

Lr.No.231/GM(EMP)/APIIC/EC-IP-Gandrajupalle/2015, dt:24.07.2017



To

The Director (IA-III),
CRZ, Infrastructure Miscellaneous projects & Industrial Estates
Ministry of Environment, Forests & Climate Change
Indira Paryavaran Bhavan
3'd Floor, Vayu Wing, JorBagh Road, Aliganj
New Delhi-110003

Sir,

Sub: Submission of point wise replies for Clarifications for "Industrial Park at Gandrajupalle village, Gangavaram Mandal, Chittoor District, Andhra Pradesh" for grant of Environmental Clearance (EC)-Reg.

Ref: 171th EAC Minutes of Meeting, held on 12.05.2017(Agenda item no: 3.4)& [File no:21-141/2015-IA-III].

It is submitted that the issue of according Environmental Clearance (EC) for Industrial Park at Gandrajupalle Village, Gangavaram Mandal, Chittoor District, Andhra Pradesh has been discussed by the Expert Appraisal Committee (EAC) during it's 171th meeting held on 12th May, 2017 and sought some additional information/clarifications.

In connection to the above, we are herewith submitting the point wise compliance with necessary attachments for the proposed project as desired by the EAC.

We are hereby requesting you to kindly consider the additional details now furnished and accord Environmental clearance to the project at the earliest.


Encl: Point wise clarifications & replies with annexures (1 set of hard & soft copy)

Yours faithfully,

Sd/-

Chief Engineer-I

#True Copy#


General Manager (EMP)

Andhra Pradesh Industrial Infrastructure Corporation Ltd.,
(A Govt. of Andhra Pradesh Undertaking)

Regd. Office: "Parisrama Bhavan" 6th floor, 5-9-58/B, Fateh Maidan Road, Basheerbagh, Hyderabad-500 004. India.

Corporate Office: D.No.59A-20-3/2A, 1st, 2nd and 3rd Floors, Sri Siva Complex, Fun Times Club Road, Teachers Colony, Vijayawada - 520 008.

Tel : 0866- 2428300, 323. Web : www.apiic.in

CIN NO.U99999TG1973SGCOO1630

Point wise replies for the clarifications raised by the EAC in the 171st meeting held on 12-05-2017

S no	Points noted by EAC	Action plan
(i)	The proposal is for grant of EC to the proposed Industrial Park in a total area of 195.27 ha near Gandrajupalle Village, Gangavaram Mandal, District Chittoor (AP) promoted by Andhra Pradesh Industrial Infrastructure Corporation Limited (APIIC)	Yes, the proposal is for grant of EC only
(ii)	Different industrial projects/activities proposed to be housed therein would include engineering, paper products, rubber products etc. However, none of the proposed units seems to be covered either under Category A or B, and thus difficult to arrive at the consent appraisal/regulatory authority	The proposed units are falling under Category B. The details are attached as Annexure I
(iii)	Total freshwater demand of 2 MLD is proposed to be partly sourced through an unlined canal from non-perennial Kaundinya River, 1.5 km from the project site. To meet the balance requirement of water during four months, storage tanks are proposed in the industrial area only.	The 2MLD of water requirement for the industrial park will be met through Kuppam Branch canal of HNSS. and stored in nearby Sankarayalapeta M.I tank (located about 3 km North from site) The capacity of the Sankarayala Peta M.I tank is 174.89 MCFT The feasibility report for supplying of water from Kuppam Branch Canal of HNSS to Industrial Park attached as Annexure II
(iv)	Neither there was any commitment to ensure the sustainable water supply through surface water resources so identified, nor providing storage tanks in a huge area of 50 ha were considered to be feasible.	The 2MLD of water requirement for the industrial park will be met through Kuppam Branch canal of HNSS. and stored in nearby Sankarayalapeta M.I tank (located about 3 km North from site) The capacity of the Sankarayala Peta M.I tank is 174.89 MCFT The feasibility report for supplying of water from Kuppam Branch Canal of HNSS to Industrial Park attached as Annexure II
(v)	The clarification in respect of the proposed CETP and STP was also not found convincing.	The wastewater generation from Industrial & Domestic activities is 1257KLD & 331KLD respectively. The effluents from industries will be treated in CETP of 1.5 MLD capacity & domestic wastewater in CSTP of 0.5 MLD capacity. The detail of CETP & STP is attached as Annexure III
(vi)	Kaundinya Wildlife Sanctuary is in the	The Kaundinya wild life sanctuary is 13 km

Annexure I

The types of industries falling under Category B as per MOEFCC notification 14th Sep 2006 which are proposed in the industrial park are given below.

Project/Activity 3(a) - Metallurgical industries (ferrous & non-ferrous) – Category ‘B’ –

Sponge Iron Manufacturing <200 TPD

Secondary metallurgical processing units

- All Toxic & heavy metal producing industries < 20000 TPA
- All other Non – Toxic industries >5000 TPA

Note:

i) **Toxic metals** include lead, mercury, cadmium, chromium, arsenic and heavy metals include metals which have specific gravity more than 5 (As, Cd, Co, Cr, Cu, Fe, Hg, Mn, Ni, Pb, Zn, Sn, etc.) for the purpose of this notification.

ii) Under Secondary metallurgical processing industry, all toxic and heavy metal producing units may assumed to be those where substance associated with industrial process are suspect to be toxic or heavy metals

Secondary metallurgical process: Secondary metallurgical processes are the production processes that start with the output of the ore reduction process, scrap, salvage and ingots as input to the industry and its products are semi-finished products and finished products. It includes the melting, giving the aimed shape to the final output, through forming, pouring liquid metal and alloys to the mold cavity and forging. The processes and input materials used for the production of metals like sponge iron, foundries, re-rolling mills, mini-blast furnace (MBF) based steel plants, electric arc furnace (EAF) and induction furnaces, aluminum, lead, copper, zinc, and ferroalloys are given in table below:

Material Inputs in Secondary Ferrous Metallurgical Processes Process Material Inputs

Type of industry	Process	Material input
Iron making	Coal and Gas based Sponge Iron Plants	Iron ore, coal
	Mini Blast Furnace	Iron ore, coke, limestone
Furnaces	Induction and electric arc furnace	Steel scrap, liquid steel, direct reduced iron, or /and pellets briquettes, metal scrap and pig iron, coke or carbonizes, ferroalloys, limestone, gas fuel, bentonite and binding materials
	Oil and coal fired Preheating furnace	
	Cupola and crucible furnace	
Re-rolling, drawing, extrusion and forging	Rolling	billets or slabs, bars, blooms, lubricating oils, greases
	Drawing	
	Extrusion	
	Forging	
Conventional casting in foundries	Molding	Green sand, dry sand, clay, core sand, raw material, scrap, gaseous and solid fluxes (CO ₂ , He, N ₂ , Ar, cl, AlCl, ZnCl, AlF)
	Casting	

Material Inputs in Secondary Non-Ferrous Metallurgical Processes

Process	Material Inputs
Copper	New scrap produced in the fabrication of finished products or old scrap from automobiles and domestic appliances. Other materials with copper value include slags, drosses, foundry ashes and sweepings from smelters.
Lead	Battery scrap
Zinc	New clippings, skimmings and ashes, die-cast skimmings, galvanizer's dross, flue dust and chemical residue as sources of zinc. Most of the new scrap processed is zinc- and copper-based alloys from galvanizing and die-casting pots. Included in old scrap are zinc engraver's plates, die castings, and rod and die scrap.
Aluminum	New and old scrap, sweated pig, and some primary aluminum. New scrap consists of clippings, forging, and other solids purchased from the aircraft industry, fabricators, automobile, and other manufacturing plants. Borings and turnings are byproduct of the machining of castings, rods and forging. Drosses, skimmings, and slags are obtained from primary reduction plants,

Industries in Secondary metallurgical units are given below.

- Sponge Iron manufacturing
- Aluminium recycling
- Copper recycling
- Zinc recycling
- Lead batteries recycling
- Re rolling mills
- Iron & Steel Foundries – Cupola furnace, Electric induction furnace, Electric arc furnace

Project / Activity 7 (i) Common Effluent Treatment Plants (CETPs)

The notification covers treatment plants which serve different industries not in the same premises for common / combined wastewater. The notification excludes ETPs serving different production units within the same individual industry premises, which are integrated to operation.

It also covers sludge handling, discharging pipeline and disposal point studies.

It covers combined wastewater treatment plants, i.e. CETPs accepting sewage also along with industrial effluents from better treatability. For clarity, any treatment plant having more than 10% of industrial contributions by volume shall be treated as a combined treatment plant.

Project Activity 8 (b) Townships and Area Development projects (as per 9th Dec 2016 Notification)

Builtup area $\geq 3,00,000 \text{ m}^2$ and land area $\geq 150 \text{ ha}$ project is treated as Category A.

GOVERNMENT OF ANDHRA PRADESH
WATER RESOURCES DEPARTMENT

From
Sri R.Muralinath Reddy, M.Tech.,
Superintending Engineer,
HNSS Circle NO.3,
Madanapalle.

To
The Chief Engineer,
NTR TGP,
Tirupathi,
Chittoor Dist.

Letter No. SE/HNSS C3 /MPL /DW/

180 CB TGP

Dt: 9 .6.2016.

Sir,

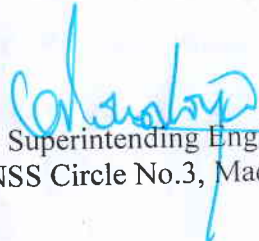
Sub:- APIIC Ltd., - Industrial park, Gandrajupalli – Allocation of 2 MLD of surface water for industrial purpose – Requested – Reg.

Ref:- 1) Dy. Zonal Manager (Engg.), APIIC Ltd., TPT Lr. No. Gandrajupalli/2017 Dt.15-5-2017 communicated in CE,NTR TGP,TPT Endt. No. Dt. – 5 - 2017.

With reference to the Chief Engineer, NTR TGP, Tirupathi Endt. No. cited, I here with submit the feasibility report for supplying of water from Kuppam Branch Canal of HNSS Project to Industrial Park, Gandrajupalli (Village) for taking further action in the matter.

Encl: Feasibility report with Topo Sheet duly indicating Tank and alignment

Yours faithfully,


Superintending Engineer,
HNSS Circle No.3, Madanapalle.

Feasibility Report for supplying of water from Kuppam Branch Canal of HNSS to Industrial Park, Gandrajupalli (Village), Gangavaram (Mandal), Chittoor (District).

The Industrial Park of Andhra Pradesh industrial infrastructure corporation near Gandrajupalli village of Gangavaram mandal requested for water allocation of water. The water requirement for the industry is stated to be 2.00 MLD surface water continuously. The total requirement for an year including storage and transmission losses would be about 29.58 MCFT (25.78 MCFT +3.88 MCFT Losses etc).

Kuppam branch canal is taken up under HNSS Phase-II .The Kuppam Branch Canal is envisaged to supply water to 110 No's of tanks and provide drinking water in 8 mandals in palamaner & Kuppam constituencies. The water will be supplied in 120 flood days from fore shore of Srisailem Reservoir.

The Total allocation to Kuppam Branch Canal is 2.00 TMC of water

- | | |
|---|------------|
| 1. For Drinking Water | = 0.5 TMC |
| 2. For Ayacut under tanks | = 0.5 TMC |
| 3. Future requirements and industrial use | = 1.00 TMC |

The following tank existing near to Andhra Pradesh industrial infrastructure corporation is proposed to be feed from Kuppam Branch Canal. The capacity of the tank is 174.89 MCFT.

Sankarayala Peta MI Tank –Near Sankarayala peta village of Peddapanjani Mandal.

Water supply from the Kuppam Branch Canal will be for about 120 days starting from October. For utility Supply of water through out the year an exclusive storage tank may have to be constructed and the water has to be stored accordingly.

As Sankarayalapeta M.I Tank is very near by and it is being fed from HNSS, Possibility of taking water from the same tank may be explored or otherwise an exclusive tank may be constructed.

About 500 MCFT for drinking and 1000 MCFT for industrial use is already envisaged in the project for Kuppam Branch Canal. Hence it is feasible and there is no objection to allocate 30 MCFT for this Industrial Park at Gandrajupalle. The allocation has to be approved from the Secretary Water Resources Department.

Encl: Topo Sheet duly indicating Tank and alignment



Superintending Engineer
HNSS Circle-3, Madanapalle.



Executive Engineer,
HNS & Division -12,
KUPPAM

Annexure III

The industrial wastewater generation was calculated based on the water allocation made to proposed industries considering 5 KLD/acre as most of the industries proposed are not major water consuming industries. The wastewater generation is assumed as 80% of water required for respective industry (4 KLD/acre). The wastewater generation on industrial park level is 1257 KLD.

The domestic water requirement is calculated assuming 45 LPD/person for industrial workers of 8170. The domestic wastewater as 90% of the water required. The domestic wastewater is around 331 KLD.

The CETP is around 1.5 MLD having primary, secondary (MBBR) and tertiary (MMF, ACF) and final treated water is reused for greenbelt and industrial uses (cooling, floor washing, etc.).

The CSTP capacity is around 0.5 MLD having primary, secondary (activated sludge), tertiary (MMF, ACF) and final treated water is reused for greenbelt development and floor washings.

Advantages of CETP/CSTP

The following are some of the advantages due to common CETP / CSTP

- facilitates 'economy of scale' in waste treatment, thereby reducing the cost of pollution abatement for individual SMEs
- addresses the 'lack of space' issue – CETP can be planned in advance to ensure that adequate space is available including plans for expansion in future
- homogenization of wastewater
- relatively better hydraulic stability
- professional control over treatment can be affordable
- facilitates small scale units, which often cannot internalize the externalities due to control of pollution
- eliminates multiple discharges in the area, provides opportunity for better enforcement *i.e.*, proper treatment and disposal
- provides opportunity to improve the recycling and reuse possibilities
- facilitates better organization of treated effluent and sludge disposal *etc.*

A proper planning will be made for establishment of CETP/CSTP by considering the factors which influence the operation and maintenance. Some of the factors are as follows.

- categories of effluent generating member industries
- qualitative/quantitative fluctuations of effluent (equalization/ homogenization / modules)
- pre-treatment requirements
- segregation of effluent streams at individual member industry
- collection and monitoring mechanism
- treatability choice of technology and bio degradability, interferences
- mode of disposal; and
- charging system

As the proposed industrial park is for catering various types of industrial units having varieties of products which generates different types wastewater proposing a CETP is difficult. Therefore inlet effluent standards will be fixed as per the understanding between member industries and only suspended solids and biodegradable matter will be removed at CETP / CSTP level. Hence industrial effluents from industrial process requires some form of pre-treatment prior to sending the effluents for further treatment at CETP,

Pre-treatment standards for sulphides, sulphates and pH are concerned with preventing corrosion of concrete parts in gravity pipes and also the anaerobic conditions leading to the formation of hydrogen sulphide leading to the fire accidents. Limits for the discharge of oil, grease, grit and heavy sediments are prescribed in order to prevent clogging of pipelines. Limits to heavy metals and toxic organics would ensure proper performance of biological treatment and minimize accumulation of contaminants in residual sludge.

Standards are prescribed for inlet effluent quality as well as treated effluent quality for CETPs. The inlet effluent standards are given in below.

Inlet Effluent Quality Standards for CETPs

Parameter	Concentration	Remarks
pH	5.5 - 9.0	<i>Source: Guidelines for management, operation and maintenance of common effluent treatment plants, CPCB publications, programme objective series: problems/81/2001-2002</i> Note: 1. These standards apply to the small-scale industries, i.e. total discharge up to 25 kld 2. For each CETP and its constituent units, the state Board will prescribe standards as per the local needs and conditions; these can be more stringent than those prescribed above. However, in case of clusters of units, the State Board with the concurrence of CPCB in writing may prescribe suitable limits.
Temperature (oC)	45.0	
Oil and grease	20.0	
Cyanide (as CN)	2.0	
Ammoniacal nitrogen(as N)	50.0	
Phenolic compounds (as C ₆ H ₅ OH)	5.0	
Hexavalent Chromium	2.0	
Total chromium	2.0	
Copper	3.0	
Nickel	3.0	
Zinc	15.0	
Lead	1.0	
Arsenic	0.2	
Mercury	0.01	
Cadmium	1.0	
Selenium	0.05	
Fluoride	15.0	
Boron	2.0	
Radioactive Materials		
Alfa emitters, Hc/ml	10 ⁻⁷	
Beta emitters, Hc/ml	10 ⁻⁸	



#By Reg. Post With Ack. Due#

Lr.No.231/GM(EMP)/APIIC/EC-IP-Gandrajupalle/2015, dt:23 .06.2017

To
The Divisional Forest Officer,
(Wild life division)
Chittoor West Division,
Chittoor- 517001.

Sir,

Sub: Issue of NOC from Forest department for “proposed Industrial Park at Gandrajupalle village, Gangavaram Mandal, Chittoor district, AP for –Obtaining EC- Requested- Reg.

Ref: MoEF CC-Minutes of 171th EAC Committee meeting held on 12th May’2017 at New Delhi recommended for obtaining NOC due to existence of Kaundinya Wild life sanctuary with in 15km radius (anticipating the human- wildlife conflict)

It is to inform that APIIC has proposed to establish an Industrial Park at Gandrajupalle village, Gangavaram Mandal, Chittoor district, AP.The total land for the proposed Industrial Park is 482.51 acres (195.27 hectares).

The project site latitude & Longitude are mentioned below:

Latitude & Longitude	Village Name	Latitude	Longitude
		130 11’ 36.5’’N	780 34’50.9’’ E
		130 12’ 26.9’’N	780 34’59.3’’ E
	Gandrajupalle	130 11’ 22.9’’N	780 36’20.9’’ E
		130 11’ 10.1’’N	780 36’13.6’’ E

The Kaundinya Wild life sanctuary is 13 km away from the project boundary (on SE direction).As it is a home of about 78 Indian elephants, a note on elephant movement & maps showing the project location & WLS are attached.

As per the literature review of “A Case History of Colonization in the Asian Elephant: Koundinya Wildlife Sanctuary (Andhra Pradesh, India) Gajah 33 (2010) 17-25 by Ranjit Manakadan^{1*}, S. Swaminathan¹, J.C. Daniel¹ and Ajay A. Desai² it clearly indicates that the elephant migratory path is far away from the project site and it will not lead for Human-wildlife conflict In and around the proposed Industrial Park.

Andhra Pradesh Industrial Infrastructure Corporation Ltd.,

(A Govt. of Andhra Pradesh Undertaking)

Regd. Office: " Parisrama Bhavan" 6th Floor, 5-9-58/B, Fateh Maidan Road, Basheerbagh, Hyderabad - 500 004, India.

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Hence it is earnestly requested you to issue the NOC for the project to obtain Environmental Clearance for IP Gandrajupalle.

Yours faithfully,


Chief Engineer-I 23/6
