The following were present:

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<th>S.No.</th>
<th>Name of the Member</th>
<th>Member</th>
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<tbody>
<tr>
<td>1</td>
<td>Sri Vivek Yadav, IAS., A.P. Pollution Control Board.</td>
<td>Member Secretary</td>
</tr>
<tr>
<td>2</td>
<td>Dr. V. Ranga Rao, Dept., of Civil Engineering, K.L. University, Guntur.</td>
<td>Member</td>
</tr>
<tr>
<td>3</td>
<td>Dr. S. Bala Prasad, Dept., of Civil Engineering, Andhra University.</td>
<td>Member</td>
</tr>
<tr>
<td>4</td>
<td>Dr. N. Chitti Babu, Dept., of Chemical Engineering, Andhra University, Visakhapatnam.</td>
<td>Member</td>
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The Member Secretary has welcomed the members of the Committee. After general introductory remarks on the items placed before the CFE Committee, the Committee took up agenda, item wise. The decisions of the CFE Committee on each item are recorded below.
MINUTES OF THE CFE COMMITTEE MEETING HELD ON 04.10.2018

ITEM NO. 1  M/s. Sesh Sal Chemicals Private Limited (Unit-II), Plot Nos. D1, D2, D9 & D10, IDA, Pudhheemavaram (V), Rananthalam (M), Srikakulam District - Applied for CFE for Solvent Recovery unit – Reg.

In order to comply with the time limits stipulated by the Government, the Board issued CFE order dt. 26.09.2018 to the industry. After detailed discussions the Committee ratified the CFE order issued.

ITEM NO. 2  M/s. ONGC, Kondangi (V), Kalidindi (M), Krishna District - Exploratory well SUW-AA - Applied for CFE and CFO – Reg.

The Committee noted the following:

a) The proponent obtained EC from MoEF&CC, GOI, New Delhi vide EC order dt. 18-05-2012 for 24 wells.

b) Now, the proponent applied for CFE & CFO of the Board through OCMMS.

c) As per Circular Memo No.11 / EC / CFE / ROs & ZOs / 2011 – 5055 Dt:02-02-2013, the issue of CFE & CFO of the Board may be considered to the Oil/Gas Exploratory Drilling Activities of ONGC at a time as the activity is of temporary in nature.

After detailed discussions, the Committee recommended to issue CFE & CFO.

ITEM NO. 3  M/s. Berry Alloys Limited, Plot No. 368, APIIC, Growth Center, Bobbili (V) & (M), Vizianagaram District - Applied for CFE expansion – Reg.

The Committee noted the following:

- The industry obtained EC (exp) for installation of additional 2 x 9 MVA, EAF furnaces.
- Now, the industry applied for CFE (exp.) for installation of 2 x 9 MVA furnaces and additional production of Ferro manganese – 43200 TPA or Silico manganese – 36,000 TPA.
- CFO of the existing unit is valid upto 31.08.2022. The industry has to comply with some of the conditions stipulated by the Board.
- A condition shall be stipulated that the industry shall manufacture Ferro Chrome after prior intimation to the Board.
- The industry shall use the emergency stacks during emergency only and record the durations in the plant operation register.
- Industry shall use slag granulator.

[Signature]
MEMBER SECRETARY
MINUTES OF THE CFE COMMITTEE MEETING HELD ON 04.10.2018

The representatives of the project proponent attended the meeting and have submitted a letter dt.03.10.2018 and informed as following:

a) Flow meters for treated effluents utilization have already been installed.

b) As they are using belt conveyor transport system, dry fogging is not installed. Hence, sprinklers are arranged.

c) All the internal roads were asphalleted except the road before furnace building.

d) Developed greenbelt already around 34% of the total area.

e) An undertaking on stamp paper has already submitted to Regional Officer that they will not manufacture Ferro chrome without obtaining prior approval from APPCB.

After detailed discussions, the Committee recommended to issue CFE for expansion after receipt of condition-wise compliance status / action plan to the conditions stipulated by the Board in the earlier orders.


The Committee noted the following:

a) It is an existing Solvent Recovery Unit.

b) In this unit, now it is proposed to produce 3 more products viz., Thinner, Pottassium Humate and Pure solvents from Mixed Solvents.

c) The process is as following:-

i. It is a solvent distillation unit which produce pure solvent volatile chemicals such as Isopropyl Alcohol, Ethyl Acetate, Acetone, Toluene & Methonal from their crude form as raw materials i.e., Mixed solvents. The industry is carrying out simple distillation for the proposed expansion also. Industry proposes to use existing 2 x 3 KL SS reactors for the proposed activity.

ii. The manufacturing of Thinner: Procurement of raw material, Charging into the existing reactor of capacity 3 KL and blending and mixing.

iii. The manufacturing of Pottassium Humate: Procurement of raw material, charging into the existing reactor of capacity 3 KL and heating and mixing.

d) The industry is yet to install totalizer to the water meters.

e) The industry is not operating forced evaporator regularly and not maintaining records on quantity of trade effluents evaporated.

The representatives of the project proponent attended the meeting. They have informed that they would operate forced evaporator regularly and maintain records on daily quantity of trade effluents evaporated.
MINUTES OF THE CFE COMMITTEE MEETING HELD ON 04.10.2018

After detailed discussions, the Committee recommended to issue CFE for expansion after receipt of compliance status／action plan to the Board’s conditions. A condition shall be incorporated that that wood shall not be used as fuel for Boiler and Thermic Fluid Heater. Briquettes shall be used as fuel in the Thermic Fluid Heater.

The industry shall submit details of spent solvents received (Name of the industry, solvent name and quantity) in every month.

The record pertaining to operation of forced evaporation system and quantity of trade effluents evaporated shall be maintained. The record shall be submitted to the RO: Tirupati once in three months.

| ITEM NO. 5 | M/s. Orch Laboratories India (P) Ltd., (exp), Plot No. 51-A, C, D, E, F,G & H IDA, Kondapalli (V), Ibrahimpatnam (M), Krishna District - Applied for CFE expansion – Reg. |

The Committee noted the following:

a) The CFO of the existing industry is valid upto 30.04.2021.

b) The industry obtained EC order dt. 14.08.2018 for expansion.

c) Now, the industry has applied for CFE (expansion):

d) The Board issued temporary permission to transport effluents to M/s. Ramky Pharma City (India) Ltd., CETP, Parawada, Visakhapatnam for 3 months or till restart of CETP, Kondapalli whichever is earlier as CETP, Kondapalli was stopped due to modification and development works and not receiving the HTDS & LTDS effluents from the member industries vide order dt 11.09.2017 stipulating certain conditions. Subsequently the Board issued extension of temporary permission to transport the effluents to M/s. Ramky Pharma City (India) Ltd., CETP, Parawada, Visakhapatnam for further 2 months or till restart of CETP, Kondapalli whichever is earlier vide order dt.28.03.2018 which expired on 31.05.2018. The industry is still sending the effluents to CETP, Parawada for treatment and disposal.

e) The CETP, Kondapalli re-started its operations of Biological ETP since 1st August 2018 and started operating MEE since 1st September 2018.

f) The industry may be directed to send the HTDS & LTDS effluents to CETP, Kondapalli as the CETP started its operations. The industry may be directed to segregate the effluents as HTDS & LTDS and send the segregated effluents to CETP for further treatment and disposal.

g) The industry has provided two stage scrubbers with online pH meter for control of process emissions. For the expansion project, the industry has already constructed another production block with 18 Nos. of reactors each provided with double stage condensers. A separate two stage scrubber has been provided to this block, for which online pH meter is yet to be provided.

h) As per the EC order, the industry shall adopt ZLD system. But as per CFE application, the industry has proposed to dispose the effluents to CETP, Kondapally IDA, Krishna District. Industry has to clarify boilers and DG sets to be installed as it is varying with EC.

i) The existing green belt in the premises has been removed and proposed to develop green belt in the premises in an extent of 1724.25 Sq. m. The industry has developed green belt in an extent of 1 acre in the IALA land outside the industry premises.

[Signature]
MEMBER SECRETARY
MINUTES OF THE CFE COMMITTEE MEETING HELD ON 04.10.2018

The representatives of the project proponent attended the meeting. They have informed as following:

a) As CETP, Kondapalli started its operation they have proposed to send their effluents to CETP, Kondapalli. The ZLD system is withdrawn in the present proposal.

b) The existing 2 TPH Boiler would be dismantled after installation of the proposed 4 TPH Boiler.

c) They will apply for amendment to EC for above proposed changes.

After detailed discussions, the Committee recommended to issue CFE for expansion with a condition that the industry shall obtain amendment to EC before applying for CFO for the following:

- For sending effluents to CETP, Kondapalli, instead of ZLD system.
- To dismantle the existing 2 TPH boiler after installation of new 4 TPH boiler.


The Committee noted the following:

a) M/s. Kajaria Floera Ceramics Private Limited, Sy.No.129(P), Thatiparthi (V), Thottambedu (M), Chittoor District, Andhra Pradesh has proposed to establish a unit for manufacture of Vitrified Ceramic Tiles – 15,000 Sq. m /day.

b) As per APOCMMS application, the industry is consuming coal of about 1000 TPM i.e. 40 TPD. Hence, the proposed industry is categorized under Red Hazardous category.

c) Industry was informed that the industry is to be classified as Red instead of Orange, as the industry is consuming 40 TPD of coal and directed to pay balance CFE Fee Rs.1,50,000/- towards CFE fee under Red-Haz category,

d) During inspection, it was observed that the proponent has completed construction of compound wall, started formation works for roads, construction work of Water storage and Process shed is under progress.

e) The following conditions are suggested:-

1. The industry shall provide dust pollution control systems at the raw material handling / mixing sections to control fugitive / process emissions.
2. The industry shall provide acoustic enclosures to the DG Sets to control noise pollution.
3. The industry shall modify the ETP if the industry proposes any colour materials to manufacture different types of Vitrified Ceramic Tiles.
4. The industry shall provide closed sheds for storing raw materials.
5. The industry shall develop thick green belt with width of 5 m all around the factory premises.

f) The industry proposed to develop green belt in 15.0 acres out of total area of 150.0 acres. The proposed green belt area is only 10%. The industry has to give commitment to increase the green belt area to meet 33% requirement.

MEMBER SECRETARY
MINUTES OF THE CFE COMMITTEE MEETING HELD ON 04.10.2018

The representatives of the project proponent attended the meeting. They have informed that they have already paid balance CFE fee.

After detailed discussions, the Committee recommended to issue CFE after receipt of action plan for Greenbelt development and with the following conditions:

- Broken tiles shall be disposed as per Construction and Demolition waste Management Rules, 2016.
- The above suggested conditions shall also be stipulated.

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<th>ITEM NO. 7</th>
<th>M/s. Salvias Pharma Pvt. Ltd., Plot No. 5J 1, De-Notified Area, APSEZ, Nakkapalem (V), Rambilli (M), Atchutapuram, Vishakhapatnam District - Applied for CFE – Reg.</th>
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The Committee noted the following:

- It is a new Bulk drug and intermediates manufacturing industry proposed in denotified area, APSEZ, Visakhapatnam District.
- The industry proposed to send the LTDS and HTDS effluents to CETP, Atchutapuram for treatment. The construction of CETP, Atchutapuram is not completed. The proponent has to clarify how they would dispose effluents if CETP, Atchutapuram is not ready as there is no extra capacity in CETP, Ramky Pharma City.

The representatives of the project proponent attended the meeting and informed that it would take another 7 to 8 months to complete construction of the project. Hence, they are proposing to send effluents to CETP, Atchutapuram; assuming that CETP, Atchutapuram; would commence operations by that time. The proponent also requested the committee to permit them to send their effluents to CETP, JNPC if CETP, Atchutapuram is not ready by the time the industry completes construction.

After detailed discussions, the Committee has not agreed to send effluents to CETP, JNPC as it is reached to its maximum capacity. The committee recommended to issue CFE with a condition that “the industry shall not start production till CETP, Atchutapuram commences its operations”.

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<th>ITEM NO. 8</th>
<th>M/s. Hindustan Petroleum Corporation Ltd., New White Oil Terminal, Opp: site to INS Dega, Port Connectivity Road, Visakhapatnam - Applied for CFE for additional Bio Diesel Tanks – Reg.</th>
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The Committee noted the following:

a) M/s. Hindustan Petroleum Corporation Ltd., (HPCL) obtained Environmental Clearance on 02.09.2009 for expansion of clean fuel project from 7.5 MMTPA to 10 MMTPA and to include EURO – IV Diesel production residue up-gradation facilities at Visakh Refinery. The project involves relocation of product terminal and distributing facilities adjacent to existing premises.

b) M/s. Hindustan Petroleum Corporation Limited, New White Oil Terminal is located at Opp: site to INS Dega, Port Connectivity Road, Visakhapatnam and obtained CFE of the Board vide Order dated 03.04.2010.

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d) The Bio-diesel does not fall under the purview of MSHIC Rules, column No.3 of Schedule 2 & 3 of MSHIC Rules, 1989 amended in 2000. Hence, the provisions of EIA Notification are not applicable.

e) The proponent shall inform the MoEF&CC, Gol, New Delhi regarding installation of additional tanks to store Bio-diesel.

The representatives of the project proponent attended the meeting.

After detailed discussions, the Committee recommended to issue CFE for the additional tanks to store bio-diesel.

**ITEM NO. 9**


The Committee noted the following:

  a) The proponent has to pay balance CFE fee of Rs. 1.50 lakhs.

  b) During the inspection, it was observed that construction of proposed project is already started. About 50% of the convention & exhibition centre is completed. Basement and two floors of proposed hotel and basement of the mall & multiplex are under progress.

The representatives of the project proponent attended the meeting. They have informed as following:

  a) The construction was started after obtaining EC. All the environmental measures will be taken and complied with.

  b) They would pay the balance fee of Rs. 1.5 lakhs.

After detailed discussions, the Committee recommended to issue CFE for the project.

**ITEM NO. 10**

| M/s. Andhra Pradesh Airports Development Corporation Limited (APADCL), (Formerly M/s. Bhogapuram International Airport Corporation Ltd.), for “Development of Green field Air Port” at Kannamadakala (V) & Pudicherla (V), Orvakal (M), Kurnool District - Applied for CFE - Reg. |

The Committee noted the following:

  a) M/s. Bhogapuram International Airport Corporation Ltd., obtained EC dt. 07.06.2017 for development of Green field Airport at Kannamadakala (V) & Pudicherla (V), Orvakal (M), Kurnool District for Phase – I development.

  b) Now, M/s. Andhra Pradesh Airports Development Corporation Limited (APADCL) (formerly, M/s. Bhogapuram International Airport Corporation Ltd.) applied for CFE for Phase – I development of Airport.

  c) During inspection, it was observed that APADCL has completed the construction of runway and the civil works of Apron, ATC Tower, Taxi way, Compound wall are in progress.

[Signature]

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MINUTES OF THE CFE COMMITTEE MEETING HELD ON 04.10.2018

The representatives of the project proponent attended the meeting and informed that they would submit compliance report / Action plan / commitment with regard to Environment (Protection) amendment rules 2018 notified by MoEF&CC, Gol on 18.06.2018 as applicable to newly proposed airports.

After detailed discussions, the Committee recommended to issue CFE after receipt of compliance report / Action plan / commitment with regard to Environment (Protection) amendment rules 2018 notified by MoEF&CC, Gol on 18.06.2018 as applicable to newly proposed airports.


The Committee noted the following:

The item was placed before the CFE Committee in its meeting held on 03.08.2018.

The Committee noted the following:

- The item was placed before the CFE Committee at ZO: Visakhapatnam on 21.06.2018. The Committee had recommended to reject the application as the proposed site is not complying with the siting guidelines for establishment of Dairy Unit. Viz.,
  - NH-16 is existing towards Southern side of the proposed site.
  - Village road connecting NH-16 to Ramannapalem is existing towards the Western side of the proposed site.
  - Kotha Vajrakutam an SC colony with about 80 houses with about 400 population & an elementary school of H/o. Chendurthi Village is existing at about 20 m, on the other side of the village road connecting NH-16 to Ramannapalem Village, which is abutting the proposed site on Western side, against the siting guideline of 500 m.

- Accordingly, the application was rejected vide order dt. 28.06.2018 by the JCEE, ZO: Visakhapatnam. The industry vide lr. dt. 24.07.2018 requested to reconsider their application on the following grounds:
  a) The area of the plot is 20.24 acres. Out of that, 6 acres is allotted for plant infrastructure and balance 14.24 acres is allotted for green belt. The PCB officials considered green belt portion of the land for the purpose of distance calculation. The actual production block / ETP for the purpose of distance measurement which is 350 / 463 m respectively.
  b) The distance between Western side rural road and plant site is about 70 m. The PCB officials considered green belt portion of the land for the purpose of distance calculation.
  c) The PCB officials considered green belt portion of the land for the purpose of distance calculation. The production block / ETP are located at a distance of 320 / 406 m from the habitation / school respectively.
d) The proponent assured that they wish to put up ultra-modern ETP plant in the proposed factory without causing smell, to treat the effluents generated. The ETP consists of the following unit operations:

    Equalization tank – Alkali & Acid Dosing Tanks – UASB Reactor – Aeration Tank –
    Secondary Clarifier – Pressure Sand Filter – Activated Carbon Filter – Treated Effluent
    Tanks – Sludge Tank – Decanter Centrifuge – Sludge Drying Belts – Foam Trap –
    Sediment Trap - Biogas Flare.

e) The factory creates employment over 800 people directly / indirectly in the local area.

➤ The officials of RO: Kakinada inspected the proposed site again on 31.07.2018 and submitted a report dt. 31.07.2018 with the following observations:

i. The distance between the production block (170 14° 12.3"N, 820 18° 38.1"E) and the NH-16 (170 14° 1.6"N, 820 18° 42.8"E) was measured and it was reported to be about 350 m.

ii. The distance between the production block (170 14° 12.3"N, 820 18° 38.1"E) and the Village Road (17° 14° 12.5"N, 820 18° 34.9"E) was measured and it was reported to be about 70 m.

iii. The distance between the production block (170 14° 12.3"N, 82° 18° 38.1"E) and the habitation i.e., Kotha Vajrakutam, SC Colony (170 14° 03.76"N, 820 18° 38.03"E) was measured and it was reported to be about 260 m. The site at which ETP proposed is located towards Northern side of the production block, which is at a distance of about 300 m, from the habitation.

iv. The distance between the site at which 4 TPH boiler proposed (17° 14° 10.51"N, 82° 18° 41.04"E) and the habitation i.e., Kotha Vajrakutam, SC Colony (17° 14° 03.76"N, 82° 18° 38.03"E) was measured and it was reported to be about 227 m.

v. Civil works pertaining to production block are in progress and about 40% of civil works are completed. Photographs are submitted.

vi. The representative of the unit informed that they have proposed RO plant in addition to the Primary, Secondary and Tertiary treatment facilities to treat part of the treated effluent further. The unit has proposed to utilize the RO permeate for crate washing, cooling tower makeup and toilet flushing purpose and RO rejects back into ETP.

The representatives of the project proponent attended the meeting and requested to re-consider their application. They have submitted a letter dt. 02.08.2018 along with details of ETP, site layout plan, Green belt etc.,

After detailed discussions, the Committee recommended to obtain the following information from the project proponent:

  o Gram panchayat Resolution permitting the industry.
  o NOC from the neighbouring villages.
  o The purpose for which the site of the industry earmarked in the master plan of Urban Development Authority.
  o The RO rejects contain dissolved solids. It is required to verify whether the proposed ETP can treat the rejects of the RO.

The proponent was requested to submit the above information to take further necessary action vide lr. dt. 14.08.2018.

MEMBER SECRETARY
MINUTES OF THE CFE COMMITTEE MEETING HELD ON 04.10.2018

The proponent vide IR dt. 06.09.2018 submitted reply to the Board on above points as following and requested for re-consideration:

- A copy of the resolution No. 73, dt. 28.04.2018 of Chendurthi Grampanchayat, permitting for establishment of industry was submitted.
- A copy of the NOC dt. 20.08.2018 from the villagers of K.H. Peta was submitted.
- The RO rejects are proposed to dispose into quadruple effluent evaporation (4 stages) and ATFD system.
- A copy of the Technical approval dt. 15.03.2018 obtained from the Vice Chairman, Godavari Urban Development Authority (GUDA), Kakinada was submitted. The proponent has not furnished details on the purpose for which the site of the industry earmarked in the master plan of the Urban Development Authority.

The representatives of the project proponent attended the meeting. They have informed as following:

a) They have submitted a copy of G.O.Ms.No.96 dt.15.03.2017 issued by MA&UD Department, notifying the jurisdiction of "Godavari Urban Development Area (GUDA)" in 280 Villages in 26 Mandal in which Chendurthi Village of Gollaprolu Mandal is also included.

b) They would prepare and submit Standard Operating Procedure (SOP) for ETP operation.

After detailed discussions, the Committee recommended to direct the JCEE, ZO: Visakhapatnam to issue CFE after receipt of Standard Operating Procedures (SOP) for ETP operation with the following conditions:

c) The proponent shall submit the analysis report of the treated effluent to the Board after commissioning the ETP.

d) The proponent shall shift the unit to a suitable place conforming to the Board's siting guidelines in case of failure to comply with Board's standards and conditions and any complaint against them.


The Committee noted the following:

a) The R.O. submitted a report dt. 28.09.2018 on the representation. The following point was mentioned in the report:

"A Hillock is existing towards the Eastern direction of the proposed site which is at a height of about 200 ft. The Peda Sankarlupudi Village habitation is existing on the other side of the Hillock which is at an aerial distance of about 540mtrs., As a hillock is existing in between the proposed site and the Peda Sankarlupudi habitation, the impact i.e. dust nuisance due to operation of stone crushing unit may be minimum."

The representatives of the project proponent attended the meeting and informed that there is a hill between the proposed site and village habitation and requested to issue CFE.

After detailed discussions, the Committee recommended to direct the JCEE, ZO: Visakhapatnam to issue CFE after receipt of NOC from Villagers and with a condition that "they would shift the unit to a suitable place conforming to the Board's siting guidelines in case of failure to comply with Board's standards and conditions and any complaint against them".

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MINUTES OF THE CFE COMMITTEE MEETING HELD ON 04.10.2018

ITEM NO. 13 M/s. Vasishta Environ Care, Plot No 27A25, Denotified Area AP SEZ, Atchutapuram Rambilli (M), Visakhapatnam - Industry’s request for the Extension of CFE validity - Reg.

M/s. Vasishta Environ Care, Plot No 27A25, De-notified Area AP SEZ, Atchutapuram Rambilli (M), Visakhapatnam has obtained CFE for the Board vide order dt 08.09.2017 having valid up to 08.06.2018 for the establishment of 2nd CBMWTF in Visakhapatnam District.

The industry has requested the Board for the extension of the CFE validity for the period of three months i.e until 30.09.2018 and the Board vide order dt: 07.08.2018 extended the validity of the CFE for the period upto 30.09.2018.

Further, the industry vide letter dt: 24.09.2018 requested the Board to extend the validity of the CFE upto 31.12.2018 stating that the works could not be completed as per schedule due to rains and workers issues.

The EE, RO, Visakhapatnam e-mail dt: 01.10.2018 submitted that the erection of the shed is under progress; the chimney was erected; the incinerator equipment was observed in the premises.

Recommendations:

After detailed discussion the Committee recommended for extension of CFE validity upto 31.12.2018 with a condition that the industry shall start the plantation immediately.


The A.P. Pollution Control Board vide order dt: 25.05.2018 issued CFE (Phase – IV, 4th Cell) to M/s. Coastal Waste Management Project for establishment for landfill at Sy.No.183, 117 & 54/p, in J.N Pharmacity in an area of 2.0 acres to facilitate disposal of 1.8 Lakh Tons of Hazardous waste.

As per the CFE condition No 36. “CFE order is issued subject to the approval of design criteria and the drawings of the proposed landfill etc. by APCCB and the project proponent can take up preliminary works and shall not take up any works related to the above items until the design criteria and drawings are approved by APCCB”.

As per the CFE condition no. 19 “The facility has to construct as per the National Geophysical Research Institute (NGRI), and Andhra University designs.”

Now, the facility has applied for the approval of the designs of the landfill and Garland drain designs and submitted the drawings attested by Dr. C.N.V. Satyanarayana Reddy, Professor, Department of Civil Engineering, Andhra University. As per the designs, it is proposed to provide the following liners from the bottom.

1st Layer:
- Compacted earth (sub soil)
- 450 mm thick compacted clay
- 2 mm thick HDPE geo liner
- 400 gsm geo-textile liner
- 160 mm dia HDPE (Percolated holes) PIPE (Secondary)
- 300 mm thick filter media (Secondary leachate collection)
- 285 gsm geo-textile (base portion only)

MEMBER SECRETARY
2nd Layer
450 mm compacted clay
2 mm thick HDPE geo liner
400 gsm geo-textile liner
160 mm dia HDPE (Perforated) Pipe
300 mm thick filter media (Primary leachate collection system)
285 gsm geo-textile (base portion only)

The EE, RO, Visakhapatnam reported that above liners are meeting the CPCB design criteria: these drawings are approved and certified by the Andhra University; and recommended that the designs of the landfill may be examined.

Prof. C.N.V. Satyanarayana Reddy, Professor, Department of Civil Engineering, Andhra University stated the following:

1. The proposed location is abutting previous cells of Phase – IV and the subsoil consists of gravelly soil and SDR. The water table is present beyond 20m depth. Hence the location is suitable for landfill construction.

2. The double base (composite) lining and side lining systems proposed for containing pharmaceutical waste corresponds to the requirements of landfill for containing Hazardous waste specified by CPCB.

3. The submitted layout and design drawings of cell 4 of Phase- IV are in line with requirements specified in HAZWAMS/17/2000-01.

4. Hence, the layout and design drawings of cell 4 phase – IV are certified and recommended for approval for landfill construction by APPCB.

The industry representative attended the meeting and informed that the signed drawings will be submitted to the Board; explained that the leachate from the new cell will be connected to the old landfill and it will be routed to the CETP for treatment and disposal; permanent capping works of the existing landfill will be started immediately.

Recommendation:
After detailed discussions on verification report of the EE, RO: Visakhapatnam, agenda and submissions of the representatives of the industry, the committee recommended to approve the design after submission of i) the signed drawings of the proposed landfill & ii) time bound action plan for providing permanent capping to the existing landfill.

[Signature]
MEMBER SECRETARY