

COP 2011 - '12



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

During the year 2011-12:

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

- (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'** (3rd phase), for providing safe drinking water to 9 tribal villages of Agency area of Vizag District have been launched. 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 will be benefited. The project is being implemented through M/s D. Sarada Trust.

Education

An amount of **₹49.10** <u>Millions</u> has been spent on Education benefiting <u>4275</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 ₹32.83 Millions and total beneficiaries are about 1500 students.
- (b) Constructed a school building at Ukkunagaram, for differently abled children, at its own cost, with all facilities for providing education, vocational training, music therapy, yoga, speech therapy, physiotherapy for differently abled children. The cost of project is ₹20 Millions.
- (c) Computer awareness program at ZP High school, Islampet.





- (d) Free education and training/therapy to differently abled children RINL has been giving overriding emphasis on imparting education to differently abled children also, through Arunodaya Special School, benefiting about 60 children.
- (e) Providing desk cum benches, fans & sports items for students in RH colony.
- (f) Distribution of Plates & glasses to 370 students in schools in RH colonies towards Mid-day meals.
- (g) Distributed Uniforms to students in Govt. schools in RH colonies.
- (h) Support given to "The Hindu" for conducting the Young World Quiz Contest.
- (i) Provided water cooler for Govt. Library.

Health Care

An amount of $\stackrel{?}{\stackrel{?}{?}}$ 4.60 <u>Millions</u> has been spent on health related activities, benefiting a total number of $\stackrel{?}{\stackrel{?}{?}}$ persons. Important activities during the year are :

- (a) 'Sanjeevan': The company has commissioned a state of art mobile cancer detection van 'Sanjeevan' and donated it to 'Lions Cancer Hospital' Visakhapatnam, on 26th Decmber 2011. Lions Cancer Hospital will organize mobile camps in rural areas utilizing the Van, especially for detection of cancer at early stages. The state of art mobile unit is equipped with latest cancer detection facilities which enable early detection of cancer for permanent recovery. During 2011-'12, 6 camps were organized & 1247 people were tested out of which 25 suspected cases have been taken to Lions Cancer Hospital for further investigation & treatment.
- (b) Medical Camps were continued to be organized as part of CSR initiatives in all RH Colonies and Peripheral Villages in association with Satya Sai Seva Samithi, doctors from VSGH and Visteel Mahila Samiti(VMS). These camps have benefited about 2000 people.
- (c) Organized 28nos. Cataract Eye Screening Camps through M/s Sankar Foundation, Visakhapatnam, covering 4995 patients / 1192 Cataract Surgeries.
- (d) Mosquito Nets 3134 nos. were distributed in 20 Tribal Welfare Ashram Schools in 9 Tribal mandals of Visakhapatnam district, where people are being affected with malaria menace, under the aegis of Integrated Tribal Development Authority (ITDA).
- (e) Distributed Artificial limbs to 200 poor & needy tribal people in Srikakulam & West Godavari districts of Andhra Pradesh, through M/s Gurudeva Charitable Trust.





People Care

To mitigate the hardships faced by the people, an amount of ₹11.80 Millions has been spent towards the following welfare measures, benefiting 50,040 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. About 640 people in RH colonies, peripheral villages, and tribal areas of Vizag District, have been given training during the year, in Light Motor Vehicle driving, Tailoring, Beautician, Electrician.

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. The mining activities are served by employees residing in township area of Mines. CSR activities in the Mines cover community & society living in and around the mines area.

- (a) Vocational training was given to 725 women at Jaggayyapet & Garbham villages in courses like Dress making, Aarya works, hand embroidery, fabric painting etc., for their sustainable living.
- (b) School Furniture, Library books, computer & other sports material were provided to the schools in Mines area at Jaggayyapet & Garbham.
- (c) Power supply was given to Water supply scheme at Madaram village

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:

- (a) **At Bangalore**: Distribution of School kits to 30 students & adoption of 10 girl students of schools.
- (b) **At Jaipur:** Distribution of School kits to 30 students & adoption of 10 girl students of 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, Jarkhand, Chattisgarh, Rajasthan & Uttar Pradesh.

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

- (a) Construction of 10nos. additional class rooms
- (b) Providing 200solar street lights
- (c) Laying of road
- (d) Providing 200nos. Hand pumps

Sports activities :

The company has supported sports events like

- (a) AP Shuttle Badminton Championship for Sr.Men & Women
- (b) AP Body Building Championship.
- (c) Inter club Football Championship-'Vizag Steel Cup
- (d) Invitation Hockey tournament, Vizag

Development of Cultural talent :

The company has given encouragement by contributing to organize cultural programs like Burra katha, classical dance, patriot and devotional songs, in the local communities where the local talent of the people is also showcased in the programs. An amount of ₹0.30 Million has been spent towards peripheral development, benefiting 7,000 persons

Peripheral Development

An amount of $\stackrel{?}{\sim}$ 38.10 Million has been spent towards peripheral development, benefiting 7,000 persons.

Peripheral development being one of the objectives of CSR, a number of projects like Community Welfare Centres in RH Colonies and peripheral villages, Road over Bridge at Balacheruvu etc.,

Help during natural calamities

Immediate response to the occasion, extended relief and succor to the 16 fire accident victim families at Devada, a village nearby VSP area, through VMS, on 27.1.2012.



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

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.

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 33 Nos
- Shop floor Safety Committees 30 Nos
- 3. CWC Committees (including mines) 9 Nos
- 4. Other Committees 14 Nos

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, 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 religiously 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 is 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. All the employees during the service are extended equal pay for equal work.

Scope for discrimination is eliminated.





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. RINL 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.

Quality, Safety, Health, Environment Policy:

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 above, we will

- Supply quality goods and services to customers' delight.
- Document, implement, maintain & periodically review the management systems including the policy, objectives and targets.





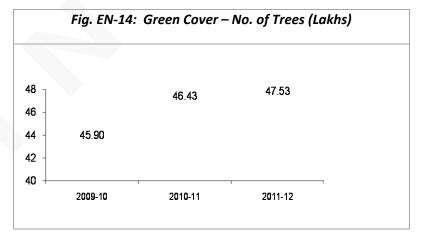
- Focus on conservation of natural resources and energy efficiently with concern for environment.
- Comply with all relevant legal, regulatory and other requirements applicable to products, activities and processes in respect of Quality, safety, Occupational health & Environment, and also ensure the same by contractors.
- Continually improve Quality, safety, Occupational health and Environment performance.
- Encourage development and involvement of employees.
- Maintain high-level of Quality, safety, Occupational health and Environment 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 public.

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 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, 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 x 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	-	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)	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 discharging. 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, SO₂,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! 2011-12

(Unit: Microgram/Ncum)

Location	Parameter	APPCB Norm	2009-10	2010-11	2011-12	Remarks
	RSPM (PM-10)	100	66.40	49.60	62.90	ALL PARAMET- ERS ARE
Main Gate	SO ₂	80	6.70	6.40	6.10	WITHIN
	NOX	80	5.20	10.80	7.10	THE NORMS

RSPM: Respirable Suspended Particulate Matter

 SO_2 : 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.

	2009-10	2010-11	2011-12
Total Solid Waste Generation(MT)	2.15	2.27	2.29
Specific Solid waste generation (t/tcs)	0.67	0.70	0.73
Total solid waste utilization (%)	92.86	96.03	88.75



c. Stack Emissions

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

Unit: milligram/Ncum

Location	Parameter	Norm	2009-10	2010-11	2011-12	Remarks
Coke oven Battery	SPM	50	39.10	43.50	42.30	
Blast furnace	SPM	115	86.50	79.30	82.00	
Steel Melt Shop	SPM	115	49.40	48.40	55.60	ALL PARAME
LMMM	SPM	115	39.80	39.40	43.80	-TERS
Wire Rod Mill	SPM	115	45.90	53.80	41.00	ARE WITHIN
MMSM	SPM	115	41.60	42.70	41.00	THE
Sinter Plant	SPM	115	82.00	79.20	80.60	NORMS
Thermal Power Plant- Boiler	SPM	115	89.20	94.80	93.50	

d. Effluent Quality

All effluent parameters are within norms.

Outfall - I (APPIKONDA) - 2011-'12

Unit: mg/L

PARAMETER	NORM	Average
рН	6.0 - 9.0	7.3
TSS	100	5.2
OIL & GREASE	10	3.6
IRON	1.00	0.20
COPPER	1.00	0.02



Outfall - II (GANGAVARAM) - 2011-'12

Unit: mg/L

PARAMETER	NORM	2011-`12
рН	6.0 - 9.0	7.50
TSS	100	77.50
OIL & GREASE	10	7.50
PHENOL	1.00	0.50
AMMONICAL N2	50.00	39.00

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	3.44	0.86	2.14
2.	Battery - 2	1.01	0.37	1.21
3.	Battery - 3	4.17	0.99	1.83

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 & BS EN 16001:2009. 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 23rd October 2007 and valid upto 14th 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 2011-12 are as given below:

SI.No	Area of Environmental Improvement	No of EMPs
1	Reduction of Ozone Depleting Substances	4
2	Air Pollution Control	7
3	Water conservation and quality	3
4	Hazardous Waste Management	8
5	Resource Conservation	18
6	Energy Conservation	5
7	Environmental Monitoring	2
8	Waste Management	19
9	Afforestation and garden development	1
10	Training on environment	6
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	2009-10	2010-11	2011-12
Specific SPM load (kg/tcs)	0.71	0.61	0.58
Specific SO2 load (kg/tcs)	0.75	0.68	0.63
Specific NOX load (kg/tcs)	0.64	0.52	0.51
Specific emission of CO2 (t/tcs)	2.548	2.539	2.61
Hazardous waste recycled (%)	100	100	100



Plans for the upcoming year:

In order to persist with 'Continual Improvement' the following EMPs are planned to be taken up in the upcoming year.

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	Noise reduction	2
12	Environment management	5

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 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)		
2004-05	1	Recirculation of sewage water by ultra filtration	47.50		
	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		
		Sub Total	3.70		
2006-07	1	3 nos. continuous ambient air monitoring stations in side VSP	10.70		
	2	Dry fly ash handling, storage and delivery system	27.60		
	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		
2008-09	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		
	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		



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

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	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	2447.00





	project) bed coolers to generate 20.6 MW Power	
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 10252.38

In addition, one more Top Pressure Recovery Turbine Station of 14 MW for BF-3 and 2x60 MW Turbine Station using the waste gas from BFs are coming up.

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 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.

- 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 31st October to 3rd November 2011 on the theme "Participative Vigilance". Wide publicity to the theme and events organized was afforded through display of hoardings, banners and posters at selected locations, intranet and telephone network, issue of circulars and bringing out brochure etc. In conformity to the theme several programmes 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 by Shri Venugopal K Nair, IPS, Addl. DGP, Kerala was organized on 4.11.2011 for the benefit of employees, on the topic "Vigilance and Corporate Governance its relevance today".
- 3. The extent of implementation of integrity pact during the year was to the tune of 70% 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.
- 4. During 2010-11, Vigilance Department had obtained 5 S Certification for its work place management. The department has successfully completed its compliance audit. ISO-9001:2008 certification of the department has also been renewed upto 11.10.2012.

Out come

Improved focus on the need for 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

Preventive and pro-active vigilance through surveillances and checks at increased frequency in addition to vigorous awareness campaigns.



