

# **©** C O P 2012 - '13



# 1.Businesses should support and respect the protection of internationally proclaimed human rights

#### During the year 2012-'13:

RINL VSP CSR Policy committed to respect the protection of internationally proclaimed human rights like – Environment care, Education, Housing, Drinking Water and Good Health. Following are the key areas where RINL-VSP CSR activities have been taken up:

#### Environmental Care

An amount of **₹12.16** <u>Millions</u> has been spent on Environmental care. Important activities during the year are :

- (a) 'Green Visakha': This program was launched with a view to reduce pollution in the area of Greater Visakha Municipal Corporation (GVMC). The program has been planned with a target of planting 5,00,000 trees in a period of 5 years(commencing 2011) in the GVMC area. This Project is recommended by Parliamentary Committee on Environment, Forests, Science and Technology and in coordination with Visakhapatnam Urban Development Authority(VUDA), GVMC & AP State Pollution Control Board.
- (b) **Jaladhara**: Environment friendly project **'Jaladhara'** (3<sup>rd</sup> phase), for providing safe drinking water to 9 tribal villages of Agency area of Vizag District was completed. This project provides filtered, perennial drinking water by gravitation method from a rain fed source which is at heights, without using electrical power/energy. About 3000 people in 9 villages were benefited. This project was implemented through M/s D. Sarada Trust.
- (c) 'Surya' Towards utilizing alternate energy sources, Solar Street lighting & Home lighting system was provided to all the 14nos. homes, library & Office in SOS Children village, Bheemunipatnam, Visakhapatnam District, benefiting about 200 people.

#### Education

An amount of ₹**51.17** <u>Millions</u> has been spent on Education benefiting <u>**38,993**</u> persons. Important activities during the year are :

- (a) Free education to economically poor students through Visakha Vimala Vidyalaya Schools at Ukkunagaram & Balacheruvu, at a cost of ₹ -46.70 Millions and total beneficiaries are about 1500 students.
- (b) **Arunodaya Special School**: Free education and training/therapy to differently abled children. RINL has been giving overriding emphasis on imparting education to differently



abled children also. Vocational workshops in different courses like candles making, paper bags making, preparation of cloth washing powder, Floor cleaner (Phenyl), Making of washing powder, craft items like diyas etc., were organized for differently abled children (18 years and above) with the help of their parents which will enable these children to make themselves self-reliant in their daily life stream with the help of their family.

- (c) 'Saksham' Women Literacy programs to increase literacy rate among women, were commenced (1year program) in peripheral villages of VSP, through 'Pratham Education Foundation' at Chepalapalem village, Duvvada, Samatha nagar Durganagar & Rickshaw colony (near Pedagantyada Rehabilitation colony). 200 women are benefitted from this literacy program.
- (d) Provided Desk cum Benches (60nos.) & Teacher tables and Chairs at Government Junior college, Islampeta.
- (e) Introduced **Digital Class Room concept** in Visakha Vimala Vidyalayam Schools at Ukkunagaram & Pedagantyada, as part of improving educational standards. Around 2500 children are benefitted.

#### Health Care

An amount of  $\raiset{13.47}$  <u>Millions</u> has been spent on health related activities, benefiting a total number of <u>11,619</u> persons. Important activities during the year are :

- (a) **'Sanjeevan'**: Cancer Detection Camps using 'Sanjeevan' Mobile cancer detection van(provided by RINL-VSP), were organized at Rehabilitation colonies & peripheral villages of VSP and rural areas of Visakhapatnam, Vizianagaram & Srkakulam districts. The camps were organized through "Lions Cancer Hospital". 5560 people were tested & 93 suspected cases were referred for further treatment in Lions Cancer Hospital at Vizag city.
- (b) Organized general medical camp in association with Satya Sai Seva Samithi, doctors from VSGH, in Chepalapalem village. About 400 people attended the camp.
- (c) Mega Sign boards to bring awareness on HIV/AIDS were erected at 5 prominent locations in Visakhapatnam city.
- (d) Organized Cataract Eye Screening Camps through M/s Sankar Foundation, Visakhapatnam, covering 1351 patients / 244 Cataract Surgeries (cumulative 5014 surgeries since 2007).
- (e) Distribution of Artificial limbs to 190 poor & needy people, in West Godavari Dist., through M/s Gurudeva Charitable Trust.
- (f) Distribution of Tri cycles to 144 poor & needy people, at Vizianagaram.





(g) Free cataract surgeries have been performed to 355 patients by Doctors of Visakha General Hospital (VSGH), Ukkunagaram.

### People Care

To mitigate the hardships faced by the people, an amount of ₹11.29 Millions has been spent towards the following welfare measures, benefiting 35,501 persons. Important activities during the year are:

- (a) **Jan Shiksha**: A CSR initiative in the area of **'Empowerment'** of unemployed youth & women to become employable for their sustainable living. 60nos. Men at Chepalapalem village completed their Vocational training program in Light Motor Vehicle (LMV) Driving through Jan Shikshan Sansthan (JSS). 20 women completed their training in Arya work, at Chepalapalem village.
- (b) **Placement based skill development** centres have been started through IL&FS Skill Development Corp. Ltd., at Gonda district of Uttar Pradesh & at Vadlapudi Rehabilitation colony, Visakhapatnam, Andhra Pradesh. Skill development training was imparted to 105 unemployed in various trades like Fitter, Welder, Sewing Machine Operation & Electrician and placement will be provided to all the trainees. It is envisaged to cover a total of 500 youth & women under this scheme.
- (c) Drinking water was supplied to 4 Rehabilitation colonies i.e., Gangavaram, Pedagantyada, Vadlapudi & Aganampudi, for a period of 4 months in view of the severe summer. 36,000 litres of drinking water per day was supplied to each RH colony reaching to 14,400 beneficiaries per day.
- (d) Mock Safety Training facilities complex was provided at ITI, Gajuwaka, Visakhapatnam, for imparting safety training to VSP contract labour working at heights

#### CSR in Mines area :

The Company has its captive mines for Limestone, Dolomite, Manganese & sand. Activities were taken up in our mines areas of Jaggayyapet, Madharam & Garbham. CSR activities in the Mines cover community & society living in and around the mines area.

(a) Vocational training was given to 195 unemployed youth & women at Jaggayyapet & Garbham villages in courses like Auto Driving, Dress Making, Fabric painting & Embroidery for their sustainable living. Training is being given to 165 unemployed youth & women in courses like

Electrician, Car driving, Machine Embroidery, Hand Embroidery, lume Embroidery, Fabric painting, cutting and tailoring.

- (b) Free education to 305 BPL children through DAV Schools at Madharam & Jaggayyapeta Mines areas.
- (c) Provided school furniture to school at Jaggayyapeta Mines area benefiting 400 students.

## CSR in Marketing Branches :

The Company has 23 Marketing branches spread over almost all States of the Country. The marketing activities in States contributes to the State exchequer apart from serving the requirements of the local industries. Marketing activities also cover the rural areas in the States. Activities at Outstation branches include:

#### At Kanpur (UP):

- ▶ Distribution of school bags, Educational Kit and other items to 400 poor school children in Government/Aided schools.
- Adoption of 50 girl students of below poverty line families, in Government/Aided schools, up to Class XII.
- ▶ Distribution of tricycles to 50 poor & physically challenged persons.
- Distribution of desktop computers to 25 brilliant students of Government/Aided schools
- **Other Mining areas:** The Company in its efforts to attain self-sufficiency in major raw material, has applied for acquiring iron ore mines in the states of Odisha, Jharkand, Chattisgarh, Rajasthan & Uttar Pradesh.

In rural areas of Uttar Pradesh, the Company has taken up CSR activities which include

- Construction of 12nos. additional class rooms
- Providing 150 solar street lights
- Laying of road
- Providing 100nos. hand pumps
- Providing 1500nos. solar lanterns to girl students and
- Setting up of Industrial Training Institute (ITI) etc.





### Sports activities :

The company has supported the following sports events:

- ✓ 2<sup>nd</sup> Vizag Steel Invitation Hockey Cup was organized. Teams from Bhilai , Rourkela & Andhra Pradesh had participated. About 500 people witnessed the event.
- ✓ 2<sup>nd</sup> Vizag Steel Inter Zonal Senior Women's National Boxing Championship at Ukkunagaram, Visakhapatnam.
- ✓ 1<sup>st</sup> Dr.B.R.Ambedkar All India Invitation (Men) National Boxing Championship (2012-13) at Swarna Bharathi Indoor Stadium, Visakhapatnam.
- $\checkmark$  24<sup>th</sup> AP Inter-District Roller Hockey Championship 2012'. 32 Teams had participated and about 1000 were the beneficiaries.
- ✓ Sports for MR children/special children were organized by Sports Department. About 230 children from Ten schools in Visakhapatnam, participated in this mega sports event

### Development of Cultural talent :

The company gave encouragement by contributing to organize cultural programs like Burra katha, classical dance, patriotic and devotional songs, through CWC Committees, in the local communities where the local talent of the people is also showcased in the programs.

#### Peripheral Development

An amount of ₹ 16.36 Million has been spent towards peripheral development, benefiting 96,500 persons.

- (a) Construction of Multi-purpose Halls at Pedagantyada & Gangavaram Rehabilitation colonies has been taken up through CPWD.
- (b) Road over Bridge constructed on Balacheruvu Road near Visakhapatnam Steel Plant, in partnership with AP State Govt., was inaugurated and put into use

#### Help during natural calamities

- (a) Support was extended by supplying 29 MT of Steel to Fire victims at Bheemunipatnam, Visakhapatnam District, for reconstruction of 56 houses gutted in a fire accident.
- (b) Support of ₹ 100 Lakhs was extended for reconstruction of houses devastate during earthquake in Sikkim.
- Activities through Visteel Mahila Samithi (VMS) the ladies arm of RINL is executing several community development & societal support as part of CSR initiatives, on behalf of RINL. Some of the activities by VMS are :



- (a) Distribution of Plates, Glasses, Utensils, books, furniture and Sports items for MPP School at Gonthinivanipalem (Pedagantyada Mandal), ZPH School at Thotada (Visakhapatnam District), MPP School, Isarapuvanipalem (near Islampeta), Zilla Parishat High School at Kondakoppaka, Mandal Praja Parishad (MPP) schools at Pedakorada & Balacheruvu of Pedagantyada RH colony, Kondayyavalasa (Aganampudi RH colony) & Maradadasari peta (peripheral village of VSP), Zilla Parishat (ZP) High school, Pinamadaka of Aganampudi RH colony.
- (b) Water facility to Community Welfare Centre, Nadupur, Pedagantyada RH colony.
- (c) Medical Camp was organized for pregnant women at Araku (tribal area), Visakhapatnam District About 122 pregnant women were examined and given medicines & nutritious food.
- (d) Distribution of Artificial limbs to 70 poor & needy people, at Managalapalem, Vizianagaram District.
- (e) Providing 250nos. blankets to flood victims at Chuchukonda, a peripheral village nearby VSP.
- (f) Distributed 25 mattresses and 7nos. Medical Examination tables to Govt. Hospital at Aganampudi Rehabilitation colony.
- (g) Provided Teaching aids for Arunodaya Special School, Ukkunagaram, for differently abled children.
- (h) To reduce risks with conventional stoves, Biomass cook stoves (Smokeless chulhas) were provided at Chapalapalem, for 310 households.

#### **Future Plans:**

- 1. To continue the above programs in future also
- 2. Construction of Multipurpose Halls in 4 Rehabilitation Colonies
- 3. Infrastructural facilities at St. Joseph Hospital for HIV/AIDs affected children at Prathipadu, AP
- 4. On the Drinking water front, to extend water supply schemes to more tribal areas.
- 5. To take up Adult literacy programs
- 6. To implement more solar initiatives

#### 2. And make sure that they are not complicit in human rights abuses

The programs were well appreciated and all the programs are in line with protecting human rights.

#### Plans for the upcoming year

Social Audit is being arranged in the areas where CSR Activities are taking place to have the first-hand information about the willingness of the people.





# 3.Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining

The concept of Collective Bargaining is to go in for a win-win situation for both the employer and the employees in the Industry and to bring in Production and Productivity related progress of the Industry. In RINL VSP there are 21 Registered Trade Unions to take up the cause of the workers. To determine the majority union for a period of two years, the method of secret ballot is adopted. The union which secured highest number of votes would be declared as the majority union by extending recognition to it. This approach is implemented in VSP for a process of mutual appreciation of business interests and to resolve conflicts by way of consultation and conciliation and through negotiated settlement. This upholds the freedom of association and paves the way for effective recognition of right to collective bargaining.

Presently Steel Plant Employees' Union (SPEU) registered No: 597/82 is the recognized union in the RINL VSP.

Further, Workers' participation in Management has been enshrined in the Company by introducing a number of Participative Fora in sharing of information and exchange of views as shown below:

- 1. Shop floor Cooperation Committees 31 Nos
- 2. Shop floor Safety Committees 30 Nos
- 3. CWC Committees 9 Nos
- 4. Other Committees 14 Nos

A minimum of 50% of the members of the above Committees are nominated by Recognized Union.

**Outcome:** Mutual appreciation of the employer and employees interests, thereby facilitating establishment of harmonious industrial relation climate. Conflict resolution is done through an approach of consultation and conciliation.

**Future Plans**: To monitor and sustain the above and take corrective measures whenever required.



# 4. The elimination of all forms of forced and compulsory labour

RINL/VSP, 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. No form of forced and/or compulsory labour exists in the Company.

RINL/VSP 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.

#### 5. The effective abolition of child labour

In VSP, 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.

No child labour is recruited in VSP.

RINL/VSP as a model employer does not allow/permit the engagement of child labour and it will continue the existing policy.

## 6. And the elimination of discrimination in respect of employment and occupation

Equal pay for equal work irrespective of gender, caste, religion, age etc.

RINL/VSP 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. Scope for discrimination is eliminated. RINL/VSP will continue the existing policy.





7. Businesses should support a precautionary approach to environmental challenges

**VSP's commitment:** It is reflected towards precautionary approach to environmental challenges in Company's Vision Statement as given below:

#### **Vision**

To be a continuously growing world-class company

#### We shall

- Harness our growth potential and sustain profitable growth.
- Deliver high quality and cost competitive products and be the first choice of customers
- Create an inspiring work environment to unleash the creative energy of people.
- Achieve excellence in enterprise management.
- Be a respected corporate citizen, ensure clean and green environment and develop vibrant communities around us.

In order to translate its vision into practical application, it has formulated its policy, which provides the broad framework for implementation of policies that support a precautionary approach to environmental challenges.

We, at Visakhapatnam Steel Plant, are committed -

- to meet the needs and expectations of customers and other interested parties,
- to prevent injury and ill health of all persons working under our control, and
- to prevent pollution.

To accomplish this, we will

- Supply quality goods and services to customers' delight.
- Document, implement, maintain & periodically review the management systems including the policy, objectives and targets.
- Use natural resources and energy efficiently with concern for environment.
- Comply with all relevant legal, regulatory and other requirements applicable to products, activities and processes in respect of Quality, Environment, Occupational health & Safety and also ensure the same by contractors.
- Continually improve Quality, Environment, and Occupational health and safety performance.
- Encourage development and involvement of employees.
- Maintain high-level of Quality, Environment, Occupational health and safety consciousness amongst employees and contract workers by imparting education and training.



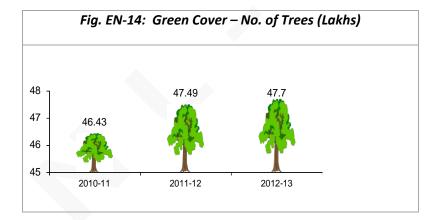


This policy is communicated to all the persons working under our control and is made available to interested parties on request.

#### **Action Taken:**

The following precautionary approach is adopted at VSP:

- a. A massive investment of about ₹4680 Millions has been made in the design stage itself to provide a wide array of pollution control equipment to contain dust emissions and for treatment of effluents. An annual expenditure of more than ₹1000 Millions/yr (approx) 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 ton of steel capacity', which has been followed meticulously since inception. Out of the total land bank of 8827 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, VSP is the **first** integrated steel plant in India to have adopted the most modern "**clean technologies**" as follows:
  - (i) 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
  - (ii) Operating blast furnaces at high top pressure (2.1 kg/cm2) and expanding the BF gas in Expansion Turbine Stations to generate power (2  $\times$  12 MW)
  - (iii)Evaporative cooling in the skids of Mills (LMMM & MMSM) to recover the waste heat to generate process steam (13 ata).
  - (iv) Recovery of L.D. gas during "blowing" and using it as a fuel.
- **d.** To prevent air, water and land pollution, VSP has provided pollution control equipment as detailed below:

Air Pollution Control: Dust Extraction Systems:

Department	Cyclone (dry)	Scrubber (wet)	ESP (dry)	Bag filter	Total	No. of Chimneys &Height (mtr)
C&CCD	ı	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	1	1	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)
Grand Total	8	62	23	46	139	20

\* DRY-FOG SYSTEM.





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

About 80% of the process water is recycled and the remaining 20% is treated before recycling or discharged. The 20 major systems are given below:

S.No.	System	No.
1.	Mechanical Biological & Chemical Treatment Plant (120m3/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-2, SMS-2, MILLS-2)	8
5.	Spillage Recycling Systems (TDP, BDP, BRP, ASP, CPH, NAFC, CPU, TOS)	8
6.	Ash-pond	1

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 (80000NM³)	1
2.	BF gas cleaning plant (GCP) 364,000NM3/hr	2
3.	Coke dry cooling plant (Steam:52T/hr at 40ata)	4

- **e.** The following waste management systems/practices are adopted in VSP 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 Ltd. 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 parties 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 removed by DE systems is unloaded from the hoppers of bag-filters / ESPs into open / closed dumpers and is unloaded in the receiving bins of sinter plant for recycling in sintermaking.
- (vi) The mills scales collected from water treatment plants in rolling mills are loaded by grab-buckets into wagons and unloaded in the receiving bins of sinter plant for recycling.
- (vii)Wet sludge from other WTPs are first sun-dried and then loaded by pay-loaders into dumpers and 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 by cranes.
- (ix) Lime dust from CRMP is sent by closed dumper to Briquetting Plant for making briquettes which are then sent by belt conveyor to SMS 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) Refractory bricks wastes are utilized for making ramming mass and for carrying out repairs of LD converter and for relining the emergency containers in SMS.

#### **Out comes:**

**a. VSP enjoys an excellent ambient air quality** because of the massive afforestation and wide array of pollution control equipment (139nos.) provided. All the ambient air quality parameters (RSPM, SPM, SO<sub>2</sub>,NOx) are well below the norms. The most perceptible impact is a 3-4°C drop in ambient temperature in comparison to Visakhapatnam city.





## **Excellent Ambient Air Quality! 2012-13**

(Unit: Microgram/Ncum)

Location	Parameter	APPCB Norm	2010-11	2011-12	2012-13	Remarks
	RSPM (PM-10)	100	49.6	62.9	61.00	ALL PARAMET- ERS ARE
Main Gate	SO <sub>2</sub>	80	6.40	6.10	10.00	WITHIN
	NOX	80	10.80	7.10	4.50	THE NORMS

RSPM: Respirable Suspended Particulate Matter

SO<sub>2</sub>: Sulphur dioxide NOX: Oxides of Nitrogen

#### **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.

	2010-11	2011-12	2012-13
Total Solid Waste Generation(MT)	2.27	2.29	2.29
Specific Solid waste generation (t/tcs)	0.70	0.73	0.75
Total solid waste utilization (%)	96.03	88.75	98.12

#### 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.





Outfall - I (APPIKONDA) - 2012-'13

PARAMETER	NORM	Average
pH	6.0 - 9.0	7.7
TSS	100	7.6
OIL & GREASE	10	5.0
IRON	1.00	0.30
COPPER	1.00	0.10

## Outfall - II (GANGAVARAM) - 2012-'13

Unit: mg/L

Unit: mg/L

PARAMETER	NORM	2012-`13
рН	6.0 - 9.0	7.30
TSS	100	86.60
OIL & GREASE	10	7.10
PHENOL	1.00	0.50
AMMONICAL N2	50.00	37.30

### 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:

S.No	Location	PLD	PLL	PLO
	Norm	10%	1%	4%
1.	Battery - 1	5.28	0.78	3.28
2.	Battery - 2	2.26	0.97	2.33
3.	Battery - 3	8.65	0.92	2.77





#### Plans for the upcoming year:

- **a.** Networking of Continuous Ambient Air Monitoring Stations and Continuous Stack Emission Monitoring Systems for central data acquisition
- b. Total phase out of use of CFCs and Halons from VSP
- **c.** Scientific disposal of accumulated miscellaneous hazardous waste such as E-waste, oil soaked cotton, asbestos ropes etc.

### 8. Undertake initiatives to promote greater environmental responsibility

### **Commitment/Policies:**

VSP is the first and the only integrated steel plant in the country to be certified to all the 4 International Standards viz ISO 9001, 14001, OHSAS 18001 & ISO 50001. VSP was certified to Environmental Management System ISO 14001:1996 on 18 May 2001 and recertified on 16 December 2004. However, after the standard was upgraded to ISO 14001:2004, VSP put in rapid efforts to comply with the upgraded standard. The surveillance and upgradation audit was carried out by BVCI from 6-8 March 2006 and BVCI has since confirmed certification of VSP's EMS to ISO 14000:2004. The certificate was issued on 23<sup>rd</sup> October 2007 and valid upto 14<sup>th</sup> August 2013.

As part of this system, VSP 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 VSP 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 VSP





### **Action Taken:**

In order to promulgate the spirit of 'Continual Improvement' in environmental performance, a no of Environment Management Programs (EMPs) are taken up in various areas. The various EMPs taken up at VSP for 2012-13 are as given below:

SI.No	Area of Environmental Improvement	No of EMPs
1	Reduction of Ozone Depleting Substances	3
2	Air Pollution Control	5
3	Water conservation and quality	0
4	Hazardous Waste Management	10
5	Resource Conservation	18
6	Energy Conservation	8
7	Environmental Monitoring	3
8	Waste Management	11
9	Afforestation and garden development	5
10	Training on environment	7
11	Noice reduction	2
12	Environment Management	5

#### **Out comes:**

The outcome has been improvement in most of the environmental performance indicators as given below	2010-11	2011-12	2012-13
Specific SPM load (kg/tcs)	0.61	0.58	0.60
Specific SO2 load (kg/tcs)	0.68	0.63	0.60
Specific NOX load (kg/tcs)	0.52	0.51	0.48
Specific emission of CO2 (t/tcs)	2.539	2.61	2.65
Hazardous waste recycled (%)	100	100	100



# 9. And encourage the development and diffusion of environmentally friendly technologies

## **Commitment/Policies:**

VSP right from its inception was committed to a clean environment and hence is the **first** integrated steel plant in India to have adopted the most modern "**clean technologies**" as follows:

- (i) 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
- (ii) Operating blast furnaces at high top pressure  $(2.1 \text{ kg/cm}^2)$  and expanding the BF gas in Gas Expansion Turbine Stations to generate power  $(2 \times 12 \text{ MW})$
- (iii) Evaporative cooling in the skids of Mills (LMMM & MMSM) to recover the waste heat to generate process steam (13 ata).
- (iv) Recovery of L.D. gas during "blowing" and using it as a fuel.



### **Action Taken:**

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

		List of Environment Projects Implemented	
Year	SI.No.	Project	Cost ( in₹ Millions)
	1	Recirculation of sewage water by ultra filtration	47.50
2004-05	2	High temp. membrane bag filters in CRMP: FK - 5	17.90
		SubTotal	65.40
2005-06	1	Dry fog dust suppression in RG Building / RMHP	3.70
2003 00		Sub Total	3.70
	1	3 nos. continuous ambient air monitoring stations in side VSP	10.70
	2	Dry fly ash handling, storage and delivery system	27.60
2006-07	3	Developing a new Scrap Yard for miscellaneous wastes: e-wastes	1.78
	4	Electronic controllers in ESPs of TPP boilers no.3&4	7.60
	5	Rapid marine EIA by NIO	2.90
		Sub Total	50.58
2007-08	1	Continuous on-line stack monitoring systems (Phase-I10 nos.)	20.50
		Sub Total	20.50
	1	Up-gradation of the PC Lab	16.20
	2	1 no. continuous ambient air monitoring station outside VSP	4.30
	3	Continuous on-line stack monitoring systems (Phase-II 10 nos.)	24.90
2008-09	4	"Dry fog" dust suppression system in BHS/BF	12.00
	5	Replacement of compressors working on 'ODS' with non-ODS / CWP – Chillers	65.00
		Sub Total	122.40



		Completed projects - Total	2082.88
		Sub Total	1097.80
	2.	Appikonda waste water treatment plant	247.80
2011-12	1	Coke dryquenching for CDCP 4 using the waste heat to generate 14 MW power	850.00
2010-11	1	Replacement 'ODS' with non-ODS refrigeration units of ASP	59.90
		Sub Total	662.60
	4	Replacement of compressors working on 'ODS' with non-ODS / CWP – Chillers	65.00
2009-10	3	Nitrification – denitrification of MBC effluents for control of ammonical nitrogen	460.00
2000 10	2	Electronic controllers in ESPs of TPP boilers no.1,2&5	12.00
	1	High temp. membrane bag filters in CRMP1,2,3,4(kilns 1,2&3 are completed)	125.60

#### Out comes:

The outcomes of these efforts have been:

- i) Drastic reduction in consumption of Ozone Depleting Substances
- ii) Continuous reduction in water consumption over the years
- iii) Improvement of work zone environment in Raw Material Handling Plant
- iv) Reduction in emissions
- v) Proper management of hazardous wastes
- vi) Up gradation of facilities for environmental monitoring and analysis

### **On-going Projects:**

SI.No	Project	Cost ( in ₹ Millions)
1	Pulverised coal dust injection in BF - 1, 2	1336.70
2	Zero water discharge scheme which saves 5 MGD water per year	902.20
3	Waste Heat Recovery from Sinter(NEDO project) bed coolers to generate 20.6 MW Power	2447.00





4	Dry Fly Ash handling, storage & delivery system for boiler 2,3,4 & 5	102.30
5	Pneumatic conveying system of dry fly ash from TPP to new SILOS outside the Plant	362.60
6	Revamping & upgradation of ESPs of SP – 1 and BF-1 & 2	2136.00
7	Provision of Dog Houses in 3 converters of SMS-1	752.30
8	Rain water harvesting schemes	130.40
	Sub Total	8169.50

**GRAND TOTAL (since 2004 onwards)** 

10252.38

# 10. Businesses should work against all forms of corruption , including extortion and bribery

#### **Commitment/Policies**

1. External vigilance is the nucleus of RINL Vigilance Policy 1997, to achieve excellence by developing an international image of RINL as a clean, transparent, continuously learning and growing organization and to convert vigilance functions as profit generating centres and thus contribute for the improvement of efficiency, productivity and profitability of RINL.

#### **Action Taken:**

1. Continued 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/sections where potential of IT can be leveraged to improve transparency and fairness. Apart from the above, 23 awareness sessions on ethics were conducted covering around





- 1500 school children belonging to 7 scools. Further 19 Nos of sessions were conducted for the benefit of around 700 employees of various levels from JO to AGM.
- 2. Vigilance activities during the year have resulted in significant savings to the company. Further, the system improvements suggested are expected to give substantial recurring benefits in future also.
- 3. Vigilance Awareness Week was observed from 29th October to 3rd November 2012 with the theme "Transparency in Public Procurement". Publicity to the theme was afforded through display of hoardings, banners and and posters at selected locations, intranet and telephone network, issue of circulars and bringing out brochure etc. In conformity to the theme several programmes designed to create awareness were organized involving the participation of school children, employees and their dependents and other stake holders. Notable amongst them were inter-school skit and elocution competition for children and slogan competition for employees and their dependents. A guest lecture on "Fraud Risks in Current Environment" by Shri Sandeep Baldava Partner & Leader (South), Fraud Investigation & Dispute Services, M/s Ernst and Young (P) Ltd was organized on 1.11.2012. The week long programme concluded with the valedictory function held on 3.11.2012 which was attended and addressed by the Chief Guest, Shri PK Jain, IRS, Chief Commissioner of Customs, Central Excise & Service Tax.
- 4. The extent of implementation of integrity pact during the year was to the tune of 95% of total value of tenders floated. Three reviews of the progress of implementation of IP were held by independent external monitors along with the senior management of RINL.
- 5. The Department had obtained 5 S Certification for work place management valid upto March 2014 in the year 2010-11. During the year 2012-13, internal as well as external surveillance audit for ensuring successful implementation of work place management (5 S) has been successfully completed.

#### Out come

Improved focus on transparency in the business processes, leading to higher level of confidence among the stake holders about business ethics and integrity of the organization.

#### Plans for the upcoming year

To continue vigorous awareness campaigns in addition to Preventive and pro-active vigilance through enhanced surveillance and checks.



