PROCEEDINGS OF THE MEETING OF STATE LEVEL EXPERT APPRAISAL COMMITTEE, ODISHA HELD ON 24.1.2014 AT 11.00 AM FOR CONSIDERATION OF PROPOSAL OF M/S. KALINGA CALCINER LTD., AT UDAYABATA, TAHASIL- KUJANGA, DIST – JAGATSINGHPUR, ODISHA AS PER DIRECTION OF THE HON'BLE NATIONAL GREEN TRIBUNAL, NEW DELHI

The meeting of the State Expert Appraisal Committee, Odisha was held on 24.1.2014 in the Conference Hall of Odisha State Pollution Control Board, Bhubaneswar under the Chairmanship of Sri Sasanka Sekhar Patnaik for consideration of proposal of M/s. Kalinga Calciner Ltd. as per direction of the Hon'ble National Green Tribunal, New Delhi. The following members were present in the meeting:

1. Shri Sasanka Sekhar Patnaik - Chairman
2. Dr. G. K. Roy - Member
3. Dr. D. K. Rout - Member
4. Dr. S. K. Biswal - Member
5. Shri Sridhar Behera - Member
6. Dr. Moheswar Patra - Member
7. Dr.(Ms.) Padmaja Mishra - Member
8. Dr. R. C. Mohanty - Member
9. Dr. C. R. Mohanty - Member

M/s. Kalinga Calciner Ltd. obtained consent to establish from the State Pollution Control Board, (SPCB) Odisha on 25.08.2010 for the production of calcined petroleum coke of 2,20,000 TPA by installation of Rotary Kiln Technology with capacity of 200 TPD in Phase I and capacity of 500 TPD in Phase II at Udayabata, Tahasil- Kujanga in the district of Jagatsinghpur. The proponent has divided the entire project into two phases i.e., Phase I = 60,000 TPA and in phase-II = 1,60,000 TPA and a WHRB to produce 5 MW electric power. The phase-I project was put into trial operation after obtaining consent to operate (trial) from the State Pollution Control Board.

Sri Narahari Tarai filed an Application No. 14 of 2013 before the Hon'ble National Green Tribunal, New Delhi on dt. 05.02.2013 regarding the operation of the plant without obtaining environmental clearance. The MoEF, Govt. of India subsequently enlisted calcined petroleum coke in the schedule 4(b) (that is same as coke oven plant) vide circular dt.25.02.2013. Subsequently, the Board has asked the industry to shut down the operation.

Disposing the application No. 14 of 2013 filed by Sri Narahari Tarai Vs. MoEF and others, the Hon'ble National Green Tribunal, Principal Bench, New Delhi in their order dated 20th March, 2013 has stated that calcined petroleum coke unit being a coke oven plant is covered under 4(b) of the EIA notification, 2006 and have directed the project proponent to obtain environmental clearance from SEIAA, Odisha. Accordingly, the project proponent applied for environmental clearance for its phase-I for 60000 TPA CPC unit (already established without environmental clearance) and phase-II for 1,60,000 TPA CPC unit and a WHRB power plant of 5 MW capacity.

The SEAC, Odisha issued TOR for EIA study vide letter No. 493 dt. 8.5.2013. Public hearing of the proposal was conducted on 29.9.2013. While disposing M.A. No. 983 of 2013 in the matter of environmental clearance of M/s. Kalinga Calciners Ltd at Udayabata, Kujanga, Jagatsinghpur,the Hon'ble NGT passed order dated 1.11.2013 "to complete the process of grant and/or refusal of environmental clearance expeditiously and in any case not later than four weeks from today"… and " list the matter on 10th December, 2013".The final EIA report submitted by the project proponent was received by SEAC from SEIAA on 13.11.13 for appraisal . Accordingly, the project proponent was directed vide letter No. 2111 dt. 16.11.13 to appear before the committee on 26.11.13 at 3 PM alongwith accredited EIA Coordinator for presentation of the final EIA report. However, the EIA Coordinator was not present due to ill health. Accordingly, the committee decided not to allow for presentation in absence of EIA Coordinator.

Since, the proponent was unable to present the proposal before the committee and requested to allow them some more time for presentation, it was not possible to take decision on grant / rejection of environmental clearance within 04 weeks of time. The SEAC opined that, the SEIAA, Odisha may consider to make submissions before the Hon'ble NGT, New Delhi for modification of order dated 1.11.2013 for extension of time.

The SEIAA, Odisha discussed the matter in its meeting held on 30.11.2013 and taking into consideration the lackadaisical approach of the project proponent and the direction of the Hon'ble NGT to complete the process of grant and / or refusal of EC within a time frame of four weeks, unanimously decided to refuse environmental clearance to M/s. Kalinga Calciner Ltd.

While disposing M.A. No. 1071 of 2013 in the matter of environmental clearance of M/s. Kalinga Calciners Ltd at Udayabata, kujang, jagatsinghpur the Hon'ble NGT passed order dated 16.12.2013 to keep the order passed by SEIAA, Odisha for refusal of environmental clearance in abeyance and direct the Project Proponent to appear before SEIAA on 02nd January, 2014. In the event the Applicant does not appear or does not cooperate with the SEIAA for expeditious conclusion of the proceeding, the Order passed by SEIAA, Odisha now put in abeyance shall become operative. However, if he appears and cooperates in the proceedings, the SEIAA shall pass a fresh order and place a copy thereof on record of the tribunal for hearing on 27th January, 2014.

The applicant appeared before the SEIAA on 2.1.2014 as per above order of the NGT, New Delhi.The SEIAA decided that decision on issue of environmental clearance for the proposal will be taken after getting recommendation from the SEAC. In pursuance of the above decision of the SEIAA, the SEAC called the project proponent on 16.1.2014 at 3.00 PM to make presentation on final EIA report before the SEAC.

The project proponent alongwith with EIA Coordinator of **M/s. Visiontek Consultancy Ltd**. made a detailed presentation on the final EIA report of the proposal before SEAC. The SEAC observed the following

M/s Kalinga Calciner Limited (KCL) has proposed 2,20,000 TPA Calcined Peteroleum Coke(1X60,000TPA (PH-I-Existing & Proposed 1X 1,60,000TPA (PH-II)) & WHRB-15MW (PH-II) by Rotary Kiln Technology at Udayabata , P.O. Paradeepgarh, Tehsil- Kujanga Dist. Jagatsinghpur, Odisha. The total project land area is 22.59 acres which has already been acquired and is bounded by Latitude $20^0$18'19.0"N and Longitude $86^0$37'39.5"E. The site is well connected by road & rail network. The proposed site is 0.5 KM from NH-5A connecting Haridaspur & Paradeep Port, 0.6KM from Cuttack-Paradeep Road and 3.25 Km away from the Paradeep Railway Station of SE Railway. The nearest railway station Paradeep connects it with Badabandham Rahama, Sarla Road, Gorakhnath, Raghunathpur, Kandarpur, Cuttack & Bhubaneswar. The Mahanadi River is at a distance of 2.5 km and the Taladanda Canal is at 0.5 Km from the site. The major sea Bay of Bengal is at a distance of 6.5Km from the Project Site. The nearest Airport is at Bhubaneswar at about 120 Km. No National Park/Wild Life Sanctuary/Reserve Forest is located within 10 Km radius.

Total cost of the project is Rs. 120.00 Crores. A budget of Rs. 465.00 Lakhs and Rs. 43.00 Lakhs has been earmarked towards capital cost and recurring cost against pollution control measures. A budget of Rs. 6.00 crores has been envisaged for CSR. Green belt will be developed in 8.00 acres (35.5%) out of total 22.59 acres. The power requirement for the

proposed unit is 780KW which shall be sourced from CESU and CPP. Total water requirement will be 65 m^3/hr sourced from Taladanda Canal (permission obtained from Water Resource Department for 0.185 cusec) & groundwater (permission obtained from CGWB for 300 m^3/day). Application shall be submitted to Department of Water Resources for phase-II water drawl. Water is used only for cooling purpose which is recycled or evaporated. No effluent will be discharged outside the premises and Zero discharge will be adopted.

Raw petroleum coke (3, 00,000 TPA) will be used as raw materials to produce 2, 20,000TPA Calcined Petroleum Coke. The total raw materials will be imported and indigenous transported through port, rail & road.

Air pollution is generated as fugitive emissions which will be controlled by using bag filters installed at all material handling sections, transfer & storage section, Kiln feeding section, crushing & screening section & Product storage section. Electrostatic precipitator & Ventury scrubber (SO_2) with adequate height of stack has been proposed to control air pollution in both the kilns. Waste Heat Recovery Boiler will be installed for heat extraction of kiln gases and subsequent power generation. Dedusting system and water sprinkler will be provided to control fugitive emissions. Solid waste is generated in significant quantities from the process in the form of fines and carbon sludge will be reused or sold to parties. The TOR was issued for 5 MW WHRB. However, it has been given in the TOR to utilise entire gas in WHRB. So the proponent has increased the capacity of WHRB for generation of power from 5 MW to 15 MW as per TOR.

The SEAC in its meeting held on 16.1.2014 decided to take decision on the proposal after receipt of the certain information / document from the proponent and after a field visit by the sub-committee of the SEAC.

I. The proponent has furnished the information / documents as sought for by the SEAC and the SEAC verified the same. The sub-committee of the SEAC has also visited the site on 23.1.2014 and furnished site visit report which is enclosed as **Annexure-I**. The following issues It is noted that many industries have come up in Paradeep in the recent years which have contributed to the industrial pollution in the area with the industries established , new habitations /buildings have come up adjoining the industries located in the area who are in turn affected by the presence of the such industries. Erstwhile rural areas are now urban area / township and industries / human habitations co-exist.
II. Goa Carbon (the existing industry) is emitting carbon dust which affects IOCL residential colony .(a complaint has reported by IOC residents)
III. The project proponent already had a trial run to establish compliance to this consent to operate conditions in Feb' 2013, which shows a high level of AAQ (PM_{10} - 112.0 against approved standard 100.0)

IV. Discussions with the project proponent revealed that the proposed processed technology is a modern/ improved technology (as against the existing technology as adopted by Goa Carbon). Hence, it is likely to take care of the pollution concerns to significant extent.

V. Greening and land scape development covering at least 1/3rd of the project site with multi row tree plantations with well-developed crown cover need to be developed to arrest the dust problems in the project site.

VI. With critical analysis of the process technology from raw material receipt, to process engineering and dispatch of the final product need critical care and attention to enforce the pollution safeguards by the project officials at the plant site.

The SEAC analyzed the issues in detail. The SEAC also noted that the proponent has already commissioned the phase-I project without environmental clearance in violation to EIA notification 14th September, 2006 and amendment thereafter.

Considering the information furnished, presentation made by the **M/s. Visiontek Consultancy Ltd**and issues raised by the public during the public hearing,the SEAC recommended to grant environmental clearance for the proposal for a period of five years with the following stipulated conditions **subject to submission of a written commitment in the form of a formal resolution by the proponent that violation will not be repeated as per MoEF, Govt. of India Office Memorandum No. J-11013/41/2006-IA.II(I) dt. 12.12.2012**

A. SPECIFIC CONDITIONS

1. The proponent shall provide WHRB to generate power utilizing waste heat gas from Rotary kilns.
2. The construction material which has potential to be air borne, shall be transported in covered trucks.
3. The height of the stack attached to the D G sets shall confirm to the following.

   $H = h + 0.2 \sqrt{KVA}$
   where
   h = Height of the building where it is installed in meter
   KVA = Capacity of D.G Set
   H = Height of the stack in meter above ground level

4. The particulate emission from all vents / stacks connected to the bag filters shall not exceed 50 mg/Nm^3. Height of the stacks/ vents shall not be less than 20 mtrs. The unit shall provide port hole and platform at suitable location on the stack with safe approach to conduct emission monitoring.
5. The unit shall install ESP followed by scrubber in the stack attached to rotary kilns such that particulate matter emission shall not exceed 50 mg/Nm^3. They should make provision for one spare field during the design of ESP. If more than one field of ESP fails, the plant should trip automatically through an interlocking system.

6. The connectivity of pipeline between rotary kiln(combustion chamber) and chimney should be removed. The exhaust gas should be sent to the chimney through ESP and scrubber.

7. Additional scrubber is to be installed for standby purpose to take care of Sox, NOx absorption and other gases.
8. Ploymyer based chemical is to be added in water for dust suppression
9. SO_2 Scrubber should be operated with soda ash solution
10. Conveyor *should be replaced with pipe type closed conveying system*
11. The proponent shall store the raw petroleum coke as well as calcined petroleum coke under covered shed to prevent dust getting wind borne.
12. The proponent shall ensure transportation of raw petroleum coke from port to plant site under covered truck to prevent dust getting wind borne.

13. Both Dust suppression (dry fog) and extraction (bag filter) system shall be provided at all dust generating source such as crushing, screening & material transfer points etc.
14. The suction points of dust extraction system shall, be provided at primary crusher discharge Chute, screen, all transfer points and any other dust generating sources.
15. Work zone area including roads inside the plant premises shall be black topped/concreted. Permanent high pressure water sprinkling system shall be installed for regular spraying of water on roads to minimize fugitive dust emission.
16. The proponent shall install continuous on line ambient air quality and stack monitoring system with display facilities at gate.
17. High boundary wall shall be provided around the factory premises which will be act as dust barrier
18. All Pollution control equipment may be provided with separate electricity meter for continuous recording of power consumption. Non-functioning of Pollution control equipment should be recorded in the same logbook along with reasons for not running the Pollution Control equipment.
19. Good housekeeping practices shall be followed to improve the work environment.
20. All roads and shop floors shall be cleaned regularly.
21. Waste water generated from raw water treatment system shall be properly treated and reused for dust suppression.
22. Effluent generated from Soft water plant regeneration shall be properly treated and reused for dust suppression.
23. Cooling water shall be completely recycled with make-up water.
24. Effluent generated from cooler discharge shall be treated in settling tank and recycled with make-up water.
25. Effluent generated from ventury scrubber shall be treated in settling tank and recycled with make-up water
26. The storm water drain should be so designed that the industrial effluent does not have any access to it under any circumstances.
27. The solid waste generated in form of carbon sludge from Ventury scrubber and dust from bagfiiter's shall be properly disposed off without causing any public nuisance or environmental contamination.
28. Sludge generated from raw water treatment plant shall be used for land filling and gardening.
29. The proponent should provide full fledged environmental management cell and Head of environmental management cell should report to the unit head.
30. Air compressor, DG set and other noise generating sources should be acoustically designed and should be housed in appropriate acoustic enclosures so that the noise level outside it shall conform to the prescribed norms.
31. A green belt of adequate width and density preferably with local species along the

periphery of the plant shall be raised so as to provide protection against particulates and noise. It must be ensured that at least 33% of the total land area shall be under permanent green cover. The proponent shall ensure the maintenance of green belt throughout the year and for all time to come, it is advised that they may engage professionals in this field for creation and maintenance of the green belt. An action plan for this purpose shall be prepared and shall be submitted accordingly.

32. Stack monitoring facilities for all the major stacks and adequate air pollution control systems viz. dust extraction system, bag filters etc. to control particulate emissions within the prescribed limits shall be provided. Carbon mono-oxide (CO) shall also be monitored along with other parameters and standards notified under Environment (Protection) Act, 1986 shall be followed. The reports shall be submitted to the Ministry's Regional Office at the Bhubaneswar, SEIAA, Odisha, CPCB and SPCB.

33. Measures shall be taken to prevent leakages from the Calcined Petroleum Coke Plant.

34. In-plant control measures like bag filters, de-dusting and dust suppression system shall be provided to control fugitive emissions from all the vulnerable sources. Dust extraction and suppression system shall be provided at all the transfer points. Bag filters shall be provided to hoods and dust collectors to coal and coke handling to control dust emissions. Water sprinkling system shall be provided to control secondary fugitive dust emissions generated during screening, loading, unloading, handling and storage of raw materials etc.

35. Secondary fugitive emissions shall be controlled within the prescribed limits, regularly monitored and records maintained. Guidelines / Code of Practice issued by the CPCB in this regard shall be followed.

36. Vehicular pollution due to transportation of raw material and finished product shall be controlled. Proper arrangements shall also be made to control dust emissions duringloading and unloading of the raw material and finished product. Efforts shall also be made to reduce impact of the transport of the raw materials and end products on the surrounding environment including agricultural land. All the raw materials shall be transported in covered trucks only and shall not be overloaded. Vehicular emissions shall be regularly monitored and records kept.

37. Total requirement of the water shall not exceed 65 m^3/hr. Necessary permission from the concerned authotrity for water drawal shall be obtained. All the treated wastewater shall be recycled for dust suppression and green belt development. Domestic wastewater shall be treated in septic tank followed by soak pit. Zero effluent discharge shall be strictly followed and no wastewater shall be discharged outside the plant premises.

38. Efforts shall be made to make use of rain water harvested. If needed, capacity of the reservoir shall be enhanced to meet the maximum water requirement. Only balance water requirement shall be met from other sources.

39. Coke fines shall be recycled and reused in the process. The waste oil shall be properly disposed of as per the Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2008.

40. Risk and Disaster Management Plan along with the mitigation measures shall be prepared and a copy submitted to the Ministry's Regional Office at Bhubaneswar, SPCB and CPCB within 3 months of issue of environment clearance letter.

41. All the commitments made during the public during the Public Hearing / Public Consultation meeting held on 29.9.2013 shall be satisfactorily implemented and a separate budget for implementing the same shall be allocated and information submitted to the Ministry's Regional Office at Bhubaneswar.

42. At least 5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment based on public hearing issues and item-wise details along with time bound action plan should be prepared and submitted to the Ministry's Regional Office at Bhubaneswar. Implementation of such program should be ensured accordingly in a time bound manner.

43. The company shall provide housing for construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

44. **The plant shall only be allowed to operate after implementation of pollution control measures as stipulated above**.

45. **The plant shall allowed to operate after complying to all the specific conditions stipulated above.**

B. GENERAL CONDITIONS:

1. The proponent shall obtain permission from Paradeep Development Authority
2. The project authorities must strictly adhere to the stipulations made by the odisha Pollution Control Board and the State Government.
3. No further expansion or modifications in the plant shall be carried out without prior approval of the SEIAA, Odisha.
4. The gaseous emissions from various process units shall conform to the load/mass based standards notified by this Ministry on 19th May, 1993 and standards prescribed from time to time. The State Pollution Control Board may specify more stringentstandards for the relevant parameters keeping in view the nature of the industry and its size and location.
5. At least four ambient air quality monitoring stations should be established in the downward direction as well as where maximum ground level concentration of PM_{10}, SO_2 and NO_X are anticipated in consultation with the SPCB. Data on ambient air quality and stack emission shall be regularly submitted to this Ministry including its Regional Office at Bhubaneswar, SEIAA, Odisha and the SPCB/CPCB once in six months.
6. The overall noise levels in and around the plant area shall be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (daytime) and 70 dBA (night time).
7. Occupational health surveillance of the workers should be done on a regular basis and records maintained as per the Factories Act.
8. The company shall develop surface water harvesting structures to harvest the rain water for utilization in the lean season besides recharging the ground water table.
9. The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP report. Further, the company must undertake socio-economic development activities in the surrounding villages like community development programmes, educational programmes, drinking

water supply and health care etc.

10. Requisite amount shall be earmarked towards capital cost and recurring cost/annum for environment pollution control measures to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government. An implementation schedule for implementing all the conditions stipulated herein shall be submitted to the Regional Office of the Ministry at Bhubaneswar and SEIAA, Odisha. The funds so provided shall not be diverted for any other purpose.

11. A copy of clearance letter shall be sent by the 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. The clearance letter shall also be put on the web site of the company by the proponent.

12. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MOEF at Bhubaneswar. The respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.

13. The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MOEF, the respective Zonal Office of CPCB and the SPCB. The Regional Office of this Ministry at Bhubaneswar, CPCB/SPCB shall monitor the stipulated conditions.

14. The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent 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 conditions and shall also be sent to the respective Regional Office of the MOEF at Bhubaneswar by e-mail.

15. The Project Proponent shall inform the public that the project has been accorded environmental clearance by the SEIAA, Odisha and copies of the clearance letter are available with the SPCB 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 should be forwarded to the SEIAA, Odisha.

16. 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 commencing the land development work.

17. The SEIAA, Odisha may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

18. The SEIAA, Odisha reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

19. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008 and the Public (Insurance) Liability Act, 1991 along with their amendments and rules.

(SRI S. S. PATNAIK)
CHAIRMAN,SEAC

(DR. G. K. ROY)
MEMBER, SEAC

(DR. D. K. ROUT)
MEMBER, SEAC

(SRI SRIDHAR BEHERA)
MEMBER, SEAC

(DR. S. K. BISWAL)
MEMBER, SEAC

(DR. MOHESHWAR PATRA)
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(DR. R. C. MOHANTY)
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(DR. C. R. MOHANTY)
MEMBER, SEAC

APPROVED

CHAIRMAN, SEAC