

1.0 INTRODUCTION

1.1 Preamble

M/s SJK Steel Plant Limited has been renamed as M/s Kalyani Gerdau Steels Limited on October 8, 2008 as per certificate from Registrar of Companies, Ministry of Corporate Affairs, Government of India (enclosed as Annexure 1.1).

M/S Kalyani Gerdau Steels Limited, formerly known as **SJK Steel Plant Limited** (hereinafter referred to as '**KGSL**') is operating a steel plant near Tadipatri in Anantpur district of Andhra Pradesh.

Environment Clearance for above said facility has been granted by Ministry of Environment & Forests (MOEF) vide letter no. J.11012/35/97-IAII dated April 16, 1999. This clearance was also accorded to, for township, but could not be constructed. "Consent to Establishment" and Consent to Operate (latest) have also been granted to the existing facility by Andhra Pradesh Pollution Control Board (APPCB). One copy of each document is enclosed as **Annexure 1.2**.

KGSL proposes to expand its designed annual steel production capacity to 1.0 million TPA as per the details given below:

Table 1.1 Details of Production Capacity

S.N	Particulars	Designed Production Capacity	
		Pre Expansion	Post Expansion
Finished Products			
1.	Rebar Steel	-	0.52 MTPA
2.	SBQ Steel	-	0.4 MTPA
3.	Cold Pig Iron	-	0.078 MTPA
Intermediate Products			
1.	Pig Iron	0.3 MTPA	1.0 MTPA
2.	Steel Billets	0.3 MTPA	0.922 MTPA
Coke Oven			
1.	Coke	-	0.6 MTPA
Power			
1.	Waste Heat Recovery Boiler (WHRB)	-	2x25 MW 1x9MW

M/s. SGS India Pvt. Ltd. (hereafter referred as **SGS**), Gurgoan has been engaged by **KGSL** to carry out Rapid Environment Impact Assessment (EIA) study and to prepare Environment Management Plan (EMP) for the proposed expansion. The study has been carried out as per the guidelines of Ministry of Environment & Forests (MOEF) and Andhra Pradesh Pollution Control Board (APPCB).

SJK Steel Plant Limited was commissioned in 1995 for manufacture of Iron & Steel by M/s Sujana Steels Limited. The production was commenced in early 2005 but could not continued on regular basis due to various financial problems and ultimately the unit became sick and was under Corporate Debt Restructuring (CDR) package of financial institutions, banks.

Finally, the plant is taken over by M/s Kalayni Steels and M/s Gerdau with 50:50 equity partnerships on June 22, 2007. Gerdau S.A., Brazil which is currently the 15th largest international steel producer in the world. As per agreement, both companies will have an equity partnership of 45 % each and the remaining 10 % will be owned by other investors.

Kalyani Group which has got rich experience of more than three decades in manufacture of forging steel and other special alloys steel was managing the company since 2006. It is one of the leading Industrial house and leading manufactures of special carbon and alloy steel in India and also has diverse business interests in Engineering, Steel, Forgings, Auto Components, Non-Conventional Energy & Specialty Chemicals. The Group's annual turnover is over USD 2.1 billion and has joint ventures with some of the world leaders such as ArvinMeritor USA, Carpenter Technology Corporation USA, Hayes Lemmerz USA, FAW Corporation China etc.

1.2 Location and Accessibility

The proposed expansion is envisaged within the premises of existing plant. As shown in **Figure 1.1**, the existing plant is located near village Jambulapadu which is about 6 km away from Tadpatri town in Anantpur district of Andhra Pradesh and has latitude as 14° 52' 32" E and longitude as 78° 03' 24" N (as per Topo sheet (no 57J/1) of Survey of India). The mean elevation of plant site is 222.5 m above MSL.

The nearest highway SH30, connecting Tadpatri to Cuddapah district is passing adjacent to the plant boundary in north direction. The Mumbai Chennai South Central Railway mainline is passing adjacent to plant boundary in the south direction.

The nearest railway station is at Challavaripalli which is 0.5 km from the plant site. The nearest airport is at Bangalore (about 270 km) while nearest port is at Krishnapatam (about 300 km) and Chennai (about 350 km). The district head quarters i.e Anantpur is about 70 km from the project Site.

1.3 Objective and Need of EIA Study

The EIA/EMP study is a planning tool to confirm environmental acceptability in addition to the statutory requirements. This report presents the results of the EIA process, which is intended to:

- Establish and review existing conditions pertaining to the plant site and its surrounding area;
- Identify and assess the environmental impacts during construction phase and subsequently during operation phase; and
- Advise and assist in identifying appropriate measures to mitigate adverse impacts to be adopted under Environment Management Plan (EMP) for all specified significant environmental impacts likely to emerge.

The proposed expansion is designated to be developed under the Environmental Impact Assessment (EIA) Notification and amendments under Environment (Protection) Act, 1986. Proposed project falls under “Category A” as per the notification issued on 14th September 2006 by MOEF.

1.4 Objectives of Project

The objectives of the proposed expansion are summarized as per given hereunder:

☐ Production

- With the proposed expansion, **KGSL** has an objective of setting up an Integrated Steel Plant with the expanded installed capacity as per the details given in **Table 1.1**.

☐ Environment & Safety

- Protect the surrounding environment in general during operation of proposed expanded integrated steel plant with appropriate environmental safeguards to meet community expectations in terms of environmental outcomes and cost;
- Ensure that ecological balance of the area will not be adversely affected by air & noise emissions, waste water and solid wastes;
- Protect native flora and fauna, quality of surface and groundwater and minimize public health risks; and
- Minimize operational risk and maximize safety of work persons.

☐ Socio-economic

- Improvement in the living standard of local habitants;
- Establish monitoring program and provide procedures for addressing community concerns, if any;
- Improvement of indirect means of livelihood; and
- Generation of various infrastructures in the form of social capital for the community.

1.5 Scope of Work

The EIA/EMP report termed as draft should be prepared based on the Terms of Reference (TOR) prescribed by MOEF for conducting public hearing as a mandatory step to get the environment clearance from MOEF.

As an attempt to save the time in lieu of monsoon season, environment monitoring has been conducted for three months from April to July -08 in an area of 10 km radius surrounding the project site for the following:

☐ Ambient Air Quality

Ambient Air Quality monitoring has been carried out at six (06) locations in the surrounding areas of project site for SPM, RPM, SO₂, NO_x and CO. Monitoring has also been carried for three (03) locations within plant site. The frequency of monitoring was twice in a week for 24 hours for SPM & RPM and 8 hours for SO₂, NO_x and CO.

☐ Meteorology at Site

Site specific meteorological data have been collected at one centrally located point for wind speed, wind direction, temperature, humidity, rainfall and cloud cover on hourly basis. Details of meteorology of the region have been collected from the nearest IMD station.

☐ Noise Level

Noise level has been monitored at six (06) locations on hourly basis for 24 hours. The samples have been collected once during the study period. The results of the finding are reported in terms of L_{min}, L_{max}, Leq_{hourly}, Leq_{Day} and Leq_{Night} for all locations.

☐ Water Quality

Samples from surface water (at five (05) locations) and ground water quality (at five (05) locations) have been monitored for essential parameters of BIS 10500 and additional relevant parameter. The samples have been collected once during the study period.

❑ Soil Quality

Soil samples at six (06) locations have been collected for physical and chemical parameters. The samples have been collected once during the study period.

❑ Biological Environment (Flora and Fauna)

Survey has been carried out in the study area as per the guidelines of MOEF. Species of flora have been listed as agricultural crops, commercial crops, plantation, natural vegetation, grasses, endangered, endemic and others. While faunal species have been identified as per the Wildlife Protection Act, 1972 and as amended subsequently and have been listed as endangered, endemic, migratory and aquatic.

❑ Socio-economic

Socio-economic survey in the study area has been carried out to assess the status of demographic pattern, cropping pattern and general amenities available based on the Census 2001 and secondary information available with different government agencies. Primary and secondary information on socio-economic parameters within the study area are collected for the following:

Household, population, villages and tehsils, population distribution, literacy levels, employment pattern, primary health care facilities available, scheduled castes, scheduled tribes and transport, communication and welfare facilities.

❑ Remote Sensing Study

This study has been carried out based on the satellite imagery of the study area to assess the land use pattern, drainage pattern, habitation, vegetation cover etc of the study area.

TOR was prescribed by MOEF vide letter no J-11011/3222/2008-IA II(I) dated October 16, 2008 (enclosed as Annexure 1.3) on the basis of duly filled Form-1 which was submitted on 4th April 2008 and subsequently presentation made to appraisal committee on 24th September 2008.

In order to compliance with the conditions stipulated by MOEF in prescribed in TOR, one month environment data were also generated from 23rd February 2009 to 23rd March 2009 for the following:

❑ Ambient Air Quality

Ambient Air Quality monitoring has been carried out at eight (08) locations for SPM, RPM, SO₂, NO_x and CO. The frequency of monitoring was twice in a week for 24 hours during study period for SPM & RPM and 8 hours for SO₂, NO_x and CO.

PAH content in composite sample of SPM and Chemical classification of composite sample of RPM (all samples collected during study period) at each location during study period have been estimated.

❑ Meteorology at Site

Site specific meteorological data has also been collected at one centrally located point for wind speed, wind direction, temperature, humidity, rainfall and cloud cover on hourly basis for 24 hours during study period.

❑ Noise Level

Noise level has been monitored at nine (09) locations on hourly basis for 24 hours. The samples have been collected once during the study period. The results of the finding are reported as L_{min}, L_{max}, Leq_{hourly}, Leq_{Day} and Leq_{Night} for all locations.

❑ Water Quality

Samples from surface water (at two (02) locations) and ground water quality (at eight (08) locations) have been monitored for essential parameters of BIS 10500 and additional relevant parameter. The samples have been collected once during the study period.

❑ Traffic Density

Traffic volume counts have been carried out at two (02) locations within the study area on hourly basis for 24 hours, once during the study period.

❑ Risk Assessment and Disaster Management Plan

Risk Assessment for the proposed expansion has been carried out as per guidelines prescribed by MOEF. The assessment has been made for Maximum Credible Accident Scenarios (MCA). Existing on site emergency plan has been modified on the basis of finding of risk assessment.

1.6 Approach and Methodology

This report on REIA/EMP is based on the observations made by **SGS** team during visits to the study area and collection of primary and secondary environmental data. Literatures have also been reviewed and relevant information has been collected for environmental and social baseline. Reconnaissance surveys have been conducted to identify the major environmental issues in the study area. The sampling locations have been identified on the basis of:

- Existing topography;
- Location of water bodies;
- Location of villages/ towns/ sensitive areas;
- Accessibility, power availability, security of monitoring equipment; and
- Areas, which represent baseline conditions.

SGS has followed the standard EIA methodology and technique during the entire study and whenever necessary it has used its own judgment based on its own experience and knowledge. During the entire study, appropriate quality checks have been taken into consideration and best management practices have been followed for a quality output. Discussions have also been made with state level government agencies during survey of the area.

Impacts are identified based on the actual and foreseeable events, including operational events of the proposed project activities. Processes that may create risks to the natural environment and socio-economic environment are considered in terms of key potential environmental impacts.

Mitigation measures to be adopted under EMP for all specified significant environmental impacts likely to result out during the construction and subsequently during operation are also a part of the REIA/EMP report.

The likely identified impacts and recommended mitigation measures are based on the following:

- Project information provided by project proponent;
- Baseline information and reconnaissance survey of the study conducted by the **SGS**;
- **SGS**'s past experience in similar projects; and
- Standard National/International environmental management guidelines/practices.

Details of the methodology and technique used for the study are discussed in subsequent Chapters.

1.7 Layout of the Report

This report is based on generic structure of EIA report as suggested in notification 14 September 2006 by MOEF. A brief description of each Chapter is presented below:

<i>Executive Summary</i>		<i>Presents significant findings and recommended actions</i>
<i>Chapter 1</i>	<i>:Introduction</i>	<i>Presents, an introduction along with scope and objective of this EIA/EMP study</i>
<i>Chapter 2</i>	<i>:Project Description</i>	<i>Presents brief project technical details</i>
<i>Chapter 3</i>	<i>:Existing Environment</i>	<i>Presents the baseline status for various environmental parameters in the study area.</i>
<i>Chapter 4</i>	<i>:Anticipated Environment Impacts and Mitigation Measures</i>	<i>Presents the identification, prediction and evaluation of environmental impacts due to the proposed project activities. Also presents proposed mitigative measures.</i>
<i>Chapter 5</i>	<i>: Alternate Analysis</i>	<i>Presents analysis of alternatives with reference to site and technology</i>
<i>Chapter 6</i>	<i>:Environment Monitoring Programme</i>	<i>Presents details of monitoring, audit and reporting</i>
<i>Chapter 7</i>	<i>:Quantitative Risk Assessment</i>	<i>Presents risk associated with the proposed expanded plant based on the Maximum Credible Accidents (MCA) Scenarios.</i>
<i>Chapter 8</i>	<i>:Disaster Management Plan</i>	<i>Present on-site and off-site emergency plan for management of risk associated with proposed expanded plant</i>
<i>Chapter 9</i>	<i>:Project Benefits</i>	<i>Presents project benefits as:</i> <i>• Improvements in the physical infrastructure</i> <i>• Improvements in the social infrastructure</i> <i>• Employment potential –skilled; semi-skilled and unskilled</i> <i>• Other tangible benefit</i>
<i>Chapter 10</i>	<i>:Environment Management Plan</i>	<i>Description of the administrative aspects of ensuring that mitigative measures are implemented and their effectiveness monitored, after approval of the EIA</i>
<i>Chapter 11</i>	<i>: Disclosure of Consultants Engaged</i>	<i>Company's Profile with resumes of team members</i>



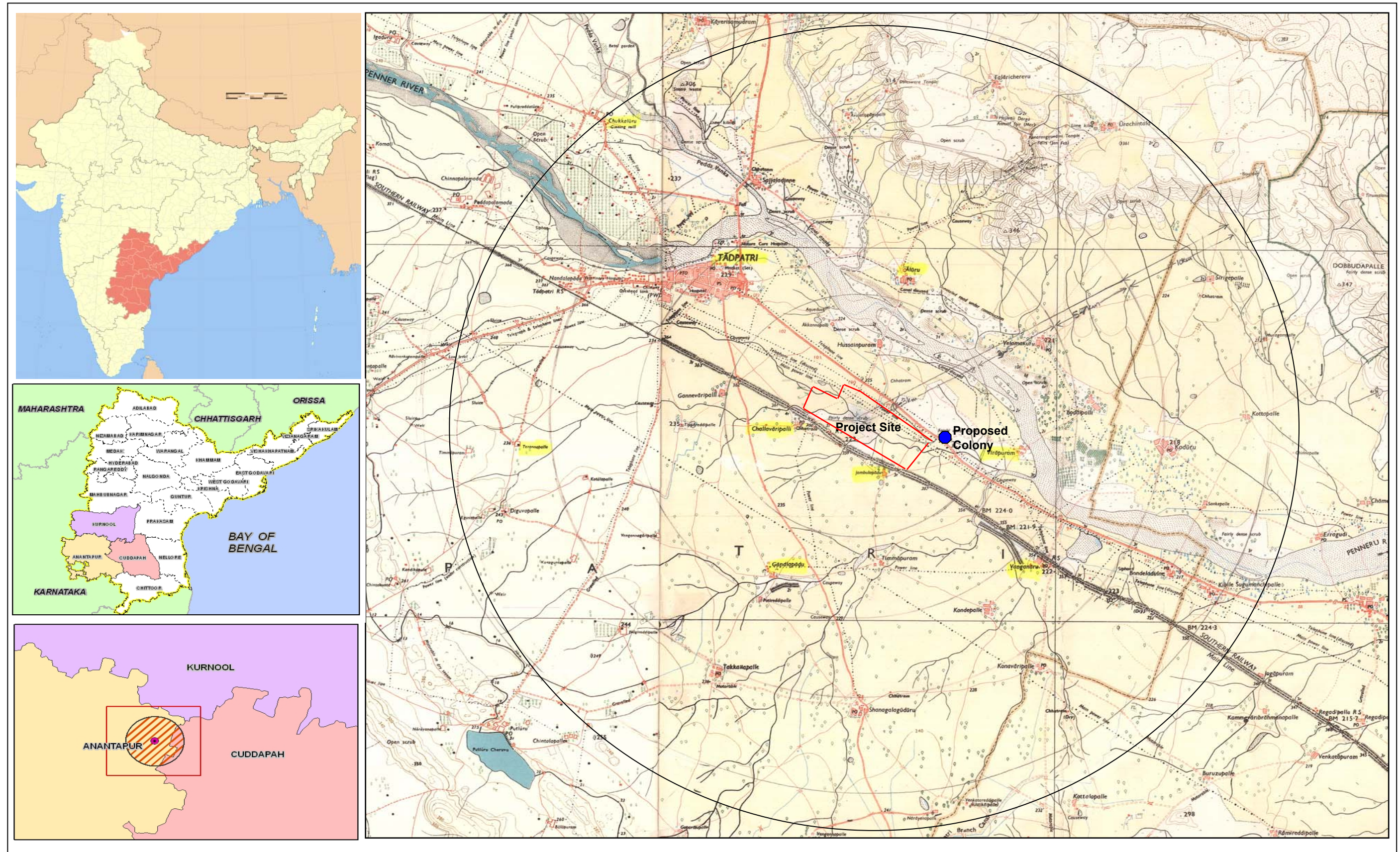


Figure 1.1: Location Map of the Study area

भारत सरकार-कॉर्पोरेट कार्य मंत्रालय
कम्पनी रजिस्ट्रार कार्यालय, आंध्र प्रदेश

नाम परिवर्तन के पश्चात नया निगमन प्रमाण-पत्र

कॉर्पोरेट पहचान संख्या : U27109AP1993PLC015499

मैसर्स SJK STEEL PLANT LIMITED

के मामले में, मैं एतद्वारा सत्यापित करता हूँ कि मैसर्स
SJK STEEL PLANT LIMITED

जो मूल रूप में दिनांक सोलह मार्च उन्नीस सौ तिरानवे को कम्पनी अधिनियम, 1956 (1956 का 1) के अंतर्गत मैसर्स
SJK STEEL PLANT LIMITED

के रूप में निगमित की गई थी, ने कम्पनी अधिनियम, 1956 की धारा 21 की शर्तों के अनुसार विधिवत आवश्यक विनिश्चय पारित करके तथा
लिखित रूप में यह सूचित करके की उसे भारत का अनुमोदन, कम्पनी अधिनियम, 1956 की धारा 21 के साथ पठित, भारत सरकार, कम्पनी कार्य
विभाग, नई दिल्ली की अधिसूचना सं. सा. का. नि. 507 (अ) दिनांक 24.6.1985 एस्.आर.एन. A45671591 दिनांक 08/10/2008 के द्वारा
प्राप्त हो गया है, उक्त कम्पनी का नाम आज परिवर्तित रूप में मैसर्स
KALYANI GERDAU STEELS LIMITED

हो गया है और यह प्रमाण-पत्र, कथित अधिनियम की धारा 23(1) के अनुसरण में जारी किया जाता है।

यह प्रमाण-पत्र, मेरे हस्ताक्षर द्वारा हैदराबाद में आज दिनांक आठ अक्टूबर दो हजार आठ को जारी किया जाता है।

GOVERNMENT OF INDIA - MINISTRY OF CORPORATE AFFAIRS
Registrar of Companies, Andhra Pradesh

Fresh Certificate of Incorporation Consequent upon Change of Name

Corporate Identity Number : U27109AP1993PLC015499

In the matter of M/s SJK STEEL PLANT LIMITED

I hereby certify that SJK STEEL PLANT LIMITED which was originally incorporated on Sixteenth day of March
Nineteen Hundred Ninety Three under the Companies Act, 1956 (No. 1 of 1956) as SJK STEEL PLANT LIMITED
having duly passed the necessary resolution in terms of Section 21 of the Companies Act, 1956 and the approval of
the Central Government signified in writing having been accorded thereto under Section 21 of the Companies Act,
1956, read with Government of India, Department of Company Affairs, New Delhi, Notification No. G.S.R 507 (E)
dated 24/06/1985 vide SRN A45671591 dated 08/10/2008 the name of the said company is this day changed to
KALYANI GERDAU STEELS LIMITED and this Certificate is issued pursuant to Section 23(1) of the said Act.

Given under my hand at Hyderabad this Eighth day of October Two Thousand Eight.



(SHASHI RAJ DARA)

सहायक कम्पनी रजिस्ट्रार / Assistant Registrar of Companies

आंध्र प्रदेश

Andhra Pradesh

कम्पनी रजिस्ट्रार के कार्यालय अभिलेख में उपलब्ध पत्राचार का पता :

Mailing Address as per record available in Registrar of Companies office:

KALYANI GERDAU STEELS LIMITED
PLOT NO-75, MLAS&MPS COLONY, ROAD NO-10C,, JUBILEE HILLS.,
HYDERABAD - 500033,
Andhra Pradesh, INDIA

Annexure 1.2

Document	Page No.
1.0 Environmental Clearance for Existing Plant	1-4
2.0 Consent to Establish (NOC) for Existing Plant	5-9
3.0 Consent to Operate (Latest) for Existing Plant	10-13

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GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT & FORESTS

No. J.11012/35/97-1A II

PARYAVARAN BHAVAN,
CGO COMPLEX, LODHI ROAD,
NEW DELHI-110 003.

Dated : 16 th April, 1999

To,

The Chairman & Managing Director,
SJK Steel Corporation Ltd.
5-A, Vengalrao Nagar,
Hyderabad-500038.

Subject : Setting up of Integrated Steel Plant near Tadipatri, Anantpur, A.P by M/s SJK Steel Corporation Ltd.

Sir,

This has reference to your communication No.SJK/02.45.1/97 EHP/2528 dated 16th October, 97 and subsequent clarifications furnished vide letters dated 5th January, 98, 7th August, 98, 29th Sept., 98 and 4th November, 98, on the above mentioned project. The Ministry of Environment and Forests have carefully examined your application. It is observed that the proposal involves manufacture of 3,00,000 TPA of Steel Billets and 12,000 TPA of Granules & slag based on the Blast furnace BOF process. A 17 MW captive Thermal Power Plant based on surplus blast furnace and BOF gases and furnace oil along with 6 MW capacity DG set has also been envisaged. It is also noted that NOC from the Andhra Pradesh State Pollution Control Board has been obtained.

The Ministry of Environment and Forests hereby accords environmental clearance under EIA Notification dated 27th January, 1994 subject to strict compliance of the following conditions.

A. SPECIFIC CONDITIONS :

- i. The gaseous emissions from various process units including power plant section should conform to the load mass based standards notified by this Ministry on 19th May, 1993 and standards prescribed from time to time. The State Board may specify more stringent standards for the relevant parameters keeping in view the nature of the industry and its size and location. At no time the emission level should go beyond the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit should not be restarted until the control measures are rectified to achieve the desired efficiency.

- ii. *In-plant control measures for checking fugitive emissions, spillage of chemicals/raw materials etc. should be provided regularly monitored and record maintained.*
- iii. *There will be no discharge of process effluents. As reflected in the EMP effluent from the raw water treatment plant should be recycled and reused for the manufacturing process. Treated utility and sanitary effluent should be used for development of green belt.*
- iv. *A perspective plan for 100% utilization of slag and other solid wastes should be prepared and submitted to this Ministry within six months for approval. The project authorities should have a long term tie-up with the user industry.*
- v. *The Company must take up a detailed study regarding the Bio Monitoring aspects of the dust emissions including its particle size distribution, RPM content, chemical characteristics etc. in consultation with an Expert Institute/Organization in order to assess the health impact due to RPM emissions from the project within 6 months of project commissioning.*
- vi. *The occupational health hazards for the employees should be identified and an independent monitoring on a sample basis of the incidence of occupational diseases should be conducted by an reputed agency selected in consultation with ICMR-Ministry of Health within 6 months.*
- vii. *The company in consultation /association with Forest Department of Anantpur District must afforest / improve 100 acres of degraded forest land in the District and a scheme submitted to the Ministry within 6-months.*

B. GENERAL CONDITIONS

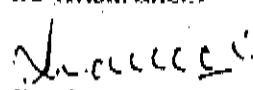
- i. *The project authorities must strictly adhere to the stipulations made by the Andhra Pradesh Pollution Control Board and the State Government.*
- ii. *No further expansion or modifications in the plant should be carried out without prior approval of the Ministry of Environment and Forests.*
- iii. *A green belt of adequate width and density should be developed using native plant species, within and around plant premises in consultation with State Forest Department. A norm of 2000-2500 plants per ha may be followed. A minimum of 25% of the total land acquired should be developed as green belt.*
- iv. *Adequate provisions for infrastructure facilities such as water supply, fuel, sanitation etc. should be ensured for construction workers during the construction phase so as to avoid felling of trees and pollution of water and the surroundings.*

- v. The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA report.
- vi. The project proponent should have a scheme for social upliftment in the nearby village with reference to contribution in road construction, education of children, festivals, health centre, sanitation facilities, drinking water supply, community awareness and employment to local people whenever possible both for technical and non technical jobs.
- vii. A separate environmental management cell equipped with full fledged laboratory facilities must be set up to carry out the environmental management and monitoring functions.
- viii. The project authorities will provide adequate funds both recurring and non recurring to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so provided should not be diverted for any other purpose.
- ix. The implementation of the project vis-à-vis environmental action plans will be monitored by Ministry's Regional Office at Bangalore/State Pollution Control Board/Central Pollution Control Board. A six monthly compliance status report should be submitted to monitoring agencies.

The Ministry may revoke or suspend the clearance, if implementation of any of the stipulated conditions is not satisfactory.

The Ministry reserves the right to stipulate additional conditions if found necessary. These will be implemented by the Company in a time bound manner.

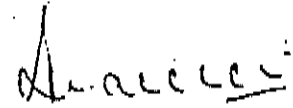
The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public (Insurance) Liability Act, 1991 along with their amendments and rules.


Dr. R. Warriar
Joint Director (S)

Copy to:-

1. Secretary, Ministry of Steel, Udyog Bhavan, New Delhi
2. Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum Office Complex, East Arjun Nagar, Delhi-110032.
3. Chairman, Andhra Pradesh Pollution Control Board, Mythilivanam, 2nd Floor, Huda Complex, Amerpet, Sarathi Studia, Hyderabad - 500038.

4. Chief Conservator of Forests (Central), Regional Office (SZ), Kendriya Sadan, 14th Floor, E&F wings, 17th Main Road, Koramangalam, Bangalore-560034.
5. Secretary (Environment), Govt. of Andhra Pradesh, Hyderabad.
6. Adviser (EI division), Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
7. Director, Regional Office Cell, Ministry of Environment and Forest, Paryavaran Bhavan, CGO Complex, New Delhi.
8. Additional Director (Monitoring Cell), Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
9. Guard File.
10. Monitoring File.
11. Record File.


Dr. R. Warriar.
Joint Director (S)

LT.No. 5067 / PCB/NOC/AEE N

195/- 2/15

DI. 22.4.1995

M/s. Tadipatri Metal Indio Ltd.,

C/o Jithin Kumar,
5 A, Vengalrao Nagar,
Hyderabad - 500 038.

Sir,

Sub : NO OBJECTION CERTIFICATE OF THE BOARD
ISSUED - REGARDING.

Ref : 1. Your application dated : 17-10-1994

XX

I. In the reference cited, you have submitted application for NO OBJECTION CERTIFICATE to produce the following products.

Steel Billets	-	875	T/day.
Pig Iron	-	375	T/day.
Alloy Steel	-	500	T/day.

II. As per your application, you are locating the industry at Jambulapadu (V), Tadipatri (M), Ananthapur District.

The site of the above proposed industry was inspected by Agri. Env. Engineer / Engr. Engineer, Regional Office, A.P. Pollution Control Board, and found that it is expounded.

In view of the above, the A.P. Pollution Control Board does not have any objection as far as water and air pollution control measures are concerned, provided the following conditions are fulfilled by the industry.

1. The industry shall submit a detailed plan for the control of effluents and emissions. The plan shall be submitted to the concerned authorities for their approval before starting civil construction.

2. Trees shall be planted and maintained in the vacant spaces of the premises, atleast in an area of 4 times the built up area of the industry. Tree plantation shall be the first item to be taken up before starting construction.

3. The industry shall treat the effluents to the standards stipulated under Environmental (Protection) Act, 1986 as amended upto date, notified under Environment (Protection) Act., 1986 by Ministry of Environment and Forest, Govt., of India.

4. The industry shall discharge the treated effluents onland for gardening/plantation in their own land premises.

5. The industry shall discharge the domestic effluents into a septic tank followed by sub-surface dispersion trenches.

The industry shall install appropriate control equipment to control the stack emissions to meet the following emission standards:

1. Particulate matter - 150 mg/Nm³
2. SO₂ - 150 mg/Nm³

The industry shall submit the detailed plan for the control of effluents and emissions to the concerned authorities for their approval before starting civil construction. The plan shall be submitted to the concerned authorities for their approval before starting civil construction.

6. The industry shall construct and commission the effluent treatment plant and install air pollution control equipment along with the commissioning of the industry. All the units of the ETP shall be impervious to prevent ground water pollution.

7. The industry shall submit revised flow sheet for wastewater treatment giving the characteristics of the waste water and the quality of the treated effluents.

8. The industry shall install appropriate control equipment to control the stack emissions from the following sections to meeting the following emission standards.

Parameter	Source	Standards
Particulate matter	Sintering plant & alloy making (steel melting shop)	50 mg/Nm ³
	Capitive power plant	150 mg/Nm ³
9. The industry shall install the stacks of atleast 70 height.		
9a) The ambient air quality standards notified by CPCB & notification No. S.O. 306 (E), dt. 11-4-94 pertaining to residential, Rural & other area shall be followed (and		

PARAMETERS		Max. ground level conc. (in Microgramme/NM ³)
1.	SPR	
2.	SO ₂	
3.	NO _x	
4.	He	
5.	Lead	
6.	Co	

10. The industry shall dispose off the solid wastes to the satisfaction of the Board after obtaining prior approval.
11. There shall not be any perceptible odour outside the industry's premises, creating nuisance to public and other environment. The industry shall adopt control measures at all stages where odour is likely to be generated.
12. Suitable automatic flow measuring devices and monitoring equipments shall be installed.
13. The industry shall provide interlocking arrangements between the process and pollution control equipments in such a way that, whenever the tolerance limits prescribed by the Board are exceeded, the process comes to halt.
14. Separate power connection with energymeter shall be provided for the pollution control equipments and record of power consumption and chemicals consumption for the operation of pollution control equipment shall be maintained separately.
15. The provision of construction of the main process unit should be in proportion to the installation of pollution control system and the plantation.

16. Main process unit should be located at the centre of site as far as possible and the entire site should be enclosed by tall growing green plantation, preferably of species having broad leaf area.

17. All the rules and regulations notified by Ministry of Environment and Forests, Government of India in respect of noise pollution control measures shall be followed to avoid nuisance to public.

The ambient Noise level shall not exceed 75 dB(A) at a distance of 5 mts., from source.

18. The generator shall be installed in a closed area with a silencer and suitable noise absorption system so as to comply the following ambient noise level standards.

75 dB(A) at a distance of 5 m from source.

19. The industry shall install minimum stack height to the D.G. Set as per C.P.C.B. guidelines. The minimum height of stack shall be calculated based on the following formula.

$$H = h + 0.2 \sqrt{KVA}$$

H = height of stack in mts.
 h = height of the building in mts., where the D.G. set is installed.
 KVA = Total Generator capacity in KVA.

20. All the rules and regulations notified by Ministry of Environment and Forests, Government of India in respect of manufacture, storage and import of Hazardous Chemicals promulgated under Environment (Protection) Act., 1986 shall be followed.

21. All the rules and regulations notified by Ministry of Environment and Forests, Government of India in respect of Management and Handling of hazardous wastes promulgated under Environment (Protection) Act., 1986 shall be followed.

All the rules and regulations notified by Ministry of Environment and Forests, Government of India in respect of Micro-organisms, genetically engineered organisms, or cells promulgated under Environment (Protection) Act., 1986 shall be followed.

22. All the rules and regulations notified by Ministry of Law and Justice, Government of India, regarding the Public Liability Insurance Act., 1991 shall be followed.

23. The Industry is liable to pay compensation for any environmental damage caused by it, as fixed by Collector and District Magistrate, as civil liability.

24. If at any time during inspection of Pollution Control Board officers or officials at Licensing/consenting departments if it is found that the industry is not complying with any of the above conditions, this NOC is liable for cancellation without notice and all the services rendered and licence issued shall be liable for cancellation without further notice.

25. The industry shall report progress on implementation of the project to this office, Regional Office, A.P. Pollution Control Board, Kurnool and to financial institutions regularly.

26. The applicant shall obtain 2nd NOC of the Board before the factory goes into trial production.

27. Regular consent of the Board shall be obtained as required under Section 25/26 of the Water (Prevention and Control of Pollution) Act., 1974 and under Section 21/22 of the Air (Prevention and Control of Pollution) Act., 1981.

28. This NO OBJECTION CERTIFICATE is valid for one year from the date of issue.

29. The conditions stipulated above are subjected to revision by the A.P. Pollution Control Board.

Yours faithfully,

R. K. H. W. J.

MEMBER SECRETARY

K
22-4-77



25/11 2008 16:11 FAX

ANDHRA PRADESH POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN, A-3, INDUSTRIAL ESTATE,
SANATHNAGAR, HYDERABAD - 500 018.

Phone: 040-23887500
 Fax: 040- 23815631
 Grams : Kalusya Nivarana
 Website : www.appcb.org

0001 3.0

RENEWAL CONSENT & AUTHORISATION ORDER
BY REGISTERED POST WITH ACKNOWLEDGEMENT DUE

Consent Order No : APPCB/KNL/KNL/255/HO/2008-1833

Date : 23.09.2008

(Consent Order for Existing/Now or altered discharge of sewage and/or trade effluents/outlet under Section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974 and amendments thereof, Operation of the plant under section 21 of Air (Prevention & Control of Pollution) Act, 1981 and amendments thereof and Authorisation / Renewal of Authorisation under Rule 5 of the Hazardous Wastes (Management & Handling) Rules 1989 & Amendment Rules).

CONSENT is hereby granted under section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974, under section 21 of Air (Prevention & Control of Pollution) Act 1981 and Authorisation under the provisions of HW (M & H) Rules (hereinafter referred to as 'the Acts', 'the Rules') and the rules and orders made thereunder to

M/s. SJK Steel Plant Limited,
 Jambalapadu Village,
 Tadipatri Mandal,
 Anantapur District.
 E-mail: sjksteel@sanchamet.in

(hereinafter referred to as 'the Applicant') authorizing to operate the industrial plant to discharge the effluents from the outlets and the quantity of Emissions per hour from the chimneys as detailed below.

i) Out lets for discharge of effluents:

Outlet No.	Outlet Description	Max Daily Discharge KLD	Point of Disposal
1.	Process & Washing effluents after treatment	540	Recycled back for slag granulation.
2.	Cooling / Blow down effluents after treatment	100	Onland for green belt development
3.	Domestic Effluents	85	Septic tank followed by soak pit.

ii) Emissions from chimneys:

Chimney No.	Description of Chimney	Quantity of Emissions at
1.	Attached to 8 TPH Oil Fired Boiler	
2.	Attached to Blast furnace	
3.	Attached to Converter	
4.	Attached to Ladle Furnace	
5.	Attached to Stove Heating Section	
6.	Attached to Back draught Section	
7.	Attached to Slag Granulation Section	
8.	Attached to 4 x 3000 KVA D.G. Sets	
9.	Attached to 2 x 250 KVA D.G. Sets	
10.	Attached to 2 x 1250 KVA D.G. Sets	

iii) HAZARDOUS WASTE AUTHORISATION (FORM - II) [See Rule 3(C) & 5 (5)]

1. Number of Authorisation and date of Issue - APPCB/KNL/KNL/34/HWM Dt. 23/09/2008.
2. M/s. SJK Steel Corporation Ltd, Jambalapadu(V), Tadipatri(M), Anantapur District is hereby granted an authorized on to operate a facility for collection, reception, storage, transport and disposal of Hazardous Wastes namely:

To: Project Head / DGT - Civil

HAZARDOUS WASTES WITH RECYCLING OPTION:

S.No	Name of the Hazardous waste	Stream	Quantity of Hazardous waste	Disposal Option
1.	Used / waste lubricating oil / Waste grease including transformer oil	5.1 of Schedule - I	5.7 tons/ annum.	Shall be sent to authorised Reprocessors / Recyclers.
2.	Used lead acid batteries	22 of Schedule - IV	25 Nos/annum.	Shall be returned to manufacture / dealers on buy back basis.

This consent order is valid to manufacture the following products along with quantities only.

S.No.	Product	Quantity
1.	Pig Iron	375 TPD
2.	Steel Billets	875 TPD
3.	Alloy Steel Castings	500 TPD

This order is subject to the provisions of 'the Acts' and the Rules' and orders made thereunder and further subject to the terms and conditions incorporated in the schedule A, B & C enclosed to this order.

This combined order of consent & Hazardous Waste Authorisation shall be valid for a period ending with the 31st day of December 2008.

Sd/-
MEMBER SECRETARY

To

The Manager (Safety & Environment),
M/s. SJK Steel Corporation Ltd.,
Jambalpadu (V),
Tadipatri (M),
Ananthapur District

// T.C.F.B.O. //


Joint Chief Environmental Engineer (CFO)

SCHEDULE - A

All the conditions stipulated in the Schedule - A of the earlier combined order of CFO No. APPCB/KNL/KNL/255/HO/2007-2334 dated 12.02.2007 remains same. The industry shall ensure consistent compliance of each condition of Schedule -A.

Sd/-
MEMBER SECRETARY

SCHEDULE - B**Special Conditions**

1. The effluent discharged shall comply with the tolerance limits mentioned below:

Outlet	Parameter	Limiting Standards (mg/l except for pH and Temperature)
2	pH	5.50 - 9.00
	Total Suspended Solids (at 103 - 105° C)	200
	Total Dissolved Solids (TDS)	2100
	Oil and Grease	10
	Biochemical Oxygen Demand (3 days at 27° C)	100

2. The industry shall take steps to reduce water consumption to the extent possible and consumption shall NOT exceed the quantities mentioned below:

S.No	Effluents	Quantity
1.	Raw Material handling System	248 KLD
2.	Blast Furnace Cooling and Boiler	389 KLD
3.	Slag Granulation	248 KLD
4.	Gas Cleaning Plant	248 KLD
5.	BOF Cooling and Auxiliaries	1614 KLD
6.	Ladle Furnace Cooling Continuous Casting Plant	331 KLD
7.	Compressed Air Station	124 KLD
8.	Oxygen Plant	124 KLD
9.	Ventilation, Air Conditioning, Dedusting Laboratory, etc.	124 KLD
10.	Domestic	107 KLD
	Total	3557 KLD

3. The industry shall file the water cess returns in Form-I as required under section (5) of Water (Prevention and Control of Pollution) Cess Act, 1977 on or before the 5th of every calendar month, showing the quantity of water consumed in the previous month along with water meter readings. The industry shall remit water cess as per the assessment orders as and when issued by Board.
4. The emissions shall not contain constituents in excess of the prescribed limits mentioned below.

Chimney No.	Parameter	Emission Standards
1 to 10	SPM	115 mg/Nm ³

5. The industry shall comply with ambient air quality standards of TSPM - 200 µg/m³; RSPM - 100 µg/m³; SO₂ - 80 µg/m³; NO_x - 80 µg/m³ outside the factory premises at the periphery of the industry.

Noise Levels: Day time (6 AM to 10 PM) - 75 dB (A)
Night time (10 PM to 6 AM) - 70 dB (A).

6. The industry shall not increase the capacity beyond the permitted capacity mentioned in this order, without obtaining CFE & CFO of the Board.
7. The industry shall provide interlocking system for air pollution control equipments provided for kiln with raw material feeding system so that the feeding of raw material would be stopped incase the air pollution control equipments fails within three months and report the compliance to RO, Kumool.
8. The industry shall maintain the records showing the intake of raw water, rejects and permeate from the raw water treatment plan.

9. The industry shall install water meters to ascertain the actual water consumption in the plant.
10. The industry shall provide adequate dust suppression / containment measures to control the fugitive emissions in the plant.
11. The industry shall complete asphaltting / concreting the internal roads within the Six months.
12. The industry shall provide separate energy meters to air pollution control equipments and report the compliance to RO, Kurnool.
13. The industry shall regularly conduct stack and ambient air quality monitoring and submit the consolidated reports to RO, Kurnool.
14. The industry shall submit the actual water consumption & wastewater generation details to RO, Kurnool.
15. The industry shall provide adequate dust suppression system at raw material yard.
16. The applicant shall submit Environment statement in Form V before 30th September every year as per Rule No.14 of E(P) Rules, 1986 & amendments.

Sd/-
MEMBER SECRETARY

SCHEDULE - C

[see rule 3(c) and 5(5)]

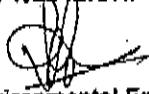
**[CONDITIONS OF AUTHORISATION FOR OCCUPIER OR OPERATOR HANDLING
HAZARDOUS WASTES]**

1. The industry shall give top priority for waste minimization and cleaner production practices.
2. The industry shall not store hazardous waste for more than 90 days as per the HWM Rules, 2003.
3. The industry shall not dispose Waste oils and Used Lead Acid Batteries to the traders and the same shall be disposed to the authorized Reprocessors/ Recyclers.
4. The industry shall store Used / Waste Oil and Used Lead Acid Batteries in a secured way in their premises till its disposal.
5. The industry shall take necessary practical steps to prevention of oil spillages and carry over of oil from the premises.
6. The industry shall maintain 6 copy manifest system for transportation of waste generated and a copy shall be submitted to Board Office and concerned Regional Office.
7. The industry shall maintain good house keeping & maintain proper records for Hazardous Wastes stated in Authorisation (FORM II).
8. The unit shall submit the condition wise compliance report of the conditions stipulated in Schedule B and Schedule - C of this order on half yearly basis to Board Office, Hyderabad and concerned Regional Office.

Sd/-
MEMBER SECRETARY

To
The Manager (Safety & Environment),
M/s. SJK Steel Corporation Ltd.,
Jambalpadu (V),
Tadipatri (M),
Ananthapur District.

// T.C.F.O. //



Joint Chief Environmental Engineer (CFO)

6-784027-080

Annexure 1.3

Document	Page No.
1.0 Terms of Reference Issued by 85th Expert Appraisal Committee (Industry) held during 23rd- 25th September, 2008 for preparation of EIA/EMP	1-3

F. No. J-11011/322/2008- IA II (I)
Government of India
Ministry of Environment and Forests
(I.A. Division)

1.0

Paryavaran Bhawan
CGO Complex, Lodhi Road
New Delhi - 110 003

E-mail : pb.rastogi@nic.in
Telefax : 011: 2436 7668
Dated 16th October, 2008

To, ✓
M/s SJK Steel Plant Ltd.
Village Jumbulapadu, Mandal Tadpatri - 515411
District, Anantapur,
Andhra Pradesh

E-mail : rahul.srivastava@sgs.com ; Fax No. : 080-23431043 / 08558 - 221299

Subject : Expansion of Steel Plant at Village Jumbulapadu, Mandal Tadipatri, District Anantapur, Andhra Pradesh by M/s SJK Steel Plant Ltd.- TORs reg.
Ref. : Your letter no. nil dated 28th March, 2008.

Sir,

Kindly refer your letter no. nil dated 28th March, 2008 alongwith project documents including Form-I, Pre-feasibility Report and draft 'Terms of Reference' as per the EIA Notification, 2006. It is noted that proposal is for the expansion of Steel Plant at Village Jumbulapadu, Mandal Tadipatri, District Anantapur, Andhra Pradesh by M/s SJK Steel Plant Ltd.

Draft Terms of Reference (TOR) have been discussed and finalized during the 85th Meeting of the Expert Appraisal Committee (Industry) held during 23rd-25th September, 2008 for preparation of EIAEMP. Following are the 'TORs':

1. Present land use should be prepared based on satellite imagery.
2. Location of national parks / wildlife sanctuary within 10 km. radius should specifically be mentioned.
3. Permission and recommendations of the State Forest Department regarding impact of proposed expansion on the surrounding reserve forests viz. Dabbadha Palle RF and Dhodhiyan RF should be included.
4. Actual land requirement, classification of land, acquisition status and status of construction activities should be incorporated.
5. Site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall should be collected.
6. A list of industries containing name and type in 25 km radius should be incorporated.
7. Residential colony should be located in upwind direction.
8. List of raw material required and source should be included.
9. Manufacturing process details for all the plants including Blast Furnace, Sinter Plant, Coke Oven Plant, Power Plant, Rolling Mill etc. should be included.
10. A chapter on type and details of coke oven plant including pollution control methods should be included.

-1-

VP (Projects)

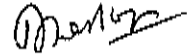


30/10/2008

11. Type of coke oven and full details and justification for installing non-recovery type of coke oven should be included.
12. Ambient air quality at 8 locations within the study area of 10 km., aerial coverage from project site with one AAQMS in downwind direction should be carried out.
13. The suspended particulate matter present in the ambient air must be analyzed for the presence of poly-aromatic hydrocarbons (PAH), i.e. Benzene soluble fraction. Chemical characterization of RSPM and for incorporating of RSPM data.
14. Impact of the transport of raw material and finished product on the transport system should be assessed and provided.
15. Determination of atmospheric inversion level at the project site and assessment of ground level concentration of pollutants from the stack emission based on site-specific meteorological features. Air quality modeling for steel plant for specific pollutants needs to be done.
16. Plant-wise air pollution control measures proposed for the control of gaseous emissions from all the sources should be incorporated.
17. A note on control of fugitive and secondary emissions from as per CPCB guidelines from all the sources should be incorporated.
18. One season data for gaseous emissions during winter season is necessary.
19. Permission for the drawl of 2.5 MGD and 5.0 MGD water from River Pennar and Gandikota Reservoir water from the concerned department and water balance data including quantity of effluent generated, recycled and reused and discharged should be provided. Methods adopted/to be adopted for the water conservation.
20. Surface water quality of nearby rivers (60 m upstream and downstream) and other surface drains at eight locations must be ascertained.
21. Ground water monitoring minimum at 8 locations and near solid waste dump zone, Geological features and Geo-hydrological status of the study area are essential as also. Ecological status (Terrestrial and Aquatic) is vital.
22. A note on treatment of wastewater from different plants including coke oven plant, recycle and reuse for different purposes should be included.
23. Action plan for solid/hazardous waste generation, storage, utilization and disposal of all the solid/hazardous waste including fly ash, BF and other slags. An assurance that 100 % char will be used in the FBC boiler should be included.
24. MOU signed with the Cement manufacturers for utilization of fly ash and granulated BF slag should be included.
25. Generation and utilization of waste/fuel gases from BF plant and their utilization in the CPP have to be set out.
26. Risk assessment and damage control needs to be addressed.
27. Occupational health of the workers needs elaboration.
28. Green belt development plan in 33 % area and a scheme for rainwater harvesting have to be put in place.
29. Socio-economic development activities need to be elaborated upon.
30. A note on identification and implementation of Carbon Credit project should be included.
31. An Action Plan for the implementation of the recommendations made for the Steel Plants in the CREP guidelines must be prepared.
32. Total capital cost and recurring cost/annum for environmental pollution control measures should also be included.
33. A tabular chart for the issues raised and addressed during public hearing/public consultation should be provided.
34. Any litigation / court case pending against the proposal should also be included.

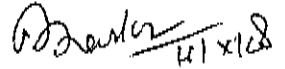
These 'TORs' should be considered for the preparation of draft EIA / EMP report for the expansion of Steel Plant at Village Jumbulapadu, Mandal Tadipatri, District Anantapur, A. P. in addition to all the relevant information as per the 'General Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. The draft EIA/EMP as per TORs should be submitted to the Chairman, Andhra Pradesh Pollution Control Board (APPCB), Hyderabad, A. P. for public consultation. The APPCB shall conduct the public hearing/public consultation as per the provisions of EIA notification, 2006.

You are requested to kindly submit the final EIA/EMP prepared as per TORs and incorporating all the issues raised during Public Hearing / Public Consultation to the Ministry for considering the proposal for environmental clearance.



(Dr. P.B. Rastogi)
Director

Copy to : The Chairman, Andhra Pradesh Pollution Control Board, Paryavaran Bhavan, A-3,
Industrial Estate, Sanathnagar, Hyderabad 500 018, A. P



(Dr. P.B. Rastogi)
Director