



# 2017-18

## Communication on Progress



**Rashtriya Ispat Nigam Limited**  
**Visakhapatnam Steel Plant**  
Visakhapatnam, India

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## HUMAN RIGHTS

**Principle- 1: Businesses should support and respect the protection of internationally proclaimed human rights.**

**Principle- 2: And make sure that they are not complicit in human rights abuses.**

### Commitment/Policies:

Rashtriya Ispat Nigam Limited (RINL), a Government of India entity under the Ministry of Steel with its allegiance to the Constitution of India resolves to deliver justice, liberty, equality and fraternity to all its stakeholders and stands committed to protect the internationally proclaimed human rights.

The commitment is reflected in letter as well as spirit in the various policies of the company:

- Code of business Conduct
- Customer policy
- HR Policy
- CSR & S policy
- Vigilance policy

### Action taken /Outcomes:

- 1) The approach of RINL towards human rights protection goes beyond its employees and extends to its stakeholders chiefly the communities around. Through its dynamic and sustainable Corporate Social Responsibility interventions, RINL makes an effort of enhancing the quality of life of the communities around.

Interventions which primarily target the basic needs approach is adopted wherein, access to safe drinking water, food, shelter etc. is looked after. In this process, RINL makes an effort of moving closer towards the fulfillment of the **UN Sustainable Development Goals**.



To ensure that the Company is not complicit in human rights abuses, following systems are followed:

- As a principal employer, RINL ensures payment of wages, which is higher than the statutory minimum wages and also ensures compliance with various statutory provisions for contract workers.
- RINL is accredited for all three system standards i.e. ISO 9001:2008, ISO 14001:2004 and OHSAS 18001:2007 which envisage internal and external audits.



- RINL is the first integrated steel plant in India to implement ISO 50001 standards for Energy Management system.
- All contractors are regularly exhorted to comply with the Child Labour regulation and surprise checks are conducted to ensure compliance.

### Key Initiatives under Corporate Social Responsibility in 2017-18:

#### I. Health

- Cochlear Implantation:** In order to promote the noble cause of rehabilitating the poor children with hearing impairment, Cochlear, an electronic medical device that replaces the function of the damaged inner ear was implanted to four children through ALIMCO. The *cochlear implantation was successfully completed for four children* belong to Visakhapatnam district. The surgery made them enable to hear speech at a nearly normal level.
- Infrastructure to Govt. Hospitals:** Two ambulances were provided to District Hospital, Sidhi and Sub- health Centre, Bahari of Sidhi District, one of the tribal districts of Madhya Pradesh. Smt. Riti Pathak, MP (Lok Sabha) flagged off the Ambulance provided to Dist Hospital Sidhi. These ambulances are utilized for taking the patients to the hospital in case of emergency or to any higher Centre for giving the treatment in time to save the lives.
- Support to HIV/AIDS infected/affected children:** DESIRE Society is actively involved in providing Institutional Care Home (ICH) services to HIV/AIDS infected/affected children at Gajuwaka. The Society takes care of these children (one or both parents died with HIV) by providing their everyday medication, nutritive food and education. With a view to support the noble cause, A TATA Winger Van was provided to DESIRE Society for transportation of these children to Hospitals for medical aid as well as for schooling purpose. In addition to the above, a washing machine was also provided to the center for the benefit of children.
- Relief to Fire Accident Victims :** RINL being a responsible corporate provided immediate relief to the 73 families affected by the Fire accident at Upparapalem, a surrounding village of the plant wherein their houses were gutted by providing essential items. Director (Personnel) Shri. Kishore Chandra Das, handed over the essential items to the families in the presence of the AP State Government officials.
- Nethra Jyothi:** A State of the Art Mobile Eye Clinic 'NethraJyothi' has been donated to 'Visakha Eye Hospital Trust', Visakhapatnam. This Mobile Van equipped with latest technologies for diagnosing various eye diseases, is being run by doctors of 'Visakha Eye Hospital Trust'. This has been serving the rural people of Visakhapatnam, Vizianagaram and Srikakulam districts. Free, cataract surgeries have been performed benefiting 813 beneficiaries, who are under Below Poverty Line through this project during the year. Further, Diabetic retinopathy screening for 196 diabetic patients were done at Visakhapatnam.
- Support for Homeless:** A van was provided to **Association for Urban and Tribal Development**, managing Night shelters of GVMC through Visteel Mahila Samithi an extended arm of RINL CSR. The vehicle is utilized for rescue operations & collection of material. The homeless staying on the foot paths and other areas in the city are identified and provided with food & shelter by the Association. They are also be encouraged to do work and earn their livelihood.
- Parivarthan:** To address the menstrual health issues faced by girls in Government High schools, RINL has undertaken a capacity building as well as awareness programme -"Parivarthan". A

program on menstrual health was organized in association with Visteel Mahila Samithi at ZP High School, Kanithi. During the programme the precautions to be taken during one's periods and the importance of proper nutrition in having good menstrual health were explained to the high school girl students by Dr. Gargeyi, Senior Doctor of Visakha Steel General Hospital. After the awareness session, sanitary napkins were distributed to the students.

- h) **Health Camps:** Medical camp was organized at Budawada, a surrounding village of Jaggayyapeta Limestone Mines (JLM) and Bongaram, tribal village at Peda Bayalu in Visakhapatnam District. Free medicines were given to the patients during the camp. Artificial limbs, wheel chairs and tricycles were also distributed to the 80 differently abled persons, Anakapalle, Visakhapatnam.

## II. Sanitation:

- a) **Installation of RO Water Plants:** Shri P Madhusudan, CMD, RINL has inaugurated the RO Plants at Islampeta, Madeena bagh, and Desapatrunipalem surrounding villages of the plant in the august presence of Shri Bandaru Satyanarayana Murthy, MLA Pendurthi. The RO Plants with a capacity of 1500 liters per hour, installed through GVMC provides clean and hygienic drinking water for around 10,000 residents of the above villages and surrounding areas. The plants were handed over to GVMC authorities for operation further maintenance.
- b) **Supply of Drinking Water:** To ensure access to pure drinking water during the summer months to the residents of four Rehabilitation colonies of VSP i.e. Aganampudi, Gangavaram, Pedagantyada & Vadlapudi, a project to supply drinking water for a period of four months was taken up. Every day 80,000 liters of drinking water was supplied through tankers to the residents of RH colonies.
- c) **Swachh Bharat: 2595 Swachh Bharat** activities were carried out by various departments of the plant during FY 2017-18. In addition to the above campaigns intensive cleaning activities 'Safai Pakhwada' are taken up at each Department. Further, in line with the directions of Govt. of India, activities viz. 'Swachhta Hi Seva', 'Cleanliness at offices', 'Swachhta Pakhwada' etc. were also religiously observed.
- d) **Contribution to Swachh Bharat Kosh:** In order to strengthen Swachh Bharat Mission and help in achieving the objective of improving cleanliness levels in rural and urban areas, Rs. 50.00 Lakhs was contributed to 'Swachh Bharat Kosh' set up by Govt. of India.
- e) **Maintenance of toilets under Swachh Vidyalaya:** RINL provided financial assistance for Maintenance of 86 toilets constructed in 33 schools under "Swachh Vidyalaya". RINL not only funds the activity but also regularly monitoring the maintenance of toilets for better utilization.
- f) **Installation of Toilets:** Installed a Port-a-cabin toilet block at the Simhachalam temple, a historical pilgrim place in south India at Visakhapatnam, for improving the sanitation levels.
- g) **52 nos. of Individual Household Toilets** were constructed in Nadumveedhi, a tribal village of Paderu Mandalam, Visakhapatnam, as a part of comprehensive development of the village towards a 'Swachh Gram'.
- h) **For effective Solid Waste Management,** installed a Compost Machine at Simhachalam temple at Visakhapatnam. This automated machine is capable of recycling all kinds of organic waste into compost within 24 hours. The machine has the capacity to convert around 250 Kg of organic waste per day.

- i) **Construction/Renovation of toilets at Rangaraya Medical College, Kakinada:** Construction of new toilet blocks and renovating existing toilet blocks at Pharmacology Department of Rangaraya Medical College (RMC), Kakinada East Godavari Dt. of AP was carried out as part of Swachha Bharat Mission.
- j) **Bal Swachh Jagruthi:** Eleven Awareness programmes on good hygiene practices through audio visual medium were conducted to children in the schools situated in the surrounding areas of Plant & Mines covering 1015 children.

### III. Education

- a) **Siksha:** With a strong belief that education is a catalyst for social change, free education is being provided to around 1600 children belonging to Below Poverty Line (BPL) families from the surrounding villages of Plant & Mines. The project creates a tangible impact in the lives of the economically disadvantaged since majority of the beneficiaries of this project are first generation learners.
- b) **Arunodaya Special School:** A multi-category School/Centre, caters to children with learning impairment, mental retardation, cerebral palsy, autism, hearing loss and other learning disabilities. The main objective of the school is to make these children learn to manage/behave themselves and also to make them self-dependent by sharpening their inherent talents. RINL extends support to this school and free education including vocational training and therapy was provided to around 100 differently abled children from the surrounding villages every year. A new school bus was also provided for meeting the transportation requirement of the Special children from the nearby villages to the school and back.
- c) **Pathashala ki Aabharanam:** With a view to address the infrastructural deficit in the schools, RINL has provided 700 three seater dual desks to Zilla Parishad High schools at Chandrampalem and K.Koppaka, DPN ZPH School, Kasimkota and ZPH school Kannurupalem in Visakhapatnam District and ZPH School at OV Peta in Srikakulam District of Andhra Pradesh.
- d) **Vivekananda Vidyarthi Nilayam:** A Hostel building was constructed for students belonging to 'Girijan' community at Yendada, Visakhapatnam through Andhra Vanvasi Kalyan Ashram. This project is intended to address the constraints faced by tribal students who are pursuing higher education at Visakhapatnam City.
- e) **Chethana** is a six month Adult literacy programme, intended for providing basic education for adults who have lost the opportunity and crossed the age of formal education. This program was taken up at 15 centers located in surroundings villages of Plant & 5 tribal villages of Visakhapatnam District. The programme has benefited 500 adults.

### IV. Skill Enhancement:

- a) **Skill Development to People with Disability:** With a view to empower the disabled to have better standards of living, RINL Provided Skill development program for 100 Divyangjan (People with Disabilities) residing in the surrounding villages of the Plant and other areas of Visakhapatnam in various Skills viz. Tailoring, Computer Data Entry Operation, Beautician and Mobile Handset repair. The programme immensely benefitted the Divyangjan for their livelihood.
- b) **Saksham:** To empower the unemployed youth with the skills for earning a decent livelihood, Vocational training programmes in various trades viz. Mobile repairing, Arya works, Solar equipment repairs & maintenance, LMV driving, Cutting & tailoring and Beautician course were

taken in 10 centers and completed benefitting 300 youth residing in the Rehabilitation colonies & Nadumveedhi a tribal village of Visakhapatnam District and Garbham Mines area. Certificates were awarded to those who have successfully completed the training programme.

- c) **Home Nurse Course:** A qualified Home nurse is of huge demand, especially in cities, with the increase in the number of senior citizens staying alone with their children settled in far off places in search of greener pastures. Considering the above, a training program in Home Nurse course for unemployed women of Bonangi village has been taken up through Jan Shikshan Sansthan. Training was provided to 20 women beneficiaries from the surrounding areas which enabled them to earn a decent livelihood. Further a three month tailoring programme was also organized for women at Bonangi, a surrounding village of Plant.

#### V. Environment:

- a) **Green Visakha:** Block plantation of 75000 saplings was taken up under Green Visakha project at Gangavaram (30000) and Lemarathi (45000).
- b) **Surya:** Provision of street lights in villages will alleviate the life style of the villagers and would bring improvements in their quality of life. RINL Installed 75 Solar Street lights in Kheri Saffa (25) and Kharak Bhura (50) villages of Jind District of Haryana.

#### VI. Rural Development

- a) **Ukku Kalavedika:** Multipurpose hall, a constructed at Gangavaram was inaugurated by, Dr. K. Haribabu Honorable MP Visakhapatnam in the presence of Shri. Palla Srinivas Rao, Honorable MLA Gajuwaka, CMD and Directors. The hall was put into operation for the benefit of villagers through Community welfare Centre, Gangavaram. The two floor building constructed at a cost of Rs.1.50cr will serve the residents of RH colony & its surrounding villages for conducting social functions and other skill development programmes.
- b) **Development works at Chepaluppada Village:** Project for providing Under Ground Drainage (UGD) and BT Road was taken up Chepaluppada village, Bheemili of Visakhapatnam district. Shri M Venkaiah Naidu, Hon'ble Vice President of India laid foundation stone for the above project which was taken up for the comprehensive development of Chepaluppada village near Bheemili, Visakhapatnam District.
- c) **Construction of Community Hall:** A community hall was constructed at Seethanagaram Village, Anakapalli Mandal, Visakhapatnam district under rural development activity. Further construction of a community hall at Sahjadpur village of UP was also taken up in collaboration with MSTC
- d) **Roof sheeting work for Hud-hud cyclone affected houses** in slum areas of Greater Visakha Municipal Corporation was taken up through the funds provided by NMDC.A.C.sheets were fixed to 4769 beneficiaries houses in 40 wards of GVMC as per the list provided by District Administration.

#### VII. Sports:

- a) **Promoting Sports for Special Children:** Sports for Special Children was organized aiming at boosting the confidence levels of the Special children also to provide a platform for the children to showcase their talents. Various special schools in Visakhapatnam Dist. & Vizianagaram Dist. participated in the meet. Around 250 children studying in Special schools of Visakhapatnam District along with 50 teachers and staff have participated in the event and won appreciation from all quarters.

- b) **Financial Assistance to disable Sports person:** Access to quality training is an essential factor which plays a key role in the success of any sports person. RINL as a CSR initiative has provided a financial assistance to Shri Jeet Kumar, a para athlete to help him take up intensive coaching for three months in Power Lifting (Bench Press) and achieve better results in the Inter Ministry Bench Press tournaments. Further, the above training enabled him to fine tune his skills to achieve success in the international Paralympic event. The cheque was presented by Hon.Minister of Steel.

### Plans for the upcoming year

To continue sustainable interventions in the communities around us to bring about a tangible change in their standard of lives. To reach out to more beneficiaries and strive for achieving the UN Sustainable Development Goals.

## LABOUR

**Principle-3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining**

**Principle-4: The elimination of all forms of forced and compulsory labour.**

**Principle-5: The effective abolition of child labour**

**Principle-6: And the elimination of discrimination in respect of employment and occupation**

### Commitment/Policies & Action taken:

1. Implementation of the concept of Collective Bargaining in RINL has proved that the industrial democracy is ensured in true letter and spirit and has set a win-win situation for both the Employer and the Employees in the Industry. The collective bargaining approach has helped to enhance the production and productivity in RINL.

25 Registered Unions are functioning in RINL. They take up the work related issues of the regular non-executive work force. For determining the majority Union, secret ballot election is held once in two years. The Union which secures the highest number of votes is declared as the majority union and accorded recognition under the concept of Code of Discipline. This approach implemented in RINL for a mutual appreciation of business interests and to resolve conflicts by way of consultation and conciliation and through a negotiated settlement. The process upholds the freedom of association and paves the way for effective recognition of right to collective bargaining.

Presently, Steel Plant Employees Union (CITU) is the Recognized Union.

Workers' participation in management is an essential ingredient of Industrial democracy. The concept of workers' participation in management is based on Human Relations approach to Management which brought about a new set of values to labour and management in RINL. Traditionally the concept of Workers' Participation in Management (WPM) refers to participation of non-managerial employees in the decision-making process of the organization. Workers' participation is also known as 'labour participation' or 'employee participation' in management. Workers' participation in management implies mental and emotional involvement of workers in the management of the Enterprise. In RINL the following committees are functioning and are covered under Quality Management System and has been certified by ISO.



Shop-Floor Cooperation Committees	33 Nos.
Shop-Floor Safety Committees	32 Nos.
CWC Committees (including Mines)	09 Nos.
Other Committees	12 Nos.

The above committees are constituted with equal participation of Recognized Union and Management.

2. RINL, a Central Govt. public sector undertaking, has a “Recruitment policy” which is in alignment with the law of the land. In respect of labour engaged by contractors, the provisions laid down in Contract Labour Regulation and Abolition Act as well as other relevant labour statutes are followed.
3. In RINL, minimum age limit for recruitment is 18 years. All Advertisements and Employment Notifications indicate the minimum age limit as 18 years. Further, circulars are issued from time to time intimating all the contractors concerned not to employ child labour. Surprise checks are also conducted periodically.
4. Equal pay for equal work irrespective of gender, caste, religion, age etc. RINL does not discriminate on any ground in matters of employment and occupation except that women are not employed after 7.00 PM and before 6.00 AM in terms of the Factories Act. Statutory requirements related to employment and occupations are fulfilled. All the employees during the service are extended equal pay for equal work.

#### Outcome:

1. Mutual appreciation of the Employer and Employees interests, thereby facilitating harmonious industrial relation climate in the Organization. Conflict resolution is done through an approach of consultation and conciliation.
2. No form of forced and/or compulsory labour exists in the Company.
3. No child labour is recruited in RINL.
4. Scope for discrimination is eliminated.

#### Plans for the upcoming year:

1. To monitor and sustain mechanism to uphold the freedom of association and the right to collective bargaining and take corrective measures whenever required.
2. RINL as a Model employer, constantly strives to ensure that all the relevant statutes pertaining to labour are implemented viz., Minimum wages, PF, ESI, Bonus etc.
3. RINL as a model employer does not allow/permit the engagement of child labour and it will continue the existing policy.
4. RINL is committed to continue the existing policy.

## ENVIRONMENT

**Principle- 7: Businesses should support a precautionary approach to environmental challenges**

**Principle- 8: Undertake initiatives to promote greater environmental Sustainability:**

**Principle- 9: And encourage the development and diffusion of environmentally friendly technologies**

### Commitment/Policies:

1. RINL's commitment: It is reflected towards precautionary approach to environmental challenges in Company's Objective Statement & Policies as given below:

### OBJECTIVES

- Achieve Gross Margin to Turnover ratio > 10%.
- Plan for finishing mill to integrate with 7.3 Mt capacity and commission the same by 2017-18.
- Achieve rated capacity of new & revamped units by 2017-18.
- Capture markets for high-end value added products by focusing on sector specific applications and customer needs.
- Achieve leadership in Energy consumption by achieving 5.6 Gcal/tcs by 2017-18.
- Globalisation of operations through acquisition of mines and setting up of marketing network abroad.
- Create a high performance and safe work culture by nurturing talent and developing leaders.
- To grow in harmony with the environment & communities around us.

### QUALITY, SAFETY, HEALTH, ENVIRONMENT & ENERGY (QSHE) POLICY

We, at Visakhapatnam Steel Plant, within the defined scope and boundaries, are committed –

- to satisfy the needs and expectations of customers, stakeholders and other interested parties and applicable requirements of the management systems;
- to protect environment from impact of the activities;
- to prevent incidents of injury and ill health of persons at workplace;
- to optimally utilize the various forms of energy for conserving natural resources.

To accomplish this, we will

- Supply good quality products and services and support customers delight.
- Document, implement, maintain & periodically review the QSHE management systems including the policy, objectives and targets and continually improve the effectiveness and performance of 'QSHE Management System'.
- Conserve natural resources efficiently and effectively, prevent environmental pollution and grow in harmony with the environment.
- Increase use of renewable and alternate energy sources for protecting the environment (from climate change).

- Comply with all relevant obligations applicable to products, activities, services and processes in respect of Quality, Safety, Occupational Health, Environment & Energy aspects.
- Support the purchase of safe, environment friendly, energy efficient products as well as services and enhance design for continual improvement in conservation of energy.
- Encourage employee involvement & participation and consultation in innovative and developmental activities.
- Continuously improve the level of consciousness related to Quality, Safety, Occupational Health, Environment, Energy and organizational requirements amongst employees and contract workers by imparting education, training and awareness.
- Ensure to make the policy available to public and communicate to all concerned for making them aware of their individual obligations towards QSHE MS.

This policy is communicated to all the persons working under our control and is made available to interested parties on request.

2. RINL is the first integrated steel plant in the country to be certified to all the 4 international standards viz. ISO 9001, 14001, OHSAS 18001, and ISO 50001. Environmental Management System (EMS) ISO 14001 is implemented throughout the plant covering 49 (forty nine) departments. To ensure that “Continual Improvement” is propagated through EMS a number of Environmental Management Programmes (EMPs) are taken up every year. EMP’s are focused in the areas of reduction of resource consumption, reduction in use of Ozone Depleting Substances (ODS), usages of waste, improvement of work-zone environment, elimination of Hazardous material use etc. About 72 nos of EMPs were taken up by different departments during the year 2017-18.

As part of this system, RINL has promoted greater environmental responsibility by:

- i Detailing the scope of its activities in all respects, evaluating the environmental impacts and aspects and providing necessary measures to mitigate the environmental impacts to the minimum.
- ii Incorporating all legal and other requirements applicable to RINL and developing a mechanism to periodically review the compliance status and take necessary corrective action, whenever deviations are observed
- iii Agreeing to communicate its “significant aspects” to external parties thro’ an “Annual Report” each year
- iv Providing training to all its contractors’ workers (before starting any work) and giving them a copy of the “Policy on Safety, Health & Environment” in 3 languages
- v Stipulating the essential environmental requirements in the “General Conditions of Contract” for compliance by all suppliers of equipment / services to RINL.

#### Action Taken:

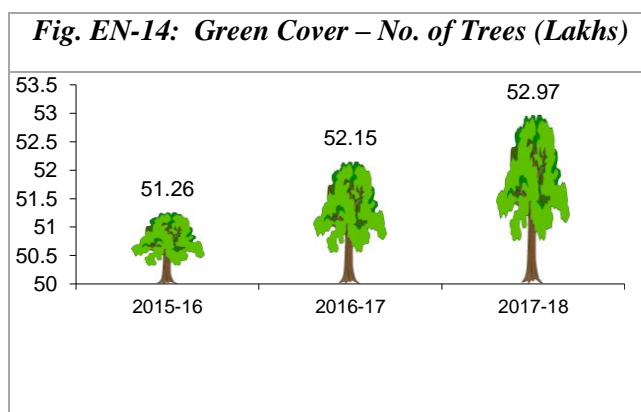
- 1) The following precautionary approach is adopted at RINL:
  - a) Environment Management at Vizag Steel commenced at the design-board-stage when its planners and designers planned for providing extensive environmental facilities both during the Stage-I and Stage-II of the plant.

During Stage-I, a massive investment of about Rs 468 crore has been made to provide a wide array of pollution control equipment to contain dust emissions and for treatment of waste water and effluents.

During Stage II expansion to 6.3 Million Ton Liquid Steel capacity, care is taken to incorporate latest technologies and facilities in the expansion units. A number of new features aimed at environmental improvement in the areas of Air Pollution, Water Systems, Energy efficiency and Waste Management are integrated in the expansion units by investing an amount of Rs.12830 Million. In addition to that Rs.15346.88 Million were spent towards the environmental improvement projects.

An annual expenditure of Rs 3300 Million/yr. (approximately) for the year 2017-18 is incurred on the operation and maintenance of the pollution control equipment.

- b) RINL's philosophy of managing operations in harmony with nature has its beginning in the motto of 'one tree for every one ton of steel capacity', which has been followed meticulously since inception. Out of the total land bank of 8,227 Ha, 3600 Ha has been identified for afforestation. Cumulative trend of tree plantation is shown at Fig EN-14.



- c) In order to minimize resource use and reduce pollution loads, RINL's VSP is the **first** integrated steel plant in India to have adopted the most modern "**clean technologies**" as follows:
- Coke dry cooling plant for recovery of waste heat from red-hot coke (pushed out from the coke ovens). This is used to generate power (2 x 7.5 MW) in back pressure turbines
  - Operating blast furnaces at high top pressure (2.1 kg/cm<sup>2</sup>) and expanding the BF gas in Gas Expansion Turbine Stations to generate power (2 x 12 MW+ 1 x 14 MW)
  - Evaporative cooling in the skids of Mills (LMMM & MMSM) to recover the waste heat to generate process steam (13 ata).
  - Recovery of L.D. gas during "blowing" and using it as a fuel.
  - Coke Dry Quenching for CDCP-4 using the waste heat to generate 14 MW power.
  - Waste Heat Recovery from Sinter (NEDO) bed coolers to generate 20.6 MW.
  - RINL, the Corporate entity of Vizag Steel crossed another milestone by launching a novel project to generate a "completely pollution free 120 MW power with 100% Blast Furnace gas and Coke Oven gas", the first of its kind in Indian Steel Industry.
- d) To prevent air, water and land pollution RINL has provided pollution control equipment as detailed below:

#### **Air Pollution Control: Dust Extraction Systems:**

Air pollution control aspect has been considered in totality during the design stage itself. Wide array of air pollution control equipment were provided. Cyclones, scrubbers, bag filters, electrostatic



precipitators & dust suppression systems were provided to recover and recycle the dust generated in course of material handling through belt-conveyors/crushers/screens etc. at various stages of production

Deptt.	Cyclone (dry)	Scrubber (wet)	ESP (dry)	Bag filter	Dry Fog Systems	Total
C&CCD	-	28	-	1		29
RMHP	8	-	-	16	9	33
TPP	-	-	6	3	-	9
SMS-1	-	-	2(CVS) 2(Dog House)	3	-	7
SMS-2	-	-	3(Dog House)	4	-	7
BF	-	-	4(BHS) 4(CHES)+ 2(BF-3)	4	2	16
CRMP	-	-	-	15		15
ES&F	-	-	-	4		4
SP	-	34	4(ACP) 4(GCP)+ 2(SP-3)	6	5	55
G. Total	8	62	33	56	16	175

and ensure congenial work zone environment. Department wise details of air pollution control measures taken are as follows:

**Note:** Data excludes ventilation systems and dust pneumatic transport systems

### Effluent-treatment/recycling and waste water treatment plants

Elaborate water recycling systems, are in operation at RINL to maximize recycling of water being used in the processes. In addition to the above state- of- the- art waste water treatment systems and effluent treatment systems are in place to treat contaminated water. 26 such systems are available at RINL as given below.

S.No.	System	No.
1.	Mechanical Biological & Chemical Treatment Plant (120m <sup>3</sup> /hr.) in coal chemicals plant	1
2.	Effluent Treatment Plant (280 cu.m/hr)	1
3.	Sewage Treatment Plant (Township) (300cu.m/hr)	1
4.	Waste Water Treatment Plants(CCCD-1, SP-1, BF-3, SMS-3, MILLS-3)	11
5.	Spillage Recycling Systems (TDP, BDP, BRP, ASP, CPH, NAFC, CPU, TOS)	8
6.	Ash-pond	1
7.	Appikonda Waste Water Treatment Plant	1
8.	Balachruvu Waste Water Treatment Plant	1
9.	Ultra Filtration Plant	1

Out of this 3 waste water treatment systems use Ultra filtration and Reverse Osmosis technology to treat water discharged from effluent treatment plants so that the water thus treated can be re-used as input water to various systems. Due to this initiative large volumes of water was saved.

Valuable fuel-gases (BF gas, LD gas) are obtained in course of iron and steel making. These are cleaned and used in various departments for heating applications eg. Kilns, reheating furnaces, TPP (power generation) etc.

S.No.	System	No.
1.	Converter gas cleaning plant & gas holder (2 x 80000NM <sup>3</sup> )	2
2.	BF gas cleaning plant (GCP) (3x364,000NM <sup>3</sup> /hr)	3
3.	Coke dry cooling plant (Steam:52T/hr at 40ata)	4

e. The following waste management systems / practices are adopted in RINL to maximize waste utilization and thereby conserve natural resources:

- (i) Generation of solid BF slag as a waste has been prevented by design. Cast house granulation of the BF slag is done and the slag is sold to cement plants for substituting lime.
- (ii) L.D. slag is processed by M/s Ferro Scrap Nigam Limited. Magnetic separators remove embedded iron/steel pieces and then the slag is screened. The +30 to -50mm size is recycled in SMS & BF (as a substitute for lime) or it is used as ballast in railway tracks. The -8mm size is recycled in sinter plant as a substitute for lime.
- (iii) "Used oils" are reclaimed in the ORU (Oil reclamation unit) and it is then used for lubrication purpose in non-critical areas. The resultant oil sludge and waste oil are sold to agencies duly registered with the Ministry of Environment & Forests.
- (iv) All hazardous wastes like tar & oil sludge, MBC activated sludge, Benzol sludge, tar acids etc. generated in coke chemicals plant are charged into coke oven batteries along with the 'charge coal'.
- (v) All dust collected by DE systems / bag-filters / ESPs is charged at the receiving bins of sinter plant for recycling in sinter-making.
- (vi) The mills scales collected from water treatment plants in rolling mills are charged at the receiving bins of sinter plant for recycling.
- (vii) Wet sludge from other WTPs are first sun-dried and then sent to receiving bins in sinter plant for recycling.
- (viii) Steel scrap (cut ends) are collected from individual shops by dumpers & sent to SMS scrap yard for charging into the LD converters.
- (ix) Lime dust from CRMP is utilised at Briquetting Plant for making briquettes for steel-making.
- (x) Some of the lime dust is also sold to external parties. The dry dust is packed in bags and sent out in lorries.
- (xi) Coke breeze from batteries is sent through conveyors to S.P. for recycling.
- (xii) Used refractory bricks are utilized for making ramming mass and for carrying out repairs of LD converter and for relining the emergency containers in SMS.

2. In order to promulgate the spirit of 'Continual Improvement' in environmental performance, a no of Environment Management Programmes (EMPs) are taken up in various areas. The various EMPs taken up at RINL for 2017-18 are as given below:

Sl.No	Area of Environmental Improvement	No of EMPs
1	Reduction of ODS	3
2	Air Pollution Control	3
3	Hazardous Waste Management	7
4	Resource Conservation	17
5	Energy Conservation	2
6	Environmental Monitoring	3
7	Waste management	8
8	Afforestation and Garden Development	9
9	Training on Environment	4
10	Environment Management	14
11	E-waste Handling	2

3. In order to consistently diffuse environmentally friendly technologies and practices a no of environmental projects have been implemented at RINL, as given below:

Year	Sl.No.	Project
2004-05	1	Recirculation of sewage water by ultra-filtration
	2	High temp. membrane bag filters in CRMP : FK - 5
2005-06	1	Dry fog dust suppression in RG Building / RMHP
2006-07	1	3 nos. continuous ambient air monitoring stations in side RINL
	2	Dry fly ash handling, storage and delivery system
	3	Developing a new Scrap Yard for miscellaneous wastes : e-wastes
	4	Electronic controllers in ESPs of TPP boilers no.3&4
	5	Rapid marine EIA by NIO
2007-08	1	Continuous on-line stack monitoring systems (Phase-I--10 nos.)
2008-09	1	Up-gradation of the PC Lab
	2	1 no. continuous ambient air monitoring station outside RINL
	3	Continuous on-line stack monitoring systems (Phase-II-- 10 nos.)
	4	“Dry fog” dust suppression system in BHS/BF
	5	Replacement of compressors working on ‘ODS’ with non-ODS / CWP – Chillers
2009-10	1	High temp. membrane bag filters in CRMP1,2,3,4 (kilns 1,2&3 are completed)
	2	Electronic controllers in ESPs of TPP boilers no.1,2&5
	3	Nitrification – de-nitrification of MBC effluents for control of ammonical nitrogen
	4	Replacement of compressors working on ‘ODS’ with non-ODS / CWP – Chillers
	5	Monitoring of chemical & biological parameters in the marine environment off Appikonda & toxicological studies- of the treated effluent of Visakhapatnam Steel Plant.
2010-11	1	Replacement ‘ODS’ with non-ODS refrigeration units of ASP
2011-12	1	Coke dry Quenching for CDCP-4 using the waste heat to generate 14 MW power.
	2	Appikonda waste water treatment plant
2013-14	1	Waste Heat Recovery from Sinter (NEDO project) bed coolers to generate 20.6MW power.
	2	Balacheruvu Waste Water Treatment Plant
2014-15	1	Revamping & up-gradation of ESPs of BF -1
2015-16	1	Rain water harvesting schemes
	2	Pulverised coal dust injection in BF – 1, 3
	3	Provision of dog house in convertor A
	4	120 MW waste gas based captive power plant(CPP-2)
2016-17	1	Provision of dog house in convertor C
	2	5 MW Solar Power Plant
2017-18	1	Provision of Dog Houses in converters B of SMS-1
	2	Revamping & up-gradation of ESPs of SP-1

### Outcomes:

- a) **RINL enjoys an excellent ambient air quality** because of the massive afforestation and wide array of pollution control equipment (175 nos.) provided. All the ambient air quality parameters (RSPM, SPM, SO<sub>2</sub>, and NO<sub>x</sub>) are well below the norms. The most perceptible impact is a 3-4 °C drop in ambient temperature in comparison to Visakhapatnam city.

**b) Waste Management:**

One of the major areas identified for reducing consumption of raw materials thereby ensuring sustainable development as well as for effecting cost reduction is the utilization of various types of wastes generated inside the steel plant. Hence, a major thrust is given for maximizing the sale/recycling of various types of wastes generated in course of steel production.

Parameter	2015-16	2016-17	2017-18
Total Solid Waste Generation(MT)	2.56	2.65	3.06
Specific Solid waste generation (t/tcs)	0.70	0.67	0.65
Total Solid Waste utilization (%)	78.82	76.00	105.14

**c) Stack Emissions:**

All stack emissions are monitored as per the statutory frequency through continuous stack emission monitoring stations.

**d) Effluent Quality:**

All effluent parameters are within norms.

**e) Battery Emissions:**

Fugitive emissions in coke oven batteries-1, 2, 3 are monitored for PLD (percent leaking doors), PLL (percent leaking lids) and PLO (percent leaking off takes). All emissions are well below the norms.

- f) There has been significant improvement in most of the environmental performance indicators.
- g) Drastic reduction in consumption of Ozone Depleting Substances
- h) Continuous reduction in water consumption over the years
- i) Improvement of work zone environment in Raw Material Handling Plant
- j) Reduction in emissions and
- k) Proper management of hazardous wastes
- l) Up gradation of facilities for environmental monitoring and analysis

	On Going Projects
1	Zero water discharge scheme (Waste Water Treatment-UF/RO at CO area & STP area near BF-3)
2	Dry fly ash handling, storage & delivery system for boiler 2, 3, 4 & 5.
3	Revamping & up-gradation of ESPs of SP-1(M/c No-2)
4	Up-gradation of ESPs of TPP for one Boiler
5	Construction of 4 nos. of Guard Ponds at outlet of MBC before marine discharge of the effluent

**Plans for the upcoming year**

1. Modification/augmentation of ESP's of Thermal Power Plant for four Boilers is taken up to bring down the emissions below 50 mg/Nm<sup>3</sup>.
2. Long term lease of land for setting up of Auto Claved Aerated Concrete Block unit with a minimum offtake of 75,000 tonnes per year per party targeting an offtake of 2, 00,000 tonnes per year is under process.
3. VSP is now focusing utilization of metallurgical wastes & other wastes by establishing BOF briquetting & Pelletization plant. It is also proposed to setup a Plasma Gasification unit in our plant for processing of hazardous & toxic wastes generated in the plant.



## ANTI-CORRUPTION

**Principle-10: Businesses should work against all forms of corruption, including extortion and bribery**

### Commitment/Policies:

Eternal vigilance is the nucleus of RINL Vigilance Policy 2015, to achieve excellence by developing an international image of RINL as a clean, transparent, continuously learning and growing organization and to function as catalyst to contribute for the improvement of its efficiency, productivity and profitability.

### Action Taken:

1. **Efforts and Endeavors:** Continuing efforts have been made by Vigilance Department to promote Transparency, Ethics and Integrity in RINL through special focus on Preventive Vigilance, by conducting system studies on the procedures being followed in the company, Intensive Examination of Works Contracts and Purchase Orders, Perusal of Audit paras and Internal Audit reports, identification of Sensitive posts, conducting Surveillance, Surprise checks, random Scrutiny of bills etc. The observations/deviations and suggestions for improvement have been communicated to the concerned along with appropriate recommendations. Besides, attention is also given for creating awareness through publication of Newsletters and Brochures, to share information on relevant topics amongst the employees and other Stake holders. Assistance has been provided to the concerned in processing of disciplinary cases emanating from vigilance recommendations. The department has been instrumental in identifying new areas where potential of Information Technology can be leveraged to improve transparency and fairness.

Apart from the above, 28 (twenty eight) sessions were conducted to spread 'Vigilance Awareness' among the employees, school children and college students. Out of them, 14 (fourteen) sessions were conducted on 'Preventive Vigilance' for total 714 employees of various levels from JO to AGM. 11 (eleven) sessions on 'Ethics & moral values' were conducted for 2230 school and college students belonging to various schools and engineering colleges so as to inculcate moral behavior in the young minds.

**Vigilance Campaigns:** Vigilance Awareness Week – 2017 was observed in RINL, as per the directives of Central Vigilance Commission during 30<sup>st</sup> October 2017 to 04<sup>th</sup> November 2017, the theme being "My Vision – Corruption Free India. The Vigilance Awareness Week commence with a pledge taking ceremony by all employees at various departments across the company on 30<sup>th</sup> October 2017.

Publicity to the theme was afforded through display of hoardings, banners and posters at selected locations, intranet & telephone network, issue of circulars and bringing out a brochure reproducing the message of the Hon'ble President of India, Prime Minister and the CVC etc. Bringing the ill effects of corruption and advantages of being honest, Posters, Wall hangings and Banners were displayed at prominent places in the organization. In conformity to the theme, several programmes designed to create awareness, were organized involving the participation of school children, engineering college students, employees and their dependents and other

stake holders. Notable amongst them are skit & elocution competition for school & engineering college students, slogan competition for employees and their dependents and Cultural Programmes. The observance of Vigilance Awareness Week was concluded with the Valedictory Function organized on 04<sup>th</sup> November 2017, attended and addressed by the Chief Guest Shri Mukul Saran Mathur, Divisional Railway Manager, East Coast Railway, Waltair, Visakhapatnam, CMD and CVO, RINL.

2. **Integrity Pact:** The extent of implementation of Integrity Pact during the year was to the tune of 96.11 % of total value of Tenders floated. Review of the progress of implementation of IP was held by Independent External Monitors along with senior management of RINL.
3. **E-Commerce:** The e-auction platform of RINL is run on the Company's website i.e. [www.vizagsteel.com](http://www.vizagsteel.com) and is used by different departments for finalizing the rates in procurement activities (reverse e-auction) as well as sales activities (forward e-auction).

The details of e-commerce during 2017-18 are shown at figure given beside:

**e-Commerce 2017-18**

Auction type	% of total
e-Reverse	75.89% of procurement through tenders 100% of transport contract in marketing
e-Sale	0.43% of total sales of total steel
e-Payments	99.98% of total payment

### Outcome & Impact of our Vigilance Initiatives

1. Vigilance activities during the year have resulted in significant savings to the tune of ₹ 201.50 Million to the company. Further, the system improvements suggested are expected to give substantial recurring benefits in future also.
2. Vigilance initiatives have improved focus on Transparency in the business processes, leading to higher level of confidence among the stakeholders about business ethics and integrity of the organization and paved the way towards organizational excellence.
3. **Recognition:**

The department has been recertified for ISO 9001:2008 certification for Quality Management system, which is valid till Oct 2018. Internal audit as well as external audit for ensuring implementation of Quality Management System (QMS) was successfully completed.

### Plans for the upcoming year

To continue vigorous awareness campaigns in various departments in addition to preventive and pro-active vigilance through enhanced surveillance and checks, and to sustain the tempo of a growing organization.

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