

MOOT PROPOSITION

- 1 The world's largest democracy the Republic of Arya, situated in the Assuwa continent is a fast-developing country. It has an extremely diverse landscape ranging from the Himalayas in the North to rich beaches in the south to evergreen forests in the east and scorching desert in the west. Constitution of Arya is its *grundnorm*. The country is known for its natural heritage and diverse culture. The Aryan landmass is home to a huge variety of flora and fauna. It has an amazingly wide variety of wildlife animals and birds that live in the varied terrains of the country. People since immemorial times have worshiped nature. The need for protection and conservation of the environment and sustainable development is reflected in the constitutional framework of Arya, its international commitments and national laws.
- 2 Arya is the 4th biggest economy in the world and is primarily dependent on its agricultural and industrial sectors for its growth and employment generation. The Chemical and Petrochemical (CPC) industry plays a pivotal role in a country's industrial and agricultural development. Aryan CPC industry is one of the fastest growing in the world and has reached significant milestones in terms of capacity additions and value growth post the country's independence. The growth is largely driven by the country's rising consumption needs and export capacity. Arya also has a very booming agricultural sector. It also is the largest exporter of rice and the third largest exporter of wheat in the world.
- 3 However, in the past four decades, experts have raised concerns about damage to the environment and wildlife of the country. Many species of plants and animals have either become extinct or have been pushed to endangerment due to non-judicious industrial growth and agricultural practices.
- 4 Boost Group of Industries Ltd. is a multinational corporation (Boost Arya Ltd.) having its headquarters in the state of Pandu Ranga, Arya. Among its other businesses, it has the largest chain of CPC plants in the continent and the third largest in the world. Petrochemical plants refine crude oil and convert the components of crude oil and natural gas such as ethane, propane, butane and methane into chemicals like ethylene, propylene, butadiene,

and methanol. These chemicals are the building blocks for plastic, industrial chemicals, agricultural pesticides, etc.

- 5 The Boost Group has four fully functioning CPC Plants across the states of Pandu Ranga since 2000. The state of Silsa is the neighbouring state of Pandu Ranga, with the lowest GDP and employment rate among all the other states, in the country. To make the state self-sufficient by producing its own chemicals, pesticides, insecticides and fertilizers at reasonable rates, to boost industry, agriculture and to generate employment on a large scale the government of Silsa invited proposals for setting up a CPC plant in its territory. Amongst the several proposals, the Boost Group of industries' proposal was found to be the most promising. In 2006 the government of Silsa to promote industrial growth in the state declared the southern part of the city of Jagadpur and its outskirts as a Special Economic Zone (SEZ), entitling the beneficiaries with simplified access to all governmental formalities and taxation benefits.
- 6 The environmentalists of Arya raised objections and also held protests against setting up a CPC plant in the area as people of the *Khabo* tribe lived in the district. These tribals were dependent on nature and natural resources in the area for their livelihood. People living in the neighbouring villages supported the upcoming project as it will generate employment for the locals, although a few people also joined the protest against the construction and operation of the CPC Project in the area. The objections and the protests of environmentalists were ignored by the government of Silsa.
- 7 After acceptance of the proposal to set up the CPC industry from the state government, Boost Group of Industries filed applications for all the required government formalities including licenses from the concerned departments and Environmental Clearances (ECs). After taking into consideration necessary parameters like compliance with provisions of the Water Act, the Air Act, the Environment Protection Act, the Environment Impact Assessment and the submission of the Safety Audit Report to the authorities under the Environment Protection Rules, NOCs were granted by the Ministry of the Environment

Forest and Climate Change (MoEFCC), the Central Pollution Control Board and the Silsa State and Pollution Control Board to the company to set up its plant at Jagadpur.

- 8 In pursuance thereto in 2007, the company set up the plant at the designated SEZ and installation of process piping which refers to the entire system of pipes that transport fluids like air, steam, water, chemicals, fuel, effluents, etc. in and around the industrial unit was done. The map showing this proposed plan for the installation of process pipes was duly approved by the Municipal Corporation of Jagadpur. On getting approval the company started refining crude oil and producing chemicals in the year 2010. The company was required to submit the annual audit and safety measures reports to the concerned authorities.
- 9 The CPC plant was sanctioned a designated area of 70 acres to dispose of its hazardous waste which is produced from its daily processing of petrochemicals. But according to locals, the waste so disposed of was not properly managed by the corporation, they complained about a chemical smell emanating from the waste disposal area. In April 2021 the Silsa Pollution Control Board issued directions for proper treatment and disposal of the waste on time bound basis. Boost Arya Ltd. submitted the compliance report within 7 days of the directions issued.
- 10 A land area of 470 acres was marked as a buffer area around the CPC plant. The buffer zone was covered with local vegetation like Karanj, *Ber*, *Imli*, *Khair*, *Mahua*, *bel*, *Babool*, *mithineem*, *mainphal*, *pilu*, *karonda* and other local bushes and grasses. According to the Master Plan of 2010, prepared by the government of Silsa, beyond that buffer zone in villages Samsar and Nilibar (falling under the jurisdiction of Jagadpur), agricultural land of 3000 *bighas* was allotted to economically weaker section (EWS) farmers. The government also provided subsidies to the farmers for purchasing farming equipment, irrigation, new varieties of seeds, fertilizers, pesticides, etc. Several farmers slowly encroached on some pockets of the buffer zone and started the cultivation of vegetables and crops in this area.

- 11 During the rainy season, the periphery of the CPC Plant and the buffer zone are overgrown with seasonal tuberous plants like *Pit Kanda* (a deep-rooted tuber), *Kasha Kanda* (edible tuber) and *Kulia Kanda* (tuber known for its intoxicating properties). These tuberous plants are consumed by the tribals to satisfy their hunger, meet their nutritional needs and for intoxication. The tribals used spades and other digging tools for digging the roots during the wee hours of the day. To avoid notice, after digging *kanda* the tribals covered the area again with the soil.
- 12 In the city of Jagadpur and nearby villages like other cities and villages of Arya, people kept hens, ducks, geese, goats, cows, buffaloes, sheep, pigs, donkeys, etc. as domestic animals. Crows, sparrows, mayans parrots, peacocks, monkeys, langurs, etc. inhabiting the area also frequented the Boost Arya Ltd. plant. Many of these birds and animals lived in the thick green cover of the buffer zone.
- 13 The bylaws of the Jagadpur, prohibited roaming of domestic animals on roads, SEZ, buffer zone and commercial areas falling under the jurisdiction of Jagadpur Municipal Corporation. Any domestic animals found wandering are seized by the Municipal Corporation and are released only after payment of a fine by the owner of the animal. Taking advantage of the situation of the non-presence of Municipal Corporation staff at night time, the farmers living on the outskirts of the buffer zone i.e. *Samsar* and *Nilibar* let their cows, buffaloes, and calves loose after sunset to graze in the open green areas and buffer zone. After grazing all night in these areas, the animals were brought back by the farmers to their homes before dawn.
- 14 In the third week of July 2021, the Wild Life Department Jagadpur recorded the unnatural death of 5 monkeys and 6 Black Faced Langurs. Similarly, unusual deaths of cows, buffaloes and sheep were reported by the farmers allotted land on the outskirts of the buffer zone in the village *Samsar*.

- 15 The post-mortem report of the animals recorded chemical toxicity as a cause of death. This news of the death of domestic and wild animals spread like wildfire amongst the circles of animal lovers, who through the registered NGO Jagadpur Society for Protection and Care of Animals (JSPCA), filed a case before the Hon'ble National Green Tribunal, North Zone Bench, Arya for taking action against the Boost Arya Ltd. for causing environmental pollution in the area and death of animals caused due to environmental pollution. The Tribunal issued a notice of motion on the petition and asked the Union Government of Arya through its Chief Secretary, Union MoEFCC and also the State Government of Silsa, through its Chief Secretary, Secretariat to furnish a detailed report regarding the incident and the Government's stand regarding the unfortunate incident.
- 16 The report submitted by the National Water and Soil Authority to MoEFCC highlighted the presence of toxic chemicals in the soil and water bodies up to 7 acres from the CPC plant in the buffer zone caused due to leakage from effluent pipes of the plant. According to the investigation carried on by the State Government, it also came to notice that some tribals had been regularly encroaching on the Boost Arya Petrochemical Plant premises. They had been digging edible tubers growing naturally near its outskirts and this process might have impacted the underground effluent pipes. The company was also found to have not filed the annual audit and safety reports in the year 2021 to the concerned authorities.
- 17 Unfortunately, in the first week of August 2021, there was a report of 134 cases of severe stomach ache and vomiting among people living in Jagadpur and the village *Samsara*. Two people also lost their life due to this. However, the pathological test could not ascertain the exact cause of the ailments. The Chief Medical Officer of the Civil Hospital Jagadpur brought this to the notice of the District Collector. This incident was widely reported by the regional, national and international media. The local environmentalists blamed the toxicity caused by the effluents of the Boost Arya Ltd. for the death of two persons, severe stomach ailments and loss of life of domestic and wild animals.

18 A group of environmentalists along with a registered NGO ‘Jeewan Suraksha’ filed a case before the NGT against Boost Arya Ltd. for the deaths and illnesses caused due to spillage of pollutants from Boost Arya Ltd. and environmental harm.

19 The Hon’ble NGT took cognizance of both incidents and clubbed both matters together and after hearing both sides, passed an order against Boost Arya Ltd., thereby holding them liable for the soil and water pollution leading to the death and sickness of people living in the village Samsar and loss of life of domestic and wild animals. A sum of Rs. 27 crores was directed to be paid as compensation to the heirs of the deceased, persons who suffered sickness, reimbursement for their medical treatment, death of domestic and wild animals, clean up and restoration of ecology.

20 Boost Arya Ltd. preferred an appeal against the order of the NGT before the Hon’ble Supreme Court of Arya. The Hon’ble Supreme Court of Arya issued a notice of motion in this case and stayed the award of the NGT.

The issues for consideration before the Hon’ble Supreme Court of Arya in the present appeal are as follows:

- a. Whether setting up of the Boost Arya Ltd. plant in the city of Jagadpur done lawfully?
- b. Whether Boost Arya Ltd. was at fault for improper disposal of the waste originating from its CPC plant and the spillage of effluents contaminating the environment?
- c. Whether the Boost Arya Ltd. is liable to pay the award money for the loss of human life, compensation and medical reimbursement for sickness caused, death of domestic/wild animals and harm caused to the ecology?

Argue on Behalf of:

1. Boost Arya Limited
2. ‘Jagadpur Society for Protection and Care of Animals and Jeewan Suraksha

The laws of Arya are *pari passu* with the laws of India

Additional Information

Buffer land is owned by Boost India, is not Govt. land

Buffer Area 470 acres

Waste Disposal Area- 70 acres

Plant size 2530.90 acres

Total Site Area (all inclusive)- 3070.90 acres

FORM I

ENVIRONMENT CLEARANCE

(I) Basic Information

Sr. No.	Item	Details
	Whether the proposal involved the violation of EIA notification	NA
1.	Name of the Project Proposal Number Project Cost	Boost Arya Ltd. at Jagadpur, Silsa By M/s Boost Group of Industries IA/JP/ARY2/109584/2007 Rupay 50600 Lakh
2.	Project Sector	Petroleum refining industry Petro-chemical complexes Industrial Projects
3.	New/Expansion/Modernisation	New
4.	Does it attract the general condition? If yes, please specify	No
5.	Does it attract the specific condition? If yes, please specify	No
6.	Location of the project	Jagadpur, Silsa

(II) Activity

- 1 Construction, operation, or decommissioning of the Project involving actions, which will cause physical changes in the locality (topography, land use, changes in water bodies, etc.)

S.No	Information/Checklist confirmation	Yes/ No	Details there of (with approximate quantities/rates, wherever possible) with source of information data
1.1	Permanent or temporary change in land use, land cover or topography including increase in intensity of land use (with respect to local land use plan)	Yes	Approximately 31000 acres of land will be required for setting up Crude to Chemical plant. This will change the land cover of the area.
1.2	Clearance of existing land, vegetation and buildings?	Yes	The project site is more or less flat and minor leveling of ground will be required. Only some shrubs and bushes will need to be cleared.
1.3	Creation of new land uses?	No	Area is already notified as industrial area. No change in land use
1.4	Pre-construction investigations e.g. bore houses, soil testing?	Yes	Site specific geo-technical and sub-surface investigations have already been carried out.

1.5	Construction works?	Yes	Civil/structural works, mechanical and electrical erection etc. To implement the proposed Crude to Chemical plant
1.6	Demolition works?	No	No demolition work is required
1.7	Temporary sites used for construction works or housing of construction workers?	Yes	The proposed plant site will have adequate space for construction yard.
1.8	Above ground buildings, structures or earthworks including linear structures, cut and fill or excavations and fill or excavations	Yes	There will be excavation, cut and fill during the process of construction / erection of proposed Crude to Chemical plant
1.9	Underground works including mining or tunnelling?	No	No underground works including mining or tunneling is required. Underground work would be limited to (i) Foundation for installation of storage vessels/spheres, laying of cable and earthing and (ii) laying sewerage network for process and sanitary waste
1.10	Reclamation works?	No	No reclamation work is required
1.11	Dredging?	No	No Dredging is required
1.12	Offshore structures?	No	Not Applicable

1.13	Production and manufacturing processes?	No	The Refinery will be integrated with a downstream petrochemical complex.
1.14	Facilities for storage of goods or materials?	Yes	Adequate Storage facilities will be provided within the plant premises to store crude and petroleum products & warehouse for polymers.
1.15	Facilities for treatment or disposal of solid waste or liquid effluents?	No	Spent Catalysts, ETP Sludges, General Solid Wastes, Tank Bottom Sludge etc. will be generated. Comprehensive treatment and disposal method would be designed including (i) re-processing of catalysts by sale under buyback arrangement by original manufacturer (ii) Incineration and (iii) Landfill disposal with MoEFCC approved TSDFs.
1.16	Facilities for long term housing of operational workers?	No	Township with the required civic amenities and services will be developed at a separate site.
1.17	New road, rail or sea traffic during construction or operation?	Yes	Internal roads will be developed as per project layout plan and the existing roads will be widened for moving larger and heavy equipment during construction phase. Site would be connected to nearest rail network. Project will involve movement of heavy equipment through road, rail. In operation phase, feedstock and product movement would take place using a combination of road, rail and sea logistics.

1.18	New road, rail, air water borne or other transport infrastructure including new or altered routes and stations, ports, airports etc.?	No	Internal roads will be developed as per project layout plan and the existing roads will be widened for moving larger and heavy equipment during construction phase.
1.19	Closure or diversion of existing transport routes or infrastructure leading to changes in traffic movements?	No	There will be no closure or diversion of existing transport routes or infrastructure leading to changes in traffic movements will be required for proposed CTC complex.
1.20	New or diverted transmission lines or pipelines?	No	No diversion of transmission line or existing pipeline network is proposed
1.21	Impoundment, damming, culverting, realignment or other changes to the hydrology of watercourses or aquifers?	No	There will be no impoundment, damming, culverting, realignment or other changes to the hydrology of watercourses or aquifers
1.22	Stream crossings?	No	No stream crossing present
1.23	Abstraction or transfers of water from ground or surface waters?	Yes	The water requirement for the CTC Complex is ~4,750 m ³ /h (~ 25MGD) on annual average basis.
1.24	Changes in water bodies or the land surface affecting drainage or run-off?	No	There will be no change in water bodies or the land surface affecting drainage or run-off.

1.25	Transport of personnel or materials for construction, operation or decommissioning?	Yes	Construction materials will come to site via rail, road as per convenience.
1.26	Long-term dismantling or decommissioning or restoration works?	No	No long-term dismantling or decommissioning or restoration works is required
1.27	Ongoing activity during decommissioning which could have an impact on the environment?	No	Not Applicable
1.28	Influx of people to an area in either temporarily or permanently?	Yes	There will be immigration of people during construction phase. During construction, peak manpower would be in the range of 1,000 – 3,000 persons. The site being easily accessible from the nearby areas which also have a good number of housing facilities, local housing will not be stressed to any degree of concern. Operating manpower would be a mix of local manpower and skilled manpower from other parts of the country.
1.29	Introduction of alien species?	No	Introduction of alien species is not envisaged
1.30	Loss of native species or genetic diversity?	No	No such case is reported from the area so far
1.31	Any other actions?	No	Not Applicable

- 2 Use, storage, transport, handling or production of substances or materials, which could be harmful to human health or the environment or raise concerns about actual or perceived risks to human health

S.No	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
2.1	Use of substances or materials, which are hazardous (as per MSIHC rules) to human health or the environment (flora, fauna, and water supplies	Yes	All solids & hazardous substances used in the refinery shall be stored, transported as per the hazardous waste management rules. All such wastes will be disposed to authorised Hazardous waste treatment, storage & disposal facility (TSDF) operator.
2.2	Changes in occurrence of disease or affect disease vectors (e.g. insect or water borne diseases)	No	Not Applicable
2.3	Affect the welfare of people e.g. by changing living conditions?	Yes	During the construction phase, indirect employment will be generated temporarily which will help in welfare of local people. During operation phase, living condition of local people will have a positive significant change.
2.4	Vulnerable groups of people who could be affected by the project e.g. hospital patients, children, the elderly etc.	No	No effect envisaged.
2.5	Any other causes	No	Not Applicable

3 Production of solid wastes during construction or operation or decommissioning (MT/month)

S. No	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
3.1	Spoil, overburden or mine wastes	No	Soil, overburden generated during excavation will be used for refilling of low-lying area and back filling
3.2	Municipal waste (domestic and or commercial wastes)	Yes	Municipal solid waste generated from plant / colony will be collected, segregated and disposed off.
3.3	Hazardous wastes (as per Hazardous Waste Management Rules)	Yes	Spent catalyst will be generated every 3-4 years. All statutory rules/guidelines of MOEFCC/CPCB will be complied prior to recycle, reclamation or sale of spent catalyst
3.4	Other industrial process wastes	Yes	Small quantities of non-hazardous, non-recyclable solid waste consisting of waste refractory, spent insulation, decoking solid waste from CDU/VDU, DCU, used filter cartridges, spent charcoal, spent clay and sand will be generated. These wastes will be disposed of as landfill.
3.5	Surplus product	No	There is no surplus product

3.6	Sewage sludge or other sludge from effluent treatment	Yes	The sewage sludge and sludge from effluent treatment would be incinerated/disposed off after complying with MoEFCC/CPCB norms.
3.7	Construction or demolition wastes	No	Construction waste like soil, brick bits, etc. will be utilized in leveling of land and road making. No demolition waste will be generated
3.8	Redundant machinery or equipment	No	There will no redundant machinery or equipment
3.9	Contaminated soils or other materials	No	There will not be any contaminated soils or other materials
3.10	Agricultural wastes	No	There will not be any agricultural wastes
3.11	Other solid wastes	No	There will not be any other solid wastes

4

Release of pollutants or any hazardous, toxic or noxious substances to air(Kg/hr)

S. No	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
4.1	Emissions from combustion of fossil fuels from stationary or mobile sources	Yes	Emission from refinery cum petrochemical complex will be from process and CPP stacks
4.2	Emissions from production processes	Yes	CO ₂ , NO _x , SO _x and CO emissions from process furnaces in Naphtha Cracker, PGHU and CHU. Particulates from intermittent catalyst regeneration. Waste gas stream from Benzene drying column, alkylation and trans-alkylation units, benzene recovery and/or benzene drag column Flue gas from steam super-heater furnaces Process off-gas from De-hydrogenation Reactors. Off-gas streams from vacuum system. Emission from EDC Cracking Furnaces. Off-gas from Propylene Recovery Column.
4.3	Emissions from materials handling including storage or transport	Yes	Minor fugitive emission will occur of Coke dust from coke yard

4.4	Emissions from construction activities including plant and equipment	Yes	The main and visible pollution during construction phase is fugitive dust generated during excavation and other earth moving activities and during concreting works. Due to use of construction machinery mainly some NO _x and little amount of SO ₂ emission will be there. This is temporary and will be taken care of by good maintenance of the construction machineries. HPL authority will ensure use of water sprinklers to minimize/eliminate fugitive dust nuisance during construction activities.
4.5	Dust or odours from handling of materials including construction materials, sewage and waste	Yes	Dust is likely to be generated during construction will be minimized by restoring to water spraying at regular interval. Tarpaulin cover will be provided over stored raw construction material to reduce dust emission. No odour from handling of materials including construction materials, sewage and waste will be generated
4.6	Emissions from incineration of waste	Yes	CO ₂ , NO _x , SO _x and CO emissions from incinerator. Incineration would be equipped with online monitoring tools to ensure emissions within prescribed limits by statutory authorities
4.7	Emissions from burning of waste in open air (e.g. slash materials, construction debris)	No	There will be no burning of waste in open air.
4.8	Emissions from any other sources	No	There will be no emissions from any other sources.

5

Generation of Noise and Vibration, and Emissions of Light and Heat:

S. No	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
5.1	From operation of equipment e.g. engines, ventilation plant, crushers	Yes	Rotating equipment are likely to generate noise. All equipment would be designed to comply with OSHA requirements. Noise level at the battery limit shall comply with stipulated norms.
5.2	From industrial or similar processes	Yes	The noise levels from all industrial activities would be within permissible limits. Protective gears will be used by the occupational workers.
5.3	From construction or demolition	Yes	Construction or demolition activities shall be carried out within the designated/project areas. Noise level at the battery limit shall comply with stipulated norms.
5.4	From blasting or piling	Yes	Limited piling activities shall be carried out during proposed project as per requirement. Acoustic barriers shall be installed if required and noise level at the battery limit shall comply with stipulated norms

5.5	From construction or operational traffic	Yes	During construction phase, there will be marginal increase in noise due to traffic movement in the project area due to transportation of man and machine.
5.6	From lighting or cooling systems	Yes	All equipment shall meet the OSHA requirement. Noise level at the battery limit shall comply with stipulated norms
5.7	From any other sources	No	Not Applicable

6 Risks of contamination of land or water from releases of pollutants into the ground or into sewers, surface waters, groundwater, coastal waters or the sea:

S.No	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
6.1	From handling, storage, use or spillage of hazardous materials	Yes	All materials and chemicals will be handled as per best safety practices and in accordance with the applicable rules. All necessary precautions shall be in place to prevent any spill/ contamination.
6.2	From discharge of sewage or other effluents to water or the land (expected mode and place of discharge)	No	An Effluent Treatment Plant (ETP) will be developed for treating the waste water from all the units/sources, Effluent discharge to be made complying MOEFCC/CPCB norms.

6.3	By deposition of pollutants emitted to air into the land or into water	No	All emissions from proposed project shall comply with the applicable regulatory standards. Emissions/ Discharges of pollutants shall be minimized by adopting best available technology and engineering practices
6.4	From any other sources	No	Not Applicable
6.5	Is there a risk of long-term buildup of pollutants in the environment from these sources?	No	Not Applicable