



2016-17

# 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 2016-17:

#### I. Health

- a) 20,733 patients were tested and 991 cataract surgeries were conducted free of cost in 234 Eye Camps using 'Netrajyothi' Mobile Eye care Van (provided by RINL) in the surrounding villages of RINL. Eye camps were also organized in the peripheral villages of Jaggayyapeta Lime Stone Mines, Madharam Dolomite Mines.
- b) Support was extended to King George Hospital Visakhapatnam to tune of Rs. 2 Cr for constructing multi-storied hospital complex. RINL has joined along with other PSU's in the endeavor of construction of multistoried hospital complex at a cost of Rs. 80 Cr to strengthen the infrastructure facilities at KGH which was built during the British regime.
- c) An ambulance and audio system was provided to Visakhapatnam Eye Bank and Research Training Trust (VEBART) - Mohsin Eye bank to create awareness about cornea retrieval and collection of corneas. The project helps in reaching the interior places of Visakhapatnam and surrounding villages thereby providing awareness and ensuring timely retrieval of cornea and transplantation to unfortunate victims of corneal blindness, mostly children and youth in the rural and tribal areas.
- d) Medical equipment was provided to Dermatology Department of King George Hospital, Visakhapatnam. These equipment will help in early detection of various kinds of skin disorders and also in providing effective treatment to the poor and needy belonging to North coastal Andhra Pradesh and the neighboring states like Odisha, Chhattisgarh etc., who are availing the services at KGH.
- e) 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*". Senior gynecologists of RINL -Visakha Steel General Hospital (VSGH) along with officials from the CSR Department organized Menstrual Health Awareness programmes at the Government High Schools, situated in the surrounding villages of Plant benefitting girl students.
- f) A medical camp was also organized at peripheral village of our captive mines. Free medicines were given to the patients during the camp.
- g) Artificial limbs, wheel chairs and tricycles were distributed to the differently abled persons.

#### II. Sanitation:

- a) "Swachh Visakha": 30 Dumper bins were provided to Greater Visakha Municipal Corporation (GVMC) Visakhapatnam to address the infrastructure needs for effective waste Management.
- b) "Swachh Gram" is a project to address the sanitation needs i.e supply of drinking water through solar power and construction of household toilets has been taken up in "Nadumuveedhi" a tribal village of Visakhapatnam district. Solar powered drinking water supply system has been installed and 24 x 7 water is being supplied to the villagers. Further individual household toilets are in the process of construction.

- c) Supply of Drinking water was undertaken in four Rehabilitation colonies & surrounding villages of Plant during summer months. 80,000 litres per day of Drinking water was supplied.
- d) Installation of three RO water plants has been taken up in the surrounding villages of plant viz., at Despatrunipalem, Islampeta and Madinabagh through GVMC.
- e) Two e-toilets, the first of its kind in our township, were installed at the tri-weekly market for the benefit of the public visiting the market and the vendors. These e-toilets will further help in improving the environment and also address the problem of open defecation.
- f) 1786 activities were carried out in various departments of the Plant & Mines involving employees towards achieving Swachh Bharat; our National Mission to achieve a Clean India.
- g) Fortnight long Special Swachhta drives “Swachh Bharat Pakhwada” were organized in several department and Mines every month since May 2016. During the fortnights, a plethora of activities like Swachta walkathon, Poster & Slogan competition, Swachta Rath for awareness building amongst the communities, Zero plastic campaign etc. were conducted. The Pakhwada witnessed extensive participation at all levels.
- h) “Swachta Puraskar” awards were instituted to instill competition in implementing Swachh Bharat Abhiyan among various departments and to encourage the innovative work during the cleanliness campaigns. These awards are presented on the Formation Day of RINL.
- i) “Bal Swachh Jagruthi” awareness programmes were conducted in various Government Schools through audio visual medium with a view to contribute towards good hygiene practices among school children of the villages in the surrounding areas of Plant & Mines.

### III. Skill Enhancement:

- a) **Project “Saksham”:** Vocational Training was provided in courses like Dress making, Fabric Painting, Two wheeler mechanism, Plumbing, Car driving, Computer basics, Cloth bags & basket making, Beauty culture, Solar equipment maintenance & repairs, Mobile repairs etc. for 575 beneficiaries in surrounding villages of Plant & Mines.
- b) **Project “Kaushal”:** Skill development program for 200 SC women was conducted at Visakhapatnam, Kakinada and Nandhyala cities in Garment construction techniques and Industrial sewing machine operation. This training enables the beneficiaries to obtain employment in the garment production units.

### IV. Education

- a) Project Shiksha: Free education was provided to 1800 children belonging to the Below Poverty Line (BPL) families in the surrounding villages of Plant & Mines.
- b) Adult Literacy classes were also conducted in 7 peripheral villages and in five tribal villages covering 500 adults.
- c) Free education was provided to differently abled children at ‘Arunodaya Special School’ -which educates as well as rehabilitates the differently abled children from the surrounding villages of the plant.
- d) A food distribution vehicle was provided to deliver clean and hygienic food as a part of mid-day meals programme in Government schools in Visakhapatnam district.
- e) A one month residential camp was conducted to provide coaching to 150 students belonging to Scheduled Tribes who are appearing for APPSC Group -II preliminary examination.

- f) **Vivekananda Vidyarthi Nilayam**– To address the constraints faced by tribal students who are pursuing higher education at Visakhapatnam City, construction of a hostel building for students belonging to ‘Girijan’ communities at Yendada, Visakhapatnam.
- g) **Pathashala ki Aabharanam**: With a view to address the infrastructural deficit in the schools, RINL has taken up the project for providing 220 three seater dual desks to ZP High school, Chandrampalem, Visakhapatnam. The desks were fabricated at Government Industrial Training Institute, Gajuwaka thus providing a wonderful opportunity to the ITI trainees for acquiring hands-on experience.
- h) Additional class rooms at MPP School Dosuru and a kitchen building for mid meal programme at MPP Pittavanipalem of Visakhapatnam district were constructed to address the infrastructure deficit in Govt. schools.

#### V. Peripheral Development

- a) ‘*Ukku Kalavedika*’- Two multipurpose halls at Pedagantyada and Gangavaram, and “Sangha Mithra” community hall at Kanithi SC Colony were constructed for the benefit of villagers like conducting social functions, skill development programmes etc. These halls were handed over to the respective Community Welfare Centre committees. Construction of another community hall at Seethanagaram Village, Anakapalli mandal, has also been taken up.
- b) Roof sheeting work for the damaged houses in cyclone in the slum areas of Greater Visakha Municipal Corporation has been taken up through the funds provided by NMDC.

#### VI. Environment:

“*Green Visakha*”: Under the Green Visakha project, raising and maintenance of 2000 plants at School of Distance Education, Andhra University premises was taken up and completed with a goal of making the environment cleaner, greener and healthier.

#### VII. Sports:

- a) Support was extended to a National level Shooter to facilitate advanced equipment.
- b) A “Sports Meet for Special children” was organized to boost their confidence levels by providing them a platform to showcase their talents wherein around 300 Special Children from 12 Special Schools participated.

#### VIII. Art and Culture:

- a) RINL supported a project for establishment of a School of traditional dance and refurbishment of ancient monuments in Lahaul and Spiti which is one of the most backward tribal district of Himachal Pradesh with its rich cultural heritage in the form of dance and historic monuments to tap huge potential for tourism so as to improve livelihood for the villagers.

#### 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.

24 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, Visakha Steel Employees Congress (VSEC) 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	13 Nos

The above committees are constituted with equal participation of Recognised 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-10:** 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 meet the needs and expectations of customers, stakeholders and other interested parties;
- to prevent incidents of injury and ill health of persons at workplace;
- to optimally utilize the various forms of energy; and
- to minimize impact of steelmaking operations on climate change & environmental pollution.

To accomplish this, we will

- Supply quality goods and services to 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 MS.
- Use natural resources / energy efficiently and effectively with concern for environment.
- Harness renewable and alternative energy sources to comply with national policies & energy security.
- Comply with all relevant legal and other requirements applicable to products, activities, services and processes in respect of Quality, Safety, Occupational Health, Environment & Energy aspects.
- Support the purchase of safe, environment friendly and energy efficient products as well as services and also design for continual improvement.
- Encourage involvement & participation of employees 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 47 (forty seven) 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 84 nos of EMPs were taken up by different departments during the year 2016-17.

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.

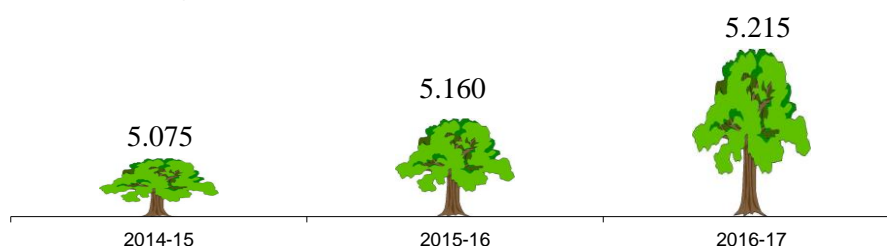
During Stage I, a massive investment of about Rs 468 crore has been made to provide a wide array of pollution control equipment to contain dust emissions and for treatment of waste water and effluents.

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.7557.15 Million were spent towards the environmental improvement projects.

An annual expenditure of 3280 Million/yr. (approximately) for the year 2016-17 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.

**Fig. EN-14: Green Cover – No. of Trees (Millions)**



- 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 (36 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:

Dept.	Cyclone (dry)	Scrubber (wet)	ESP (dry)	Bag filter	Total	No.of chimneys and height(mtr)
C&CCD	-	28	-	1	29	3(120m)
RMHP	8	-	-	16+1*	25	
TPP	-	-	5	3	8	3flues (180.5m)
SMS			2(CVS)	3	5	1 (80m)
BF	-	-	4(BHS) 4(CHES)	4	12	2(80m) 2(100m)
CRMP	-	-	-	13	13	4(52m)
ES&F	-	-	-	4	4	
SP	-	34	4(ACP) 4(GCP)	1	43	2(120m)
WRM						1(45m)
LMMM						1(87m), 1(40m)
MMSM						1(80m)
<b>G. Total</b>	<b>8</b>	<b>62</b>	<b>23</b>	<b>46</b>	<b>139</b>	<b>20</b>

\* Dry-Fog System.

In addition to above, the following DE systems & Dust Suppression Systems (DSS) are installed in (Stage -2) at various locations to take care of dust generation in expansion of 6.3Mt Stage.

Deptt.	Cyclone (dry)	Scrubber (wet)	ESP (dry)	Bag filter	Dry Fog Systems	Total
RMHP	-	-	-	-	8	8
CRMP	-	-	-	4	-	4
SMS-2	-	-	2	4	-	6
Blast Furnace	-	-	2	-	2	4
Sinter Plant	-	-	2	5	5	12
TPP	-	-	1	-	-	1
<b>G. Total</b>	<b>-</b>	<b>-</b>	<b>7</b>	<b>13</b>	<b>15</b>	<b>35</b>

#### 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

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 2015-16 are as given below:

Sl.No	Area of Environmental Improvement	No of EMPs
1	Reduction of ODS	2
2	Air Pollution Control	11
3	Water conservation and quality	1
4	Hazardous Waste Management	10
5	Resource Conservation	11
6	Energy Conservation	4
7	Environmental Monitoring	1
8	Waste management	15
9	Afforestation and Garden Development	11
10	Training on Environment	6
11	Noise Reduction	1
12	Environment Management	8
13	E-waste Handling	3

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
2016-17	1	Provision of dog house in convertor C

### Outcomes:

a) **RINL enjoys an excellent ambient air quality** because of the massive afforestation and wide array of pollution control equipment (174 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	2014-15	2015-16	2016-17
Total Solid Waste Generation(MT)	2.46	2.56	2.65
Specific Solid waste generation (t/tcs)	0.75	0.70	0.67
Total Solid Waste utilization (%)	82.51	78.82	76.00

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 and BF-2
4	Provision of Dog Houses in 1 converters of SMS-1
5	Up-gradation of ESPs of TPP for two Boilers

### Plans for the upcoming year

1. Revamping & up-gradation of ESPs of Sinter Plant and Blast furnace No.2 is taken up at a cost of Rs. 1500.9 Million to limit the stack emissions to the revised norm of 50mg/Nm<sup>3</sup>.
2. Installation of dog houses in one converter of Steel Melting Shop-1 to eliminate roof top emissions/ secondary emissions.
3. Perspectives on solid waste utilisation at RINL.

## ANTI-CORRUPTION

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

### Commitment/Policies:

External 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, 31 (thirty one) 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 443 employees of various levels from JO to AGM. 14 (fourteen) sessions on 'Ethics & moral values' were conducted for 1947 school and college students belonging to various schools and engineering colleges so as to inculcate moral behavior in the young minds.

2. **Vigilance Campaigns:** Vigilance Awareness Week – 2016 was observed in RINL, as per the directives of Central Vigilance Commission during 31<sup>st</sup> October to 05<sup>th</sup> November 2016. 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, Vice-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 inter school 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 05<sup>th</sup> November 2016, attended and addressed by the Chief Guest Shri C Rajendiran, Chief Commissioner of Customs, Central Excise & Service Tax, Visakhapatnam, CMD, Directors and CVO, RINL.

3. **Integrity Pact:** The extent of implementation of Integrity Pact during the year was to the tune of 96.25 % 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.
4. **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 2016-17 are shown at figure given beside:

<b>e-commerce 2016-17</b>	
Auction type	% of total
e-Reverse	61.25% of procurement through tenders 100% of transport contract in marketing
e-payments	99.97% of total payment

### Outcome & Impact of our Vigilance Initiatives

1. Vigilance activities during the year have resulted in significant savings to the tune of ₹ 83.4 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:**
  - a) 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 was successfully completed.
  - b) "Corporate Vigilance Excellence Award 2016-17" was bestowed on RINL for outstanding initiatives in Vigilance arena. Two Vigilance Officers received Vigilance Excellence Awards in individual category and two Officers were presented with Certificate of Appreciation.
  - c) "National Vigilance Excellence Award-2016" in individual category was also awarded to two Vigilance Officers of RINL for their meritorious services and contribution.

### 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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