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Productivity E-Newsletter

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Swachhta Pakhwada

(01st to 15th November 2018)

The Swachhta Pakhwada was observed by NPC, HQ and its Regional Directorates during 01 to 15th November, 2018. All employees participated in the special cleanliness drive by undertakeningthe following:

ACTIVITIES

- Weeding out of unwanted reports/old files /old journals/books.
- Segregation of non working old equipments/instruments for disposal.
- Weeding out of unused training materials.
- Segregation of un-repairable electrical/electronic items.
- Segregation of unused/damaged furniture for disposal.
- Cleanness of NPC HQ building and Regional Directorates premises.
- Cleanness of NPC roof area and Roof top solar power plant.

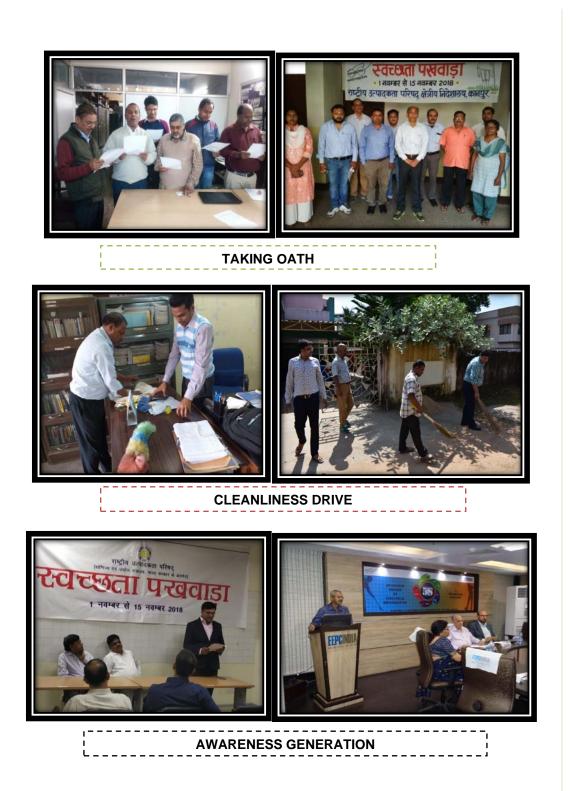
RESULT

- Additional space of approximately 500 sqft has been created that is being utilized for productive use.
- Better work environment.
- Improved safe and hygienic working conditions.
- Improved hygiene/ sanitation in toilets and drinking water area.

PHOTOGRAPHS







स्वच्छ भारत एक कदम स्वच्छता की ओर

IMS Implementation at OMC

NPC provided hand holding support in implementation & certification of Odisha Mining Corporation Limited (OMC) with ISO 9001:2015, ISO 14001: 2015 and OHSAS 18001:2007 standards under Integrated Management System (IMS). The certification also helped OMC in securing higher credits under Star Rating scheme of Indian bureau of Mines.



Energy Audit

1. Global Cement Manufacturer

NPC carried out mandatory energy audit of two integrated cement plants and the associated power plants located at Madhya Pradesh.

The efforts yielded in thermal savings of 8.27kcal/kg clinker (2 Lines)—equivalent to 1,185 tonnes of fuel per year and electrical savings of 84.3 million units per annum at Cement Plant-1. Overall, the energy audit identified annual savings worth Rs. 24 crore the plant.

Similarly, study of Cement Plant-2, yielded in saving of 15,983 tonnes of fuel per year and electrical savings of 51.8 million units per annum. Overall, the energy audit identified annual savings worth Rs. 17 crore at the plant.

2. RSPL, Bareilly, U.P

NPC completed Energy Audit of Ramaa Shyama Papers Pvt. Limited (RSPL) Bareilly, U.P. in the month of September 2018. The plant has two boilers to cater to the steam requirement in paper making process & contributes to the major energy consumption in the plant. During the field visit, boiler trials were performed & flue gas analysis and temperature profiles were taken. During the audit, the NPC Team observed that the Air Pre-Heater was choked & the boilers' efficiency was very poor. The same was conveyed to the Management & the maintenance of Boiler House was done on the next day. After that the efficiency of one of the boiler had increased by 10%. It has resulted in major fuel savings & has improved the productivity of the plant.



Gram Nyayalayas scheme evaluation

The Department of Justice, Ministry of Law and Justice, Government of India invited NPC to assess its Centrally Sponsored Scheme (CSS) to provide Financial Assistance for Establishing & Operationalising Gram Nyayalayas since 2009.



Based on the survey and analysis of structured questonnaire/feedback from stakeholder like implementing States, High Courts, District Judges, Nayayadhikaris, lawyers, litigants, witnesses etc., drawn from four selected states viz. Kerala, Uttar Pradesh, Madhya Pradesh and Rajasthan., NPC recommended the following:

- There is a need to add more offences and reliefs under the Central acts/ State acts in the first schedule Gram Nyayalayas act including suits of civil nature/ claims and disputes under central/ state acts to the second schedule of Gram Nyayalayas Act, 2009.
- There is an imminent need to widen the jurisdiction of Gram Nyayalayas to avoid pendency of cases and reduce the work load in the concerned Munciff Court and judicial first class Magistrate court and also by including all the Panchayats of the Block area where Gram Nyayalaya has been started.
- 3. Appointment of conciliators is required in each Gram Nyayalayas for the effective functioning of the Gram Nyayalayas. Lack of manpower in all the Gram Nyayalayas is also an area of concern to be addressed.
- 4. Adequate publicity about the reliefs that could be obtained from Gram Nyayalaya need to be brought to the notice of the public through legal awareness programmes.
- 5. All the states should be encouraged to set up Gram Nyayalayas so the justice delivery system in the country can be improved and the pendency of the cases can be tackled effectively.



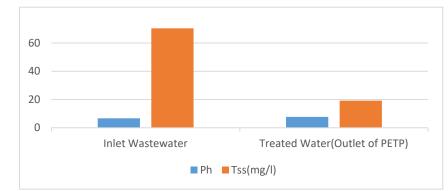
Monitoring & Adequacy Assessment of PETP

NPC conducted the adequacy of the Primary Effluent Treatment Plant (PETP) of the following two units at Jajmau, Kanpur:

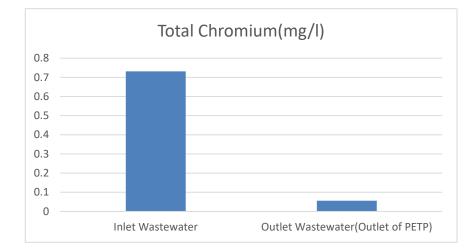
 M/s Globe Industry is engaged in processing of cut hides (waste material of tannery units) for manufacture of Leather Board. The industrial wastewater discharge limit as 5.6KL/day as per UPPCB. As per the study, NPC recommended Fine Screens for Screen Chamber for minimising Total Suspended Solids and Flow meter in recycling line of treated water line to quantify the recycled treated water.

Wastewater Parameters on the Day of Visit(20.11.2018)

	рН	TSS (mg/l)	Total Chrome(mg/l)
Inlet Wastewater	6.67	70.4	0.731
Treated Water	7.68	19.2	0.056



Graph showing Lab Result of pH and TSS





2. M/s Zeeshan Enterprises, Jajmau, Kanpur is engaged in processing of Raw Hides into finished Hides. The unit utilises chrome tanning process to process 30 hides per day with industrial wastewater discharge limit of 21KL per day by UPPCB. As per the study, the area of sludge dry bed required is 18.75 m² but their sludge dry bed(s) area is only 6.0 m². Due to space constraints and difficulties faced by the Unit during rains; NPC recommended the unit to install one filter press.



Manpower Optimization Study at TIL, Gujarat

NPC studied the qualitative and quantitative aspects of activities performed by M/s Transpek Industries Limited, Gujarat. For ascertaining the position criticality, NPC applied a 9-factor Position Criticality Assessment (PCA) model to individual job positions in the plants. This model evaluates criticality of the position with regard to risks, reaction temperature, and criticality of the process in chain, level of automation etc.This model evaluates criticality of each position in terms of percentage.

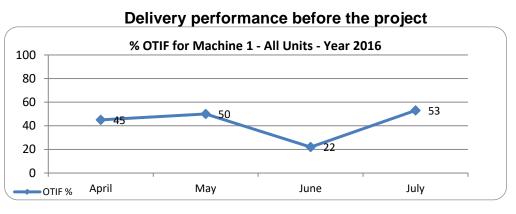
Based on detailed field study and data analysis, NPC proposed manpower for all production units in the plant viz. Sulpher-di-oxide, Sodium-hydro-sulphide, old hydro and packing. NPC recommended a total manpower of 142 vis-à-vis existing manpower of 183 which implies increase in manpower productivity by 22 %.

Further NPC provided suggestions for better processes and practices to further improve manpower productivity. These included better packing method, safe operations, low cost automation, work simplification, method improvement etc so as to improve manpower productivity.



Lean Manufacturing Competitiveness Scheme

Under Lean Manufacturing Competitiveness Scheme, 239 clusters have been formed till date. In last few months, 10 clusters have completed all the five milestones and submitted the closure report. Success story of one of the 9 units of Chennai Auto Parts Manufacturers Association-1 cluster is given below. The cluster units have shown improvement in On time in full (OTIF) parameter from 53% to 88%.



Approach

- 1. A productivity improvement team was formed within the company and were giventargets
- 2. Weekly presentations were instructed by the teams after implementing the improvements and accounting the costsavings
- 3. Machine, machining parameters and tools, inserts utilised were elaborately studied for the improvementprocess
- 4. The following ideas were brainstormed and implemented
 - Critical Conventional Process was to be converted to Vertical Machining Centre (VMC)Operations
 - As, production on VMC ishigh
 - Try to combine two processes inVMC
 - Uniform feed Rates can bemaintained.
 - Insert life will be maintained with Uniform feed rate even with thicknessvariation
 - Process capability to be improved in VMC process
 - Possibility of combining outside milling & forming, cycle time to bereduced

Implementations

New VMCFixture



Unit Name: Chennai Forge Products Pvt.Ltd.

Business Activity: Machining

Problem:

The company was facing frequent delivery failures in theCOP Lever Big component. The process was less optimized and overall throughput was reduced.

Forming process implemented inVMC

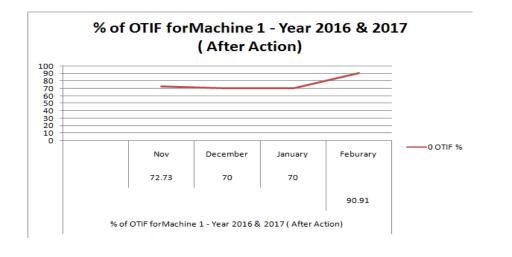


Conventional forming process replaced with VMC Milling process to achieve consistency in pad height variation

Outside milling process implemented inVMC



Conventional outside milling process to replaced with VMC Facing process to achieve consistency on pad thickness



SI.No	Parameters	Before	After
1	OTIF	53 %	88 %
2	Production / Day	100 nos	200 nos

Workshop on "Efficient Boiler Operation and Maintenance"

NPC conducted the following workshopsthat were sponsored by the Central Boiler Board, Ministry of Commerce and Industry, Govt. of India, New Delhi.

- 1. One-day workshop on 20th November 2018 at Agra for 22 participants.
- 2. Two-day workshop from December 20-21, 2018at Ahmedabadfor 180 participants of 80 industrial units.
- 3. One-day workshop on 14th December 2018 at Bangalore with 58 participants.
- 4. One-day workshop on 19th December 2018 at Hyderabad for 45 participants.

In the workshops, the safe, efficient operation and better maintenance of industrial boilers were discussed with the boiler engineers and technology providers.



Research Meeting at CoE on Industry 4.0

NPC in association with Asian Productivity Organization (APO) conducted a research meeting from December12-14, 2018 at Centre of Excellence on Industry 4.0 of NPC, New Delhi. The meeting was conducted under the guidance of Chief Expert, Dr. Ernst Hartmann, Head of Education, Science, and Humanities Department and Director of the Institute of Innovation & Technology (IIIT) to finalize the methodology to be adopted in the project and structure of the report.

PAT Awareness workshop for Thai Delegates

NPC conducted an awareness workshop on Perform, Achieve & Trade (PAT) scheme of Ministry of Power, Government of India for 11 member delegations from Thailand and Officials from Energy Efficiency Services Limited. In the meeting, the role of NPC was presented with key issues and challenges faced during the implementation of various activities of the scheme. The reports on energy saving, requirements of Energy Managers in Designated Consumers (DCs) in accordance with Energy Conservation Act, role & responsibility of Energy Manager, availability of quality data from DCs, data collection formats, capacity building needs of DCs, time period and prices of baseline and M&V audit, M&V report formats, provisions regarding penalty clause for failure to meet targets, Escert Trading etc were elaboratelv discussed with them.



The highlights of the discussion was on the PAT scheme impact on energy efficiency drive in India and it role in enabling Designated Consumers to implement energy several programs conservation reducing and thereby, energy bills.



SPV Awareness workshop for French Delegates

On the request Indians Solar Alliances, NPC, New Delhi organized a showcase of its 30 kWp grid connected Solar PV Power Plant (SPV) on its rooftop on 30th October, 2018with 4 member French delegation.

NPC solar power plant is the first consumer in New Delhi with "HT Net Metering", operating in parallel with the grid and the installation of LED lamps in the entire building along with the SPV initiative has ensured significant reduction in the carbon footprint by NPC. The solar power plant caters to the entire lighting requirements in the building during working days and exports entire power generated to the grid on non-working days.







Personal and Workplace Effectiveness for IFCI, New Delhi

NPC conducted two days in-company training programme from September 14-15, 2018 at New Delhi for 18 employees of IFCI. The participants were trained on Planning and prioritizing of Official Activities, Positive Attitude, and Effective Office procedures, E-Governance, Effective Business Communication, Public Relation, Team Work & Co-operation, Time and Stress Management, Integrated Process Management using IT Tools etc.Theprogramme feedback was 3.8 on a scale of 4.



Tools and Techniques for Quality, Environment and Safety Professionals

NPC conducted two-days training programme from September 19-20, 2018 at its Ambedkar Institute of Productivity, Chennai for 16 participants from DRDO, Ship Building Centre, ICAR-CIPHET, ISRO, Physical Research Laboratory, Ultratech Cement Limited, Nubilola India Limited, and Bhusawal Thermal Power. The participants were trained on old and new 7 Quality tool, 5S ,KAIZEN ,Seven Waste and PDCA cycle. The programme feedback was 3.6 on a scale of 4.





Energy Conservation and Energy Efficiency practices at Odisha

On behalf of Engineering-in-Chief (EIC) & State Designated Agency (SDA), Govt. of Odisha, NPC conducted one day program on "Energy Conservation and Energy Efficiency practices" for its officials in batches of 50 in two phases i.e. on 29.10.2018 and 14.11.2018 at Bhubaneswar. The programme feedback was 4.4 on a scale of 5.



Customised Soft Skills Training for OIL, Duliajan

NPC conducted a customised training program on soft skills training of 25 employees in Grade IX and above from Oil India Limited, Duliajan. The program was organized from 28th October 2018 to 3rd November 2018 at Jaipur, Rajasthan.



Industry 4.0 Training at Goa

NPC conducted "5-day Training programme on Industry 4.0" from November 26 to 30, 2018 at Goa. Dr. Lorenz Granrath, and Mr. Patrick Kabasci were international expert facultries from Asian Productivity Organization, Japan. A factory visit was arranged to IFB Industries Limited, Verna, Goa.



Management Development Programme for RCF, Mumbai

NPC conducted the Management Development Programme for Senior/Middle level 25 officials of Rashtriya Chemicals and Fertilizers Limited (RCF), Mumbaifrom November 26 - December 1, 2018 at Mumbai.

Developing Work Culture through Attitudinal Change

NPC conducted a residential training program on "Developing Work Culture through Attitudinal Change" from 22nd to 26th October, 2018 at Nainital, Uttrakhand for 6 participants. The participants were trained on PQH Model and more than 83% rated the program as very good.

Modern Office Management

NPC conducted a residential training program on "Modern Office Management"for Executive Secretaries, PA, PS and Office Staff, from 26th to 30th November, 2018 at Goa.

Effective Office Administration & Financial Management

NPC conducted the residential training programon Effective Office Administration & Financial Management from December 10-14, 2018 at Kovalam, Kerala. All the participants rated the program either good or very good.



Energy Conservation Programme for HPCL Visakhapatnam Refinery

NPC conducted a training programme on energy conservation for 60 employees of HPCL Visakhapatnam refinery from October 09-10, 2018and October 11-12, 2018.

"Job Training Empowers people to realize their dreams and improve their lives"

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Upcoming Residential Training Programs

MARCH

- Productivity & Competitiveness Measurement for Organizational Excellence from 18-22 March, 2019 at Darjeeling, West Bengal
- Team Building & Leadership Skills from 04-08 March, 2019 at Ooty
- Negotiation & Conflict Resolution Strategies from 11 -15 March, 2019 at Goa
- Enhancing Organizational Productivity through ICT from 11-15 March, 2019 at Kanyakumari
- Systematic Problem Solving, Conflict & Change Management from 11-15 March, 2019 at Port Blair
- Zero Defect Zero Effect from 04 08 March 2019 at Hyderabad
- Managerial Leadership & Change Management from March 12-16, 2019 at Jaisalmer
- Modern Office Management & RTI from March 25-29 2019 at Jaipur
- Practical ways of Designing Energy Efficiency Buildings in India from 12-15 March 2019
 at Diu
- Waste Minimisation and Solid Waste Management from 06 March 2019 at Kanpur (U.P.)
- Practical Ways of Designing Energy Efficient Buildings in India from 12-15 March 2019 at Diu

Latest News

- Dr. Amita Prasad, IAS, DG NPC stressed on setting strategic priority areas & engaging SMEs for Future of Production during Asian Productivity Organization Research Meeting on Capacity Development for Industry 4.0 held during 12–14 Dec.18 at NPC,HQ
- During the APO, Bilateral Cooperation Between NPOs (BCBN) on Industry 4.0 held at NPC, HQ, Dr. Amita Prasad, IAS, DG, NPC and Dr. Kyoo Sung Noh, Chairman & CEO, Korea Productivity Center (KPC) deliberated upon joint collaboration areas.
- As part of observance of Swachhta Pakhwada from 1st Nov to 15th Nov, 2018, NMIU-HQ, NPC team visited UD Food Product Pvt. Ltd., Ghaziabad of GZB Food Cluster under LMCS Upscaled: Revised 2013 #LMCS_MSME. It was found that cleaning activities are being carried out regularly.

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