJ/EC/5(f)/417/2016 dated 28th June, 2016 to the project for Manufacturing of Synthetic Organic Chemicals (Resins) in favour of M/s Jyoti Resins & Adhesive Ltd. Monitoring report on compliance status of the EC conditions forwarded by the Ministry's Regional Office (site visit on 15th June, 2018) vide letter dated 2nd November, 2018. Out of 64 conditions, 13 are fully complied, 4 agreed to comply, 36 are complied subject to condition, 3 are partly complied, 2 are not complied, 1 is noted for compliance and 5 are noted. The project proponent confirmed that they have already completed the action and action taken report has been sent to the Ministry's Regional office at Bhopal for confirmation.

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report and public hearing process. If any part of data/information submitted is found to be false/misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. Issues raised during the public hearing has been properly addressed in the EIA/EMP report. Additional information submitted by the project has been found to be in order.

The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time

and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have recommended for grant of Environmental Clearance (EC).

The EAC, after deliberations, **recommended** the project for grant of environmental clearance, subject to compliance of terms and conditions as under:-

- (i) Necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, shall be obtained from the State Pollution Control Board.
- (ii) As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.
- (iii) Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.
- (iv) National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R.608(E) dated 21stJuly, 2010 and amended from time to time shall be followed. Fugitive emissions shall be controlled at 99.98% with effective chillers.
- (v) No raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used.
- (vi) To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- (vii) Solvent management shall be carried out as follows:
 - a) Reactor shall be connected to chilled brine condenser system.
 - b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.
 - c) The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery.
 - d) Solvents shall be stored in a separate space specified with all safety measures.
 - e) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.
 - f) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.
 - g) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.

- (viii) Total fresh water requirement shall not exceed 38.225 cum/day, proposed to be met from tanker supply. Prior permission in this regard shall be obtained from the concerned regulatory authority.
- (ix) Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system.
- (x) Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps.
- (xi) Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.
- (xii) The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.
- (xiii) Fly ash should be stored separately as per CPCB guidelines so that it may not adversely affect the air quality. Direct exposure of workers to fly ash and dust should be avoided.
- (xiv) The company shall undertake waste minimization measures as below:-
 - a) Metering and control of quantities of active ingredients to minimize waste.
 - b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
 - c) Use of automated filling to minimize spillage.
 - d) Use of Close Feed system into batch reactors.
 - e) Venting equipment through vapour recovery system.
 - f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xv) The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.
- (xvi) *As committed, 1.5% of total project cost shall be allocated towards Corporate Environment Responsibility (CER). Item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.*
- (xvii) For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.

- (xviii) The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms.
- (xix) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- (xx) Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

Agenda No. 16.7.13

Setting up Bulk Drugs manufacturing unit of capacity 30.254 TPM by M/s Concord Biotech Limited (Unit-III) at Survey No.84, 94/A, 94/B, 119, 120, 126, 135, 136 of Village Ranasar and Survey No.772, 773, 774, 774-01, 774-02 of Village Malawada, Taluka Matar, District Kheda (Gujarat) by -Consideration of Environmental Clearance

[IA/GJ/IND2/126740/2018, IA-J-11011/164/2018-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. San Envirotech Pvt. Ltd, made a detailed presentation on the salient features of the project.

During deliberations, the EAC noted the following:

The proposal is for environmental clearance to the project for Setting up Bulk Drugs manufacturing unit of capacity 30.254 TPM by M/s Concord Biotech Limited (Unit-III) in an area of 568588 sqm at Survey No.84, 94/A, 94/B, 119, 120, 126, 135, 136 of Village Ranasar and Survey No.772, 773, 774, 774-01, 774-02 of Village Malawada, Taluka Matar, District Kheda (Gujarat).

The project/activity is covered under category A of item 5(f) 'Synthetic organic chemicals industry' of schedule to the Environment Impact Assessment (EIA) Notification, 2006, and requires appraisal at Central level in the Ministry.

The EAC noted that it was requested in the agenda of EAC meeting that Consultant shall come with FAE along with Laboratory person who had monitored/analyzed the environmental parameters samples. However, during meeting the project proponent and their consultant has informed that their EIA coordinator and laboratory person is not present due to some reason. Accordingly, the EAC has deferred the proposal.

The proposal is therefore **deferred**.

Agenda No. 16.7.14

Proposed Speciality Chemical Manufacturing Plant at 902/1, Jhagadia GIDC, Taluka Jhagadia, District Bharuch by M/s Metropolitan Eximchem Pvt. Ltd. - Environmental Clearance

[IA/GJ/IND2/75861/2018, IA-J-11011/242/2018-IA-II(I)]

The project proponent and their accredited consultant M/s Kadam Environmental Consultant, made a detailed presentation on the salient features of the project.

The proposal was earlier considered by the EAC in its meeting held during 26-27 September, 2019, wherein the EAC, *asked for clarifications and inputs in respect of certain points.*

In response of the same the project proponent has submitted point wise reply as under:

S. No.	<i>clarifications and inputs sought by the EAC</i>	Reply submitted by the project proponent	Remark of the EAC
1.	<i>Revised layout plan with greenbelt development all along the periphery</i>	As suggested greenbelt will be develop 9m wide along the periphery of site boundary. Revised layout plan has been submitted.	The Committee deliberated the issues and found the reply to be satisfactory
2.	<i>Revised water balance and plan to achieve to ZLD.</i>	The MEPL has revised the effluent treatment plan to achieve the ZLD	
3.	<i>Commitment for not using Coal and furnace oil in the unit</i>	MEPL committed to not using Coal and Furnace oil in proposed Jhagadia plant, instead of that Briquette will be used.	
4.	<i>Plan for Corporate Environmental Responsibility at 2.5 % of the project cost</i>	The project proponent was agreed to spend 2.6 % of project cost towards Corporate Environmental Responsibility and has submitted the detailed plan.	

During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for setting up speciality chemical Manufacturing Plant of capacity 4150 TPA by M/s Metropolitan Eximchem Pvt. Ltd. in an area of 70242.11 sqm at 902/1, GIDC Jhagadia, Taluka Jhagadia, District Bharuch (Gujarat).

The project/activity is covered under category A of item 5(b) 'Pesticides industry and pesticide specific intermediates (excluding formulations)' and 5(f) 'Synthetic Organic Chemicals' of schedule to the Environment Impact Assessment (EIA) Notification, 2006, and requires appraisal at Central level in the Ministry.

The details of products and capacity as under:

S. No.	Product/Activity (Capacity/Area)	Quantity (TPA)
(1.)	5 Chloro 8 Hdroxy quinolene	200
(2.)	2,5 Dichloro p-Phenylene diamine	120
(3.)	2,3-Dibromo propanyl chloride	50
(4.)	2-Amino 4[(2,3,-Di Bromo 1-oxypypropyl)amine],Benzene Sulfonic Acid	30
(5.)	4,4'-Diamino Diphenyl Amine Sulphate	20
(6.)	3-(4-Chloro-2-Fluro-5-mercaptophenyl)-1-Methyl-6- trifluoromethyl,H-pyridine-2-,4-dione	300
(7.)	3(2-Chloro ropionyl aniline)propionic acid methyl ester	200
(8.)	Diamino Benzoic Acid	10
(9.)	3,3 Dinitro di Phenyl Sulfone	20
(10.)	2,2-Bis(4-hydroxy-3-nitrophenol,hexafluro) propane	20
(11.)	3-(2,4-Dichlorophenyl)-6-Fluroquinazoline-2,4 (1H,3H-Dione	10
(12.)	2-Amino di methyl terephthalate	150
(13.)	Zinc tetraisopropyl bis(dithiophosphate)	150
(14.)	Zink O,O- Dibutyl DiThiophosphate	100
(15.)	BTCA(1,2,3,4-Butanetetracarboxylic acid)	100
(16.)	2 anilino 6 dibutyl amino, 3 methyl fluoran	500
(17.)	Oligomer of Phenyl phthalimide para bis phenol	100
(18.)	Ortho toludine Diamine (Co-Product)	225
(19.)	4-Amino-3-Methoxy Azobenzene-3-Sulphuric Acid	140
(20.)	5-Nito 2-Amino Phenol	150
(21.)	5 Amino 6 Methyl Benzimidazolone	150

(22.)	2,4,6-Tri[(2,4-Dihydroxy3-Methyl) Phenyl] 1,3,5- Trizine	100
(23.)	2-(4,6-Di Phenyl-1,3,5-Triazine-2-yl)-5(2- Hydroxyethoxy) Phenol	50
(24.)	Anilino methane sulfonic acid	25
(25.)	3,7-Diamino-2-,8-Dimethyl dibenzothiophenne 5,5 dioxide hydrochloride	10
(26.)	Di Phenyl Sulfone	150
(27.)	Direct yeoolw F6GZ	100
(28.)	4-(2 Chloro-Ethyl Sulfonyl) Butric Acid	50
(29.)	2-Chloro 4-(2 Chloro Ethyl sulfonyl) Butric Acid	100
(30.)	3-(Dibromo Propionyl)Amido-Benzoyl K Acid	10
(31.)	Dipropyleneglycol methyl-n-propylether	30
(32.)	3-Amino-4-[(4-Amino 2 sulfophenyl)-Diazynyl]5 hydroxynapthalene,2,7 Disulfonic acid	20
(33.)	2,3 Dichloro 6-quinoaline carbonyl chloride	30
(34.)	4,4` Thio diphenol	150
(35.)	1,3,benzene diol 4 (4,6,bis 2 dimethyl phenyl) 1,3,5 triazine 2-yl	100
(36.)	2-(2-hydroxy,4- methoxy phenyl) 4,6 diphenyl 1,3,5 triazine	100
(37.)	Cuprate{2-[1-amino-4-hydroxyl 3-(2 hydroxyl-5- sulfophenyl)azo-4,5-dimethoxy phenyl]}azo-2- Naphthalene sulfonic acid	20
(38.)	Diethyl sulfate	200
(39.)	m-cresol pure	10
(40.)	IPFENCARBAZONE	150
	Total	4150

The standard ToR for the project was granted on 2nd September, 2018. Public hearing is exempted as per para 7(i), III. Stage (3), (i)(b) of the EIA Notification, 2006, and in accordance with the Ministry's OM dated 27th April 2018, as the project site is located in the notified industrial area.

Proposed land area is 70242.11 sqm. Industry will develop greenbelt in an area of 33% i.e. 23291.67 sqm, out of total area of the project.

The estimated project cost of proposed unit is Rs. 60.0 Crore. Total capital cost earmarked towards environmental pollution control measures is Rs. 11.0215 Crore and the Recurring cost (operation and maintenance) will be about Rs. 8.9848 Crore per annum. Total employment including direct and indirect will be 300 persons. Industry proposes to allocate Rs. 1.2 Crores (2.0% of total project cost) towards Corporate Social Responsibility.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance of the project site.

Total water requirement is 1096.8 m³/day of which fresh water requirement of 422.8m³/day will be met from GIDC water supply system. Total Effluent generation will be 492 KLD. Out of which 122.2 KLD sent to MEE-RO and 349.8 KLD will be treated in ETP, and further in RO and MEE, 20 KLD domestic wastewater will be treated in STP. The plant will be based on Zero Discharge System. Power requirement after expansion will be 2000 KW and which will be met from Dakshin Gujarat Vij Company Limited (DGVCL). One D.G. Set of 1000 kVA capacity will be installed with stack height will be provided as per CPCB norms to the proposed DG sets.

Two briquette fired boiler 6 TPH & 3 TPH capacity will be installed. Multi cyclone separator/bag filter with a stack of height of 30 m will be installed to control the particulate emissions within the statutory limit of 115 mg/Nm³ for the proposed boilers.

Ambient air quality monitoring was carried out at 8 locations during 03.12.2017 to 28.02.2018 during the winter season and the baseline data indicates the ranges of concentrations as: PM₁₀ (61-129 µg/m³), PM_{2.5} (19-37 µg/m³), SO₂ (4.3 -28.1 µg/m³) and NO_x (8-26.8 µg/m³). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.82 µg/m³, 9.93µg/m³, and 0.96 µg/m³, with respect to PM₁₀, SO₂, and NO_x. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report and public hearing process. If any part of data/information submitted is found to be false/misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. Issues raised during the public hearing has been properly addressed in the EIA/EMP report. Additional information submitted by the project has been found to be in order.

The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have recommended for grant of Environmental Clearance (EC).

The EAC, after deliberations, **recommended** the project for grant of environmental clearance, subject to compliance of terms and conditions as under:-

- (i) Necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, shall be obtained from the State Pollution Control Board.
- (ii) As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.
- (iii) Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.
- (iv) National Emission Standards for Pesticides Manufacturing Industry issued by the Ministry vide G.S.R.446(E) dated 13th June, 2011, as amended from time to time, shall be followed.
- (v) No pesticides/chemicals banned by the Ministry of Agriculture and Farmers Welfare, or having LD₅₀<100 mg/kg shall be produced. Also, no raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used for production of pesticides.
- (vi) No raw material/solvent prohibited by the concerned regulatory authorities from time to time, shall be used.
- (vii) To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- (viii) Solvent management shall be carried out as follows:

- a) Reactor shall be connected to chilled brine condenser system.
 - b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.
 - c) The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery.
 - d) Solvents shall be stored in a separate space specified with all safety measures.
 - e) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.
 - f) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.
 - g) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.
- (ix) Total fresh water requirement for domestic purpose shall not exceed 5 cum/day to be met from local drinking water supplier. Also, treated water of 60 cum/day by STP shall be met from Rail High Risers Society, Sonipat to cater the water demand of the unit. Prior permission in this regard shall be obtained from the concerned regulatory authority.
- (x) Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system
- (xi) Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps.
- (xii) Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.
- (xiii) The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act, 1989.
- (xiv) The company shall undertake waste minimization measures as below:-
- a) Metering and control of quantities of active ingredients to minimize waste.
 - b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
 - c) Use of automated filling to minimize spillage.
 - d) Use of Close Feed system into batch reactors.

- e) Venting equipment through vapour recovery system.
 - f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xv) The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.
- (xvi) As committed, funds allocation for the Corporate Environment Responsibility (CER) shall be 2.5% of the total project cost. Item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.
- (xvii) Safety and visual reality training shall be provided to employees.
- (xviii) For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- (xix) The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms.
- (xx) Occupational health surveillance and urological assessment of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- (xxi) Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (xxii) Mitigating measures suggested during process safety and risk assessment studies shall be carried out using advanced models.

Agenda No. 16.7.15

Setting up Synthetic organic chemical manufacturing unit by M/s Mahaveer Surfactants Pvt Ltd at Plot No. A6/2Part, C4, SIPCOT Industrial Park, Village Thervoy Kandigai, Taluk Gummidipoondi, District Tiruvallur, Tamil Nadu – Reconsideration of Environmental Clearance

[IA/TN/IND2/75612/2018, IA-J-11011/217/2018-IA-II(I)]

The project proponent did not attend the meeting the EAC decided to **defer** the proposal.

16.8 Any Other

Agenda No. 16.8.1

Capacity Expansion and Addition of New Pesticide, Pesticide Specific Intermediates & Synthetic organic Chemicals (Chemical Intermediates) within existing premises of UPL Limited, UNIT#4, Survey No. 224,225,226,227, Gopipura, Halol, Dist: Panchmahal, Gujarat by M/s UPL LIMITED UNIT- For amendment in ToR

[IA/GJ/IND2/129155/2019, J-11011/381/2018-IA-II(I)]

The proposal is for amendment in the terms of reference granted by the Ministry vide letter dated 28th December, 2018 for the project Capacity Expansion and Addition of New Pesticide, Pesticide Specific Intermediates & Synthetic Organic Chemicals (Chemical Intermediates) located at Survey No: 224, 225, 226, 227, Village Gopipura, Taluka Halol, District Panchmahal (Gujarat) in favor of M/s UPL Limited – Unit 4.

The project proponent has requested for amendment in the ToR/EC with the details are as under;

S. No.	Para of ToR /EC issued by MoE F&C C	Details as per the ToR/EC	To be revised/ read as	Justification/ reasons															
1	Standard ToR granted	Existing & Proposed production capacity for Mesotrione Cu Chelate, 2 Cyano Phenol and 4, 6- Dichloropyrimidine products is as given below in product list: <table border="1" data-bbox="268 1646 767 2096"> <thead> <tr> <th>S. No.</th> <th>Name of Products</th> <th>Existing capacity MTP A</th> <th>Additional Capacity MTP A</th> <th>After expansion Capacity MTP A</th> </tr> </thead> <tbody> <tr> <td colspan="5" style="text-align: center;">Pesticide Technical</td> </tr> <tr> <td>1</td> <td>Mesotrione Cu Chelate</td> <td>0</td> <td>2160</td> <td>2160</td> </tr> </tbody> </table>	S. No.	Name of Products	Existing capacity MTP A	Additional Capacity MTP A	After expansion Capacity MTP A	Pesticide Technical					1	Mesotrione Cu Chelate	0	2160	2160	Revised Existing & Proposed production capacity for Mesotrione Cu Chelate, 2 Cyano Phenol and 4, 6- Dichloropyrimidine products to be as given below in Product List.	Amended CC&A for Mesotrione Cu Chelate, 2 Cyano Phenol and 4, 6- Dichloropyrimidine products has been
S. No.	Name of Products	Existing capacity MTP A	Additional Capacity MTP A	After expansion Capacity MTP A															
Pesticide Technical																			
1	Mesotrione Cu Chelate	0	2160	2160															

Synthetic Organic Chemicals (Chemical intermediates)					S. No.	Name of Products	Existing capacity MTPA	Additional Capacity MTPA	After expansion Capacity MTPA	obtained under product mix from GPCB vide CC&A order AWH-101118 dated 20/05/2019. The overall production quantity will not increase after this revision. There is no pollution load increase in existing operation due to Proposed amendment.
2	2 Cyano Phenol	0	480	480						
3	4, 6-Dichloro pyrimidine		150	150	1	Mesotriolone Cu Chelate	1080	1080	2160	
Detailed production capacity table of existing & Proposed project as provided in earlier ToR application is attached					Pesticide Intermediate(Isocynate/Chlorofomate) (EC Required)					
	2 Cyano Phenol		840	3960	2	2 Cyano Phenol	840	3960	4800	
	4, 6-Dichloro pyrimidine		432	1068	3	4, 6-Dichloro pyrimidine	432	1068	1500	
There will be no change in the production capacity due to above changes. Complete production capacity details have been provided in revised PFR and uploaded online. Detailed production capacity table of existing & Proposed project to be read as is attached										

The EAC during deliberation noted that the project proponent has submitted the amendment in ToR proposal to change the product list, the Committee suggested to submit the proposal afresh for terms of Reference. The project proponent also requested to confirm whether any prior approval was sought from the Ministry before product mix change and details of EC granted to the unit under the provision contained in EIA Notification, 2006. The EAC, therefore **deferred** the proposal.

Agenda No.16.8.2

Proposed expansion of Polyurethane Foam (PU Foam) manufacturing plant at S.F. No. 88, 89/1 & 89/2, Komaranapalli village, Denkanikottai Taluk, Krishnagiri District, Tamil Nadu by M/s Duroflex Private Limited- For amendment in ToR

[IA/TN/IND2/133345/2019, No.IA-J-11011/229/2019-IA-II(I)]

The proposal is for amendment in the Terms of Reference granted by the Ministry vide letter dated 26th August, 2019 for the project expansion of Polyurethane Foam (PU Foam) manufacturing plant located at S.F. No. 88, 89/1& 89/2, Komaranapalli village, Denkanikottai Taluk, Krishnagiri District, Tamil Nadu in favour of M/s Duroflex Private Limited

The project proponent has requested for amendment in the ToR/EC with the details are as under;

S. No.	Para of ToR issued by MoEF&CC	Details as per the ToR	To be Revised/ Read as	Justification/ reasons
1	Page 2	In this regard, under the provisions of the EIA Notification 2006 as amended, the Standard TOR for the purpose of preparing environment impact assessment report and environment management plan for obtaining prior environment clearance is prescribed with public consultation as follows	In this regard, under the provisions of the EIA Notification 2006 as amended, the Standard TOR for the purpose of preparing environment impact assessment report and environment management plan for obtaining prior environment clearance is prescribed without public consultation as follows	Exemption of public hearing requested as the unit comes under small unit category with less than 25 KLD of water consumption, 25 TPD of fuel consumption and the process involves single stage without any significant emission and hazardous waste generation. Similar units are handled under B2 in SEIAAs like Gujarat.

The EAC, during deliberation noted that there is no such provision to provide exemption from public hearing under category B2. Therefore, the EAC after detailed deliberation **return the proposal in present form.**

The following agenda items was taken with the Permission of the Chairman.

Agenda No. 16.8.3

Expansion of Petrochemical Complex by adding Polypropylene unit at Pata, District Auraiya, Uttar Pradesh by M/s GAIL (India) Limited- Amendment in ToR

[IA/UP/IND2/113956/2019, IA/UP/IND2/119282/2019, J-11011/595/2010-IAII(I)]

16.8.3.1 The proposal is for amendment in the Terms of Reference(TOR) granted by the Ministry vide letter dated 13th September, 2019 to the project for Expansion of Petrochemical Complex by adding Polypropylene unit at Pata, District Auraiya, Uttar Pradesh by M/s GAIL (India) Limited.

16.8.3.2 The project proponent has requested for amendment in the Terms of Reference with the details as under:

S. No.	Para of TOR issued by MoEFCC	Details as per the TOR	To be revised/ read as	Justification/Reasons
1	Page No. 1 - Line 3 of Last Paragraph	Public consultation to be conducted	Exemption from Public Consultation.	GAIL hereby seeks amendment in TOR for exemption of Public Hearing for the proposed project on the following grounds: <ul style="list-style-type: none"> • No additional fresh water demand is envisaged for proposed project. The allocated fresh water (2040 m3/hr) for existing petrochemical complex is sufficient to meet the demand. • The additional 3 MW power is required for the proposed plant and shall be sourced from existing source. • Effluent generated from the proposed project will be treated in the existing Effluent Treatment Plant and will be reused internally. • No additional land is required since the proposed facilities under the project will be set up within the existing petrochemical complex area. • GAIL, Pata uses one of the cleanest fuels in the country i.e. the lean natural gas,

				<p>which is virtually sulphur and particulates free.</p> <ul style="list-style-type: none"> • All the possible energy conservation measures and high efficiency machines will be used for minimizing greenhouse gas generation. Since this plant is located within existing facilities, the greenbelt is already considered meeting statutory norms at total complex level. • SO₂ emissions due to the proposed project shall be negligible. • Low NO_x burners are used in burners of Cracker Furnaces and Boilers. • GAIL, Pata has conducted Public Hearings on 05/09/2011 at Indradhanush Park, Gail gaon for expansion of Petrochemical Complex. All issues of public hearing are complied by GAIL.
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16.8.3.2 The EAC observed that ToR for the project was granted by the Ministry vide letter dated 13th September, 2019. Amendment in ToR with exemption from fresh public hearing was requested vide proposal no. IA/UP/IND2/119282/2019 dated 25th September, 2019 and after proposal has been resubmitted after uploading additional information as desired by the Ministry on 18th October, 2019. However, the same has not been placed before the Committee due to non-visibility of the proposal in the portal.

The Committee during deliberations noted that the environmental clearance for the existing project was granted by the Ministry on 23rd May, 2012 after conducting public hearing on 5th September, 2011. There shall be no additional requirement of fresh water, land and the effluent shall be reused and unit will be achieving ZLD. The unit is also proposed to use lean natural gas, which is virtually sulphur and particulates free.

*The Committee, after detailed deliberations, has **recommended** for exemption from fresh public hearing for the proposed project as per para 7(ii) (a) of the EIA Notification, 2006.*

Agenda No. 16.8.4

Expansion of distillery unit from 320 KLPD to 400 KLPD by M/s Godavari Biorefineries Ltd (Distillery Division) at Sy. No. 16 & 17 of Saidapur Village, Sy. No. 45, 46, of Handigund Village, Sy. No. 74 & 75 of Madbhavi Village Sameerwadi Village, Tehsil Mudhol, District Bagalkot (Karnataka) - Consideration of Environmental Clearance.

[IA/KA/IND2/127285/2019, J-11011/191/2007-IA-II(I)]

The project proponent and their accredited consultant, made a detailed presentation on the salient features of the project.

The proposal was earlier considered by the EAC in its meeting held during 30-31 December, 2019 and 1st January, 2020, wherein the EAC, *asked for clarifications and inputs in respect of certain points.*

In response of the same the project proponent has submitted point wise reply as under:

S. No.	<i>clarifications and inputs sought by the EAC</i>	Reply submitted by the project proponent	Remark of the EAC
1.	This is an expansion case/modernization proposal. The project proponent has not submitted the latest certified compliance report of existing EC dated 20th March, 2008 and 7th July, 2009. PP needs to submit the certified compliance report of RO MoEFCC to verify the compliances	The project proponent has informed that the regional office has inspected the site recently in January, 2020 and the certified compliance report is awaited at their end only.	The EAC deliberated the compliance report submitted by PP and found to be satisfactory. PP has submitted the revised form.
2.	PP needs to submit the operational status/CTO for the existing distilleries unit of 320 KLPD for which EC has been granted by the Ministry.	The project proponent has submitted the latest CTO.	
3.	PP has not uploaded the updated Form 1 on Parivesh Portal in S.No. 39(f).	The project proponent has submitted the updated Form-1.	
4.	PP has to revise the PFR (s.no. 39 (e) as it is not legible on the Parivesh Portal	The project proponent has submitted the revised PFR.	

The project proponent and their accredited consultant made a detailed presentation on the salient features of the project and informed that:

During deliberations, the EAC noted the following: -

The proposal is for environmental clearance to the project for expansion of distillery unit from 320 KLPD to 400 KLPD by M/s Godavari Biorefineries Ltd (Distillery Division) at Sy. No. 16 & 17 of Saidapur Village, Sy. No. 45, 46, of Handigund Village, Sy. No. 74 & 75 of Madbhavi Village Sameerwadi Village, Tehsil Mudhol, District Bagalkot, Karnataka. This

expansion will be achieved by the use of B-heavy molasses/sugar cane juice without any increase in the total pollution load and without any additional plant and machinery.

The project/activity is covered under category A of item 5 (g) 'Distilleries' of the schedule to the EIA Notification, 2006 and requires appraisal/approval at central level in the Ministry.

Ministry had issued EC earlier on 20th March, 2008 to the project for expansion of cane juice based distillery unit from 60 to 200 KLPD at Village Saamazwadi, Bagalkot, Karnataka in favour of M/s Somaiya Organo-Chemicals Limited. Further, the Ministry vide letter dated 7th July, 2009 has granted expansion of distillery from 200 to 320 KLPD and 40 KLPD ENA to 260 KLPD ENA at Sameerwadi, District Bagalkot, Karnataka in favour of M/s Godavari Biorefineries Ltd.

The details of products and capacity as under:

S. No	Product	Exiting (KLD)	Proposed (KLD)	Total (KLD)
1	Rectified spirit	320	80	400
2	Ethanol	293.5	86.5	380
3	ENA	260	-	260

Existing land area is 4,84,000 sqm(48.4 ha) no additional land will be required for proposed expansion. Industry has already developed greenbelt in an area of 33 % i.e.1,60,000 m²(16 ha) out of total area of the project. The existing investment of Rs. 133.2 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 79.35 crores and the recurring cost (operation and maintenance) will be about Rs. 2.14 crores per annum. Total employment will be 150 persons as direct & 30 persons indirect after expansion.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/ Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. Ghataprabha river flowing at a distance of 6.5 km in southern direction.

Total existing fresh water requirement is 819 m³/day. Fresh water requirement while using B-heavy molasses and Sugar Cane Syrup will be 860 cum/day and 591 cum/day respectively. The Spent wash will be concentrated in MEE and the concentrate will be incinerated. The MEE condensate along with process condensate and spent lees treated in Biological Treatment Plant (BTP).The proposed plant will be based on Zero Liquid Discharge (ZLD) system. All the liquid effluents generated in the system are recycled in the process.

Existing power requirement is 5.5 MW proposed to be met from captive generation. No additional power will be required. Existing unit has one DG set of 320 kVA capacity.

Existing unit has three boilers of 40 TPH (incineration boiler), 4 TPH and 10 TPH coal fired boiler. No additional boiler shall be required for proposed expansion.

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form. The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the report. If any part of data/information submitted is found to be false/misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have recommended for grant of Environmental Clearance (EC).

The EAC, after detailed presentation noted that the proposal has been submitted for grant of environmental clearance under para 7(ii) of EIA Notification, 2006; wherein the proposed capacity will be achieved by the use of B-heavy molasses/sugar cane juice without any increase in the total pollution load and without any additional plant and machinery.

*The EAC, after deliberations, **recommended** the project for grant of environmental clearance under para 7(ii) providing exemption from public hearing and preparation of EIA report, subject to compliance of terms and conditions as under:-*

- (i) Necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, shall be obtained from the State Pollution Control Board as required.
- (ii) As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. The reuse of treated effluent in gardening/ horticulture shall not be considered as ZLD.
- (iii) Concentrated spent wash shall be incinerated and not to be released in open space.
- (iv) Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.
- (v) To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous

emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.

- (vi) Odour shall be prevented at the source and effective odour management scheme shall be implemented.
- (vii) Total fresh water requirement shall not exceed 686 m³/day proposed to be met from River Tungabhadra. Prior permission shall be obtained from the concerned regulatory authority/CGWA.
- (viii) Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm and the solvent transfer through pumps.
- (ix) Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.
- (x) The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.
- (xi) The company shall undertake waste minimization measures as below:-
 - a) Metering and control of quantities of active ingredients to minimize waste.
 - b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
 - c) Use of automated filling to minimize spillage.
 - d) Use of Close Feed system into batch reactors.
 - e) Venting equipment through vapour recovery system.
 - f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xii) The green belt of 5-10 m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.
- (xiii) As committed, funds allocation for the Corporate Environment Responsibility (CER) shall be 1.5% of the total project cost. Item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.
- (xiv) For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- (xv) The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.

- (xvi) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- (xvii) There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places.
- (xviii) Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (xix) Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For ZLD, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises. For continuous discharge the unit shall install pH, TSS, BOD,COD and flow meter at the ETP outlet.
- (xx) CO₂ generated from the process shall be bottled/made solid ice and sold to authorized vendors.

The meeting ended with thanks to the Chair.

All the projects recommended for grant of environmental clearance by the EAC shall also comply with the following General conditions:

- (i) The Project Proponent shall obtain all other statutory/necessary permissions/recommendations/NOCs prior to start of construction/operation of the project, which *inter alia* include, permission/approvals under the Forest (Conservation) Act, 1980; the Wildlife (Protection) Act, 1972; the Coastal Regulation Zone Notification, 2019, as amended from time to time, and other Office Memoranda/Circular issued by the Ministry of Environment, Forest and Climate Change from time to time, as applicable to the project.
- (ii) The project proponent shall ensure compliance of 'National Emission Standards', as applicable to the project, issued by the Ministry from time to time. The project proponent shall also abide by the rules/regulations issued by the CPCB/SPCB for control/abatement of pollution.
- (iii) The project authorities shall adhere to the stipulations made by the State Pollution Control Board/Committee, Central Pollution Control Board, State Government and any other statutory authority.
- (iv) The project proponent shall prepare a site specific conservation plan and wildlife management plan in case of the presence of Schedule-1 species in the study area, as applicable to the project, and submit to Chief Wildlife Warden for approval. The recommendations shall be implemented in consultation with the State Forest/Wildlife Department in a time bound manner.
- (v) No further expansion or modifications in the plant, other than mentioned in the EIA Notification, 2006 and its amendments, shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.
- (vi) The energy source for lighting purpose shall be preferably LED based, or advance having preference in energy conservation and environment betterment.
- (vii) The locations of ambient air quality monitoring stations shall be decided in consultation with the State Pollution Control Board (SPCB) and it shall be ensured that at least one station each is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.
- (viii) The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be followed.
- (ix) The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).

- (x) The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and to utilize the same for process requirements.
- (xi) Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.
- (xii) The company shall also comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- (xiii) The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. CER activities shall be undertaken by involving local villages and administration and shall be implemented.
- (xiv) The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.
- (xv) A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.
- (xvi) The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management/ pollution control measures shall not be diverted for any other purpose.
- (xvii) A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zilla Parishad/Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.
- (xviii) The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF&CC, the respective Zonal Office of CPCB and SPCB. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.
- (xix) The environmental statement for each financial year ending 31st March in Form-V as is mandated shall be submitted to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Regional Offices of MoEF&CC by e-mail.

- (xx) 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 SPCB/Committee and may also be seen at Website of the Ministry and at <https://parivesh.nic.in/>. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers 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 concerned Regional Office of the Ministry.
- (xxi) The project authorities 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 start of the project.
- (xxii) This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.

Annexure-II**List of the Expert Appraisal Committee (Industry-2) members attended the meeting**

S. No.	Name and Address	Designation
1.	Dr. J. P. Gupta	Chairman
2.	Dr. Y.V. Rami Reddy	Member
3.	Dr. Tudi Indrasen Reddy	Member
4.	Dr. J S Sharma	Member
5.	Shri Dinabandhu Gouda	Member
6.	Dr. T. K. Joshi	Member
7.	Shri S.C. Mann	Member
8.	Dr. Uma Kapoor	Member
9.	Shri Ashok Agarwal	Member
10.	Dr. Sanjay Bist	Member
11.	Dr. R. B. Lal, Scientist 'E', MoEFCC	Member Secretary
MoEFCC		
12.	Dr Saurabh Upadhyay	Scientist 'B'
13.	Dr. E.P. Nobi	Research Officer

Email

rb.lal@nic.in

Re: Draft Minutes of the EAC (Industry 2 Sector) meeting held during January 21-23, 2020

From : JEEWAN PRAKASH GUPTA <jpglobalconsultinggroup@gmail.com> Thu, Feb 06, 2020 02:14 PM
Subject : Re: Draft Minutes of the EAC (Industry 2 Sector) meeting held during January 21-23, 2020
To : Additional Director MoEFCC Dr R B LAL <rb.lal@nic.in>

Dear Dr. R.B. Lal,

The minutes of the EAC meeting, stand approved.

With Regards,

Dr. J.P. Gupta

On Thu, 6 Feb 2020 at 2:00 PM, Additional Director MoEFCC Dr R B LAL <rb.lal@nic.in> wrote:
Respected Sir,

Thanking very much for sending your comments in the Draft Minutes of EAC Meeting held during Jan 21-23, 2020. The comments of EAC member have been included in the draft MOM. After compilation of all the comments and discussion with you Sir today, the Draft minutes are again forwarded herewith for kind approval of the Chairman.

Best Regards,

Dr R B Lal
