सत्यमेव जयते

OISD

ओ. आई. एस. डी. न्यूज़लैटर

तेल उद्योग सुरक्षा निदेशालय का मासिक समाचार पत्र
पेट्रोलियम और प्राकृतिक गैस मंत्रालय, भारत सरकार, नई दिल्ली

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ELECTRICAL SAFETY - PREVENTIVE-MAINTENANCE PROGRAM

Input from : Jalin K Thampi, PCCK Ltd.

FACTS :

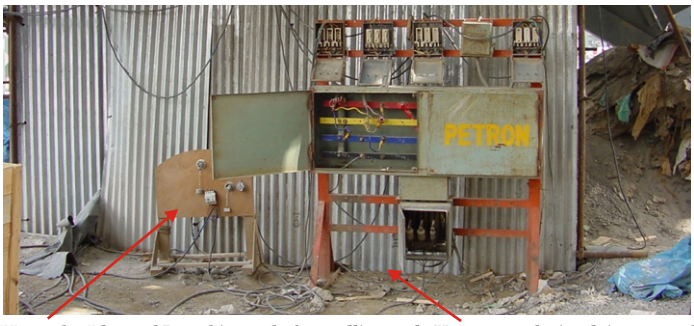
"Prevention is better than cure" and " A stitch in time saves nine" some well-known quotes are often overlooked than done. It goes without saying that safety in any industry has to be on the top of the list of priorities, especially in the oil industry where the consequence of negligence can be catastrophic.

In India :

- Almost 12 people die due to electrocution every day.
- 42 % of total fires occur due to electrical sources.
- 8% deaths that occur in factories are due to electricity related fault.

In United States

- 25% of all fires occur due to electricity.
- 411 deaths from job related electrical accidents per year.
- Electrocution - the fifth leading cause of death (1982 - 1990) NIOSH



Hazards : Plywood Board instead of metallic panel; Unarmoured wires lying around

SOME SIMPLE STEPS NEED TO FOLLOW:

There are eight simple steps that should be at the heart of an **electrical preventive maintenance program**. These key steps are plan, inspect, clean, tighten, lubricate, test, record, and evaluate. The following paragraphs briefly describe each step and illustrate the part that play a crucial role in carrying out effective preventive maintenance.

STEP 1 - PLAN

Before commencing the job, it is worth taking time to think about

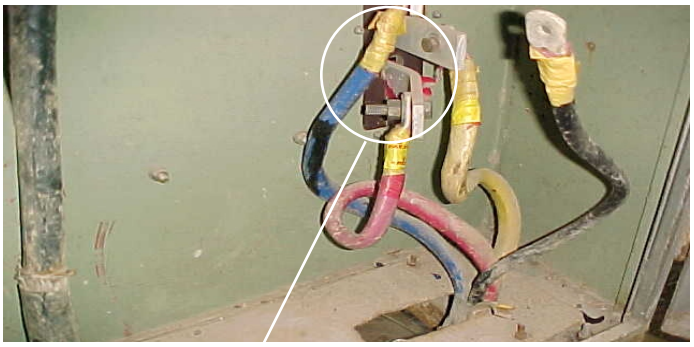
✓ what job is to be done ?

✓ How it is to be done ?

A few minutes of thought before the job is started results in a safer and more efficient job. 'Well begun is half done', as always, holds true. This step is especially important when one is performing emergency repair work. In this initial stage one need not to go into too much detail, rather should concentrate on the appropriate qualified experienced personnel, the equipment required and the amount of time to complete the work. Arrange proper instruction manuals and design drawings before start of the work. Trouble shooting without accurate and correct schematics and wiring diagrams must be avoided. Steps should be detailed as much as required by the complexity of the job and the experience of personnel.

STEP 2 - INSPECT

Periodic inspections requirements to be finalized based on standard's requirement or OEM's requirement or on a routine basis. There are two types of inspection unaided and aided i.e .



Hazard : No Cable gland used; Armour is cut before termination

Unaided Inspection

Human eyes are the most important inspection tools. It can detect dirt, note current readings, determine levels, discover discolored, overheated insulation, determine the presence of insects and rodents, and find a whole host of other problems. With more experience , the eye can provide more information; however, even the most in-experienced electrician can detect spider webs in a circuit breaker operating mechanism.

One should always observe and look for any abnormalities that can give an idea of any thing that can cause problems.

Similarly human ears can also be useful inspection tools. Overloaded transformers are normally noisier than lightly loaded ones, corona has a distinctive hissing sound, and motors with unbalanced voltages or bad bearings vibrate. Any change in sound must be immediately investigated.

In this *issue*

● ELECTRICAL SAFETY - PREVENTIVE-MAINTENANCE PROGRAM ● हिन्दी सप्ताह समारोह ● WORLD ENVIRONMENT DAY 2010 ● ENVIRONMENT ● OFFSHORE AUDIT IN ASSOCIATION WITH MMS , USA ● DID YOU KNOW THE SAFETY PRECAUTIONS ABOUT YOUR GAS TURBINES? ● AUDITS ● हार्दिक स्वागत ● दीपावली की शुभकामना

Nothing in electrical systems is more distinctive than the odour of overheated or burning insulation. Human nose can detect such problems long before other senses. Again, the most useful indicator of problems is a change in odor.

Touch may also be employed to inspect electrical equipment. Feeling for excessive vibration or heating is a time-tested technique. Of course, one should be extremely cautious before touching any piece of equipment. If the equipment is not de-energized, contact should be made only when wearing appropriate insulating PPE such as rubber gloves.

HAZARD : Improper cable termination

Aided Inspection i.e with Tools or Instruments

Appropriate tools and devices should be used with discretion whether this service is done "in house" or contracted to an outside service. Many special tools and instruments are also available to help in the performance of maintenance tasks. Such tools should be used as required by qualified personnel trained in their proper and safe use.

STEP 3 - CLEAN

Dirt and electricity don't mix. After completing the inspection of electrical equipment, the next step is to clean all components.

The first step is general cleanliness. Dust, dirt, and foreign material must be cleaned from motors, switchgear, transformers, and other such electrical equipment. For such cleaning it is recommended use of high suction vacuum cleaners, electrically safe blowers, lint free wiping cloth, and general-purpose solvents like CTC and WD40. A general-purpose solvent is effective and biodegradable.

Each insulator or conductor has its own way to be cleaned. Porcelain, for example, can be cleaned with soap, water and appropriate cleaning brushes or pads. Plastic insulation, on the other hand, cannot take any abrasion. It should be always refered to the manufacturer's recommendations for specific techniques. Using steel wool or other conductive abrasives in any area where contact with energized conductors is possible must always be avoided.

Conductor connecting surfaces need special attention. Contact surfaces of copper conductors should be cleaned to a bright finish where they are connected together. Aluminum must **not** be cleaned to a bright finish so that the protective oxide coating is not damaged. Special material as specified by the manufacturer should be used to penetrate the aluminum oxide that forms almost immediately after cleaning. The manufacturer's instruction books sometimes specify the cleaning material to be used for their equipment. It is advisable to consult proper literature before attempting to clean electrical components.

Armour sprouting out of sheath at two places

STEP 4 - TIGHTEN

All nuts, bolts, screws, connections must be checked for tightness. Many electrical accidents have been caused due to loose connections and careless tightening.

Tightening fasteners on electrical equipment takes special care and should be done to the torque recommended by the equipment manufacturer.

Electrical connections are especially very critical.

STEP 5 - LUBRICATE

Lubrication of electrical system components is an often overlooked or improperly performed. Too much lubricant can be worse than no lubricant at all. This is especially true for devices such as protective relays and circuit breakers, which may go for years without operating.

One should be especially careful of conductive lubricants to make sure that this does not cause a short circuit. It is always recommended to use lubricants by the equipment manufacturer or one that has the same characteristics.

Lubrication falls into two important areas:

1. Non-conductors : Non-conductive joints or moving members should be lubricated using an appropriate material. In some cases grease, oil, or some synthetic lubricant may be recommended. Motor bearings, mechanism pivots, and other such equipment fall into this category. It should be remembered that some pieces of equipment, such as protective relays, do not require any lubricant at all.
2. Conductors : Most manufacturers make and/or recommend a lubricant to be used on conductors, stabs, and other such equipment. The ubiquitous "black grease" has been and continues to be a good lubricant when used properly. The correct approach to lubrication of electrical conductors is to apply a small amount and then wipe the contact surface clean with a clean, lint free cloth so as to leave a fine film of lubricant in place. Surface should not be scrubbed. One must always remember to **use proper lubricants in the proper amounts.**

HAZARD : Poor Earth Strip Fastening to Earth Pit Pipe

STEP 6 - TEST

Electrical equipment should be tested periodically. Insulation resistance should be measured, breaker trip times should be checked, relays should be calibrated, and a variety of other procedures should be performed. The only exercise that many protective devices get is during the test interval.

It is always advisable to make it mandatory/compulsory to perform annually, the testing of all relays, breakers and equipments by an authorized third party agency such as the Electrical Meter Testing Laboratory who is the standard agency under the department of Electrical Inspectorate, in this case. The recommendations made by many International Testing Associations can be reviewed and applied as appropriate.

STEP 7 - RECORD

Doing work without keeping records is almost useless. Recording test and other data can help set maintenance intervals, isolate troublesome equipment (or manufacturers), and provide a baseline that helps to know when insulation or other components are starting to fail. Besides test results records should always include the date, equipment identification, and all pertinent data on any problems discovered. System conditions like load current, voltage, temperature and other such information can help determine how close components are being overloaded.

Test and record forms can be developed and tailored to company's specific needs. Specific forms are also available in a variety of manuals and publications. Examples of such forms may be found in the NFPA Electrical Equipment Maintenance manual. Reviewing that document may be helpful in generating new ideas and examples.

When God Solves your problem, you have faith in his abilities. When he does not, he has faith in your capabilities.

HAZARD : Taped Joint held by Jute

STEP 8 - EVALUATE

Evaluation of the test results is, possibly, the single most important step in the entire process. Significant progress has been made in the statistical analysis of small population data such as that gathered during maintenance intervals.

Whether the analysis is done using sophisticated mathematical techniques or simple field rules of thumb, no program is complete without it. Analysis of records will allow the company to determine what, if any, additional maintenance needs to be performed and to pinpoint problems, which might otherwise go un-observed.

FREQUENCY OF MAINTENANCE

How often should a power system be maintained? Unfortunately there is no simple answer to this question. The following should help in determining frequency of maintenance in a power system. The steps listed in this procedure are valid for all of the testing and maintenance information.

DETERMINING TESTING INTERVALS

1. Start initially with a once per year test program. Continue this procedure for the first two (2) times.
2. Review the test records from maintenance intervals.
3. If frequent and/or severe problems are evident, decrease the maintenance intervals.
4. If no major or frequent problems are evident, increase the maintenance intervals.
5. Repeat steps 2 through 5 throughout the life of maintenance program.

The average maintenance interval in industrial systems is about two years. This means that every two years, most industrial plants completely maintain their electrical system. Electrical utilities have similar intervals although their average is probably closer to 1½ years. Recent advances in statistical analysis have enabled maintenance programs based on technology rather than "estimate." Such *Condition Based Maintenance* programs will be the way maintenance should be done in coming years.

हिन्दी सप्ताह समारोह

तेल उद्योग सुरक्षा निदेशालय में 14 सितंबर से 21 सितंबर, 2010 तक हिन्दी सप्ताह आयोजित किया गया। इस हिन्दी सप्ताह का शुभारम्भ 14 सितंबर 2010 को हुआ जिसमें सर्वप्रथम श्री एस. एल. चक्रवर्ती, निदेशक (प्रक्रिया एंव इंजीनियरिंग) ने "हिन्दी दिवस" के अवसर पर अपने संदेश में कहा कि "14 सितंबर अर्थात् हिन्दी दिवस एक राष्ट्रीय महत्व का दिन है। भारत के संविधान निर्माताओं ने 14 सितंबर 1949 को हिन्दी को राजभाषा के रूप में स्वीकार किया था। तभी से यह दिन पूरे भारतवर्ष में हिन्दी दिवस के रूप में मनाया जाता है।"

राजभाषा हिन्दी को बढ़ावा देने के लिए कार्यालयों में एक अनुकूल वातावरण बनाना अनिवार्य है। इसके लिए सबसे महत्वपूर्ण कदम है कि सभी अधिकारी स्वयं हिन्दी में काम करने में रूचि लें और इसी तरह सभी कर्मचारियों को भी हिन्दी में काम करने के लिए प्रोत्साहित करें।

"हिन्दी भारत में अधिकांश जनता द्वारा बोली और समझी जाती है। हिन्दी सभी भाषा-भाषियों को जोड़ने के लिए एक संपर्क भाषा है। हमें आपसी सौहार्द और भाईचारे से हिन्दी का प्रयोग बढ़ाना है और इससे हमारी राष्ट्रीय एकता मजबूत होगी।" "हिन्दी में कार्य करना सरल है तथा सभी प्रकार के प्रशासकीय कार्यों में हिन्दी का प्रयोग लगातार आसान होता जा रहा है। हमें सरकारी कामकाज में हिन्दी का प्रयोग बढ़ाना जारी रखना चाहिए। साथ ही हमें कठिन शब्दों का प्रयोग नहीं करके, आम बोलचाल के शब्दों का ही प्रयोग करना चाहिए। हमें हिन्दी पत्राचार को बढ़ाना है और इस प्रयास से ही हम भारत सरकार द्वारा निर्धारित वार्षिक कार्यक्रम के लक्ष्यों को प्राप्त करने में सफल हो पाएंगे।

तेल उद्योग सुरक्षा निदेशालय के कर्मचारी हिन्दी दिवस समारोह में भाग लेते हुए।

"मुझे आशा ही नहीं परन्तु विश्वास है कि हिन्दी सप्ताह के दौरान आयोजित होने वाली हिन्दी प्रतियोगिताओ में आप अधिक से अधिक संख्या में भाग लेंगे।

हिन्दी दिवस के इस पावन अवसर पर, आइए, हम सब मिल कर यह संकल्प लें कि हम अपने दैनिक जीवन में राजभाषा हिन्दी का अधिक से अधिक प्रयोग करेंगे।

इस अवसर पर सुश्री विनय कुमारी ने स्वरचित कविता उपस्थित सदस्यों को पढ़कर सुनाई। हिन्दी सप्ताह के दौरान निम्नलिखित हिन्दी प्रतियोगिताएं आयोजित की गई जिनमें सभी कर्मचारियों ने अत्यधिक उत्साह के साथ भाग लिया :

(1) अनुवाद प्रतियोगिता

(2) हिन्दी निबंध प्रतियोगिता

सुश्री विनय कुमारी हिन्दी दिवस के अवसर पर कविता पाठ करते हुए।

आत्मविश्वास सरीखा दूसरा कोई मित्र नहीं। आत्मविश्वास ही भावी उन्नति की सीढ़ी है। - स्वामी विवेकानन्द

WORLD ENVIRONMENT DAY 2010

World Environment Day (WED) was established by the UN General Assembly in 1972 to mark the opening of the Stockholm Conference on the Human Environment.

World Environment Day is commemorated each year on 5th June, is one of the principal vehicles through which the united nations stimulates worldwide awareness of the environment & enhances political attention & action.

This year's theme for WED 2010 is **" Many Species. One Planet. One Future".** It echoes the urgent call to conserve the diversity of life on our planet. A world without biodiversity is a very bleak prospect. Millions of people and millions of species all share the same planet, and only together can everybody enjoy a safer and more prosperous future.

World Environment day was celebrated at OISD and OISD members took pledge for protecting environment.

We are one of a an estimated 5 million to 100 million species. Scientist have only managed to identify about 2 million species so far. A total of 17,291 species are known to be threatened with extinction – from little-known plants and insects to charismatic birds and mammals. This is just the tip of the iceberg; many species disappear before they are even discovered. The reason? Human activities. With our present approach to development, we have caused the clearing of much of the original forest, drained half of the world's wetlands, depleted three quarters of all fish stocks, and emitted enough heat-trapping gases to keep our planet warming for centuries to come. We have put our foot on the accelerator, making species extinctions occur at up to 1000 times the natural rate.

OISD Employees taking pledge on "WORLD ENVIRONMENT DAY"

As a result, we are increasingly risking the loss of the very foundation of our own survival. The variety of life on our planet – known as 'biodiversity' – gives us our food, clothes, fuel, medicine and much, much more. One may not think that a beetle in the backyard or grass growing by the roadside has a fundamental connection to human life - but the fact is it does. When even one species is taken out of the intricate web of life, the results can be catastrophic.

For this reason, the United Nations has declared 2010 the International Year of Biodiversity. It is an opportunity to stress the importance of biodiversity for human well-being, reflect on our achievements to safeguard it and encourage a redoubling of our efforts to reduce the rate of biodiversity loss.

Sh. J. B. Verma, ED-OISD releasing the 'Environment Booklet

It is our sincere request to all readers to try to incorporate all of these into your life as a matter of routine. Get others to do so the same. And get involved!

AT HOME…

- Save water in simple ways like not letting the tap run while shaving, washing, or brushing teeth.
- Install timer on water heater to save power. Insulating water heater will help save valuable energy. Installing showerheads with a low flow in bathrooms for bathing purposes to help save water.
- Using an electric razor or hand razor with replaceable blades instead of disposable razors to reduce waste.
- *Plant a tree.*
- Use towels for drying face and hands instead of tissues that are used and thrown away.
- Juice or yoghurt lovers can buy juice in concentrates and yoghurt in reusable containers instead of single serving packages.
- When packing lunch, opt for reusable containers for food storage instead of wrapping the food with aluminum foil or plastic wrap.
- Switch off all the lights and appliances whenever going out of the house or not required to be used and unplug chargers as they continue to consume even if they are not charging; saving energy helps reduce air pollution.
- Remove lamps or TV sets near air-conditioning thermostat as it senses heat from these appliances, which can cause the air-conditioner to run longer than necessary.

अपनी प्रशंसा आप न करें। यह कार्य आपके सत्कर्म स्वयं करा लेंगे।

- When cooking dinner, match the size of the pan to the size of the heating element to lower energy wastage.

TO WORK.....

- Carry cloth bag so that one can *just say no to plastic* during shopping.
- Easiest way to reduce your carbon footprint is by avoiding driving altogether. Use bicycle, walking, carpooling, public transport.
- Use most fuel- efficient car model and keep your tyres inflated to the correct pressure.
- If stuck in traffic, consider turning car engine off if you will be idling for more than 2 minutes.
- High speed driving lowers car mileage, accelerate gradually

AT WORK.....

- 80% of plastic bottles are recyclable but only 20% are actually recycled. Cup and reusable bottle be put in recycle bin.
- Write on the back of an used document for lists and messages instead of new writing pad.
- Start recycling system in office. It is estimated that 75% of what is thrown in the trash could actually be recycled, though currently only 25% is.
- While taking print out make sure to click default printer option to use both sides of the paper. This is an easy tree-saver!
- Most computer accessories like ink cartridges and CDs and DVDs are made of materials that could be reused. Computer cords and speakers are fairly standardized, meaning they can be used for a variety of computer models and makes.
- Office's carbon footprint can be lowered by switching to energy saving features in computers, monitors, printers, copiers, speakers and other business equipment and turning them off at the end of the day.
- Turn off all unnecessary lights, especially in unused offices and conference rooms to save energy.
- Houseplants are good for the environment because they remove quantities of pollutants present in the air.
- Send and store documents electronically to save paper and also trees.

ENVIRONMENT

Ministry of Environment & Forest has revised the National Ambient Air Quality standards vide gazette notification dated 16th Nov.'2009. The salient features of standard are :

1. As against three categories of areas ie Industrial, Residential rural & other, Sensitive Area, only two categories have been made by merging the Industrial & Residential area as one category and Sensitive area as another category.
2. New pollutants like Ozone, Ammonia, Benzene, Benzo(O) Pyrene, Arsenic, Nickel have been included.
3. Particulate Matter has been bifurcated with PM 10 & PM 2.5 category and total Particulate matter has been removed.
4. The annual average concentration limits for the SO2, NO2, Lead have been reduced for residential & Industrial area.

Visit MoEF web site for gazette notification.

OFFSHORE AUDIT IN ASSOCIATION WITH MMS , USA

OISD in association with the Minerals Management Service (MMS), USA conducted joint safety audit of SH process complex of ONGC from 10th November to 12th November, 2009 The audit was undertaken as part of the MOU between OISD and MMS under Indo-US Energy dialogue of the Govt. of India. The audit team members were:

Mr. Anup Walia, Director (E&P), OISD, Mr. Ben Coco, Drilling Engineer, MMS, USA, Mr. Kelly Buzigardn, Lead Inspector, MMS, USA

Mr. Kevin T Kunkel, International Programme Specialist, MMS, USA, and Mr. Arshad Hussain, Joint Director (E&P), OISD

The primary objective of the audit was to assess the status of compliance of Petroleum and Natural Gas (Safety in Offshore Opination) Rules 2008 related to process safety. Methodology adopted comprised of physical tour of the installation, review of documents, testing of some of the safety devices and interaction with personnel at the platform.

SH complex is located in Mumbai High South field at approximately 165 Kilometers West- Northwest of Mumbai in 70-80 meters water depth. SH complex consists of 5 bridge connected platforms- SHP; SHG ; SHD ; SHQ and SHW. 23 unmanned well head platforms are connected to this complex through subsea pipelines.

The design handling capacity of the process complex is 1,50,000 barrels of oil per day, 2,00,000 barrels of produced water per day, sweet gas compression facility of 22.3 Million Metric Standard Cubic Meters (MMSCMD), sour gas compression facility of 2.5 MMSCMD and water injection capacity of 3,20,000 barrels of water per day (BWPD). The power generation capacity of the complex is 32.85 Mega Watts. Oil is pumped to onshore terminal through 18" pipeline and gas is sent through 20" & 22" pipelines.

अपना मूल्य समझो और विश्वास करो कि तुम संसार के सबसे महत्वपूर्ण व्यक्ति हो।

DID YOU KNOW THE SAFETY PRECAUTIONS ABOUT YOUR GAS TURBINES?

- Gas turbines shall not be run without the fire suppression system in place. Also ensure that a suitable system is provided to detect and suppress fire(s) inside the gas turbine enclosures.
- Fire suppressant in use, should either be connected to reserve source or else provision for spare bank of filled cylinders shall be made.
- Suitable operating instructions / system shall be in place to avoid actuation of **"CO_2 fire suppressant system"** while the operating & maintenance crew performs maintenance & inspection checks inside the turbine enclosure.
- Gas turbines enclosures shall have provision of sufficient numbers of hydrocarbon detectors with a provision for audio visual alarm in field as well as control room for detection of the leaks inside the enclosure.

AUDITS

EXTERNAL SAFETY AUDIT

EXPLORATION & PRODUCTION

OFF SHORE

1. 10th -12th Nov'2009 : ONGC's SH Complex.
2. 13th -14th Nov'2009 : RIL's Rig Drill Ship 'Deep Water Expedition' of Transocean.
3. 15th to 18th March'2010 : ONGC's Sagar Gaurav, Great Drill Chitra Drilling Rigs.
4. 1st – 2nd April'2010 : ONGC's Infill complex
5. 4th -7th May'2010 : BGEPIL's Tapti Complex.
6. 23th to 26th May'2010 : ONGC's Rig sagar Jyoti and CE Thornton Drilling Rig.
7. 1st - 4th June'2010 : RIL's Dhirubahi-I, CRP.

ON SHORE

1. 30th Nov to 4th Dec'2009 : ONGC Agartala Asset - GCS- Konaban, Rokhia, Baramura, Agartala Dome.
2. 8th to 12th March'2010 : ONGC CBM Project : Drilling Rig – Shiv Vani-7,9,10 and M-750-I, Work Overing CW#-50-III and Production EPS#-1.
3. 5th to 9th April'2010 : ONGC Ahmedabad Asset – Production Installation GGS- 05, 08, GCS- Kall ol, GCP-Kallol, Work Over Rig- CW-100-05, GTC-100-01, R-50-02 & Drilling Rig CW-08.
4. 19th to 22nd April'2010 : OIL Dhulijan – Production Installation – NHK-OCS-06, WI Plant#21, QPS, Kurigari-06, GCS-04,C, Drilling Rig CH6, ZJ-70-D2, Work Over Rig –CW-B, BHEL-1R-B.
5. 19th to 22th April'2010 : ONGC- Mehsana : Production Installation GGS-01, Beachrjee GGS-02, Balol North Kadi- ETP. Drilling Rig – M-750-02, E-760-II, Work over A-50-03, John-50-05.
6. 23rd Apri'2010 : GEOENPRO - Work Over Rig 'Udipta' production installation, CTF, OCS, ETP & Power Plant
7. 12th to 16th July'2010 : ONGC's, A & AA Bassein , Jorhat- Production Installation GGS, GCP-Barhola, GGS-01, GGS-02, Koraghat., Work over rig- CW-100-11, Drilling Rig- E-760-09.
8. 2nd to 6th August '2010 : ONGC Assam Asset, Nazira – GGS-03, CTF Geleki, GGS-1 RDS,GGS-7Lakwa, Work Over Rig- SEALL-150-1, DRPL-3, Drilling Rig- E-1400-VI, Shiv Vani-30.
9. 22nd to 30th Sept'2010 : ONGC – Cambay- Production installation-GGS_Padra, EPS-Chaklasi, GGS-Kathana, EPS-Akhuljoni, Drilling Rig-Quippo, CW-IX, work over Rig TW-50 & A-50 XIII.

PROCESS

- **ONGC-Tatipaka Refinery** during 7-9th Dec'09: This Refinery was commissioned in 2001 with a capacity of processing 2000 bpd (max) crude and condensate mixture produced from Rajamundry asset of ONGC. The products Naphtha, SKO and LSHS are dispatched through oil marketing companies and Diesel is used in ONGC rigs. Refinery has facilities for power generation, Efficient Treatment, QC labs and fire station.
- **GAIL-Vijaipur Gas Processing Plant** during 16-18th Dec'09: GAIL - Vijaipur is the first LPG Plant of GAIL India Ltd. Commissioned in 1991 to process the Natural Gas received from Hazira gas processing complex through HVJ Pipeline The design gas processing capacity of the plant (both trains combined) is 15 million standard cubic meters of gas per day (MMSCMD). The products other than LPG that are recovered in the process are Propane, Pentane and Special Boiling Point Solvent (SBPS).
- **BPCL-Kochi Refinery** during 11-15th Jan'10: The Refinery was commissioned in1966 as a joint sector refinery with a crude processing capacity of 2.5 MMTPA. The refining capacity was increased to its present capacity of 9.5 MMTPA in four stages. Kochi Refinery was merged in BPCL in August, 2006. The BPCL-Kochi Refinery is processing both low sulhur and high sulphur crudes. The product slate of refinery has increased from 6 products in 1966 to 23 products now. Refinery is manufacturing LPG, Naphtha, MS (BS-II & Euro-III), SKO, ATF, HSD (BS-II & Euro-III), LSHF-HSD, LDO, Furnace Oil, LSHS, Bitumen, Natural Rubber Modified Bitumen, Bitumen Emulsion, Benzene, Toluene, Propylene, Special Boiling Point Sprit, Mineral Turpentine Oil, Poly-isobutene, Sulphur, Hydrogen
- **GAIL-Pata Plant** during 8-12th Feb'10: The GAIL Petrochemical Complex has been set up at Pata, District Auraiya of Uttar Pradesh to produce polyethylene pellets for plastic processing industries. The complex occupies 600 hectare of land, including the green belt. The complex is designed to process 12 MMNCMD of natural gas from the HVJ pipeline to produce 400000 TPA of Ethylene in the first phase and downstream products, such as the various grades (almost 40 plus varieties) of High density polyethylene (HDPE) and Linear low density polyethylene (LLDPE
- **HPCL-Mumbai Refinery** during 22-26th Feb'10: This refinery was established in 1954 with crude refining capacity of 1.25 MMTPA and after three expansions the present capacity is 5.5 MMTPA of crude processing. Lube refinery was commissioned in 1969 with a capacity of 165000 MT of LOBS production per annum. Refinery has added secondary treatment facilities like DHDS, FCCU & ISOM for producing euro grade auto fuels. Major product despatches are through pipeline transfer. This Refinery has its own power plant. Major products are LPG, Naphtha, ATF, SK, HSD, FO, JBO, LOBS, MTO, CBFs etc.
- **IOCL-Haldia Refinery** during 15-19th Mar'10: The IOCL-Haldia Refinery was commissioned in 1975 with a capacity of 2.5MMTPA. Lube base oil production facility was added in 1977. The capacity was augmented to 4.7 MMT in 1996 and currently refinery is processing 6.0 MMTPA crude. The refinery is divided into three blocks viz. Fuel Oil Block (FOB), Lube Oil Block (LOB) and DHDS Block. Refinery is manufacturing LPG, Naphtha, Motor Spirit, ATF, SKO, HSD, and Sulphur. The 41% of product dispatch by IOCL-Haldia is through pipeline, 26% by rail, 15% by road and 18% through water ways. and has dedicated marketing facility near the Refinery

जीवन का आनन्द गौरव के साथ, सम्मान के साथ और स्वाभिमान के साथ जीने में है।

facility for product upliftment. Currently, IOCL-Haldia implemented the OHCU plant project.

CROSS COUNTRY PIPELINE

1. 1st to 5th Dec' 2009 : 1st round ESA of ONGC's 237 Km, 8" to 14" NB Gas & Crude oil pipeline network in Assam Asset.
2. 27th to 30th Jan'2010 : 1st round ESA of ONGC's 670 Km, 36" & 42" Diameter onshore and offshore gas pipeline from South Bassein to Hazira .
3. 23rd to 29th March, 2010 :
   a 2nd round ESA of GAIL (India) Ltd's 642 km , 36" diameter Hazira - Vijaipura section of Hazira –Vijaipure- Jagdishpur Natural Gas pipeline.
   b. 1st round ESA of GAIL (India) Ltd's 611 km, 42" OD -Dahej – Vijaipur Natural Gas Pipeline.

PRE- COMMISSIONING SAFETY AUDITS

PROCESS

1. 15th Dec'2009 : EPCC-2 of MSQUP at IOCL- Panipat Refinery.
2. 31st Dec'09 to 1st Januaray'2010 : OHCU of IOCL's Haldia Refinery.
3. 20th-22nd January'2010 : NCU & associated facilities at IOCL's Panipat Refinery.
4. 27th – 28th Januaray'2010 : Prime G Unit and assosiated facilities at IOCL Mathura Refinery.
5. 17th to 19th Feb'2010 : Down stream units and offsite facilities at PNCP-Panipat.
6. 22nd – 23rd Feb'2010 : New CPP project at BPCL –Kochi Refinery.
7. 9th- 10th March'2010 : DHDT, HGU, SRU and DHDTat IOCL – Gujarat Refinery.
8. 1st- 2nd April'2010 : ISOM Units of IOCL's Gujarat Refinery.
9. 26th- 28th April'2010 : Indmax 3 Cut splitter unit of IOCL's Guwahati Refinery.
10. 11th March, 2010. Naphtha Gantry in IOCL's Panipat Marketing Terminal.
11. 11th May'2010 : LPG Mounded Bullet at IOCL's Panipat Refinery.
12. 20- 21st May'2010 : GTG and LPG Mounded Bullet at IOCL's Gujarat Refinery.
13. 11-13th Aug'2010 : MSQ Project IOCL - Guwahati Refinery
14. 16-18th Aug' 2010 : NHT / ISOM Unit of CPCL's Manali Refinery
15. 30th Aug. - 2nd Sept' 2010 : MSQ Project of IOCL's Digboi Refinery
16. 13th - 15th Sept' 2010 : MSQ Project & IOCL - Barauni Refinery
17. 27th - 29th Sept' 2010 : SRU / SWS Unit of IOCL - Haldia Refinery

CROSS COUNTRY PIPELINE

1. 29th -30th Oct'09: HPCL's 3.173 km, 6" NB LPG Pipeline from BPCL's Kochi Refinery to HPCL's LPG Bottling plant, Irumpanam, Cohin.
2. 9th-10th Dec'09 : GAIL(India) Ltd's 19.7 Km , 6" NB LPG spur pipeline from SV-63 of GAIL's existing Jamnagar- Loni LPG pipeline to IOCL's Bhondsi LPG Bottling plant .
3. 15th Dec'2009 : GAIL(India) Ltd's 55.757 km , 20" diameter Natural gas Pipeline from Bawana Tap off to PPCL, Bawana.
4. 16th Dec'2009 : GAIL(India) Ltd's 38.358 km , 36" diameter Natural gas Pipeline from Dadri to Bawana.
5. 31st Dec'2009 to 1st Jan'2010 : GAIL(India) Ltd's 107 km , 48" diameter Natural gas Pipeline from Vijaipur to Kulwara section of Vijapur - Dadri Pipeline.
6. 21st to 23rd Jan'2010 : GAIL(India) Ltd's 120.7 km , 48" diameter Natural gas Pipeline from Kulwara to Kailaras section of Vijapur - Dadri Pipeline.
7. 11th – 13th March'10 : GAIL(India) Ltd's 106.489 km , 48" diameter Natural gas Pipeline from Kailaras to Bajhera section of Vijapur - Dadri Pipeline.
8. 18th to 20th March'10. : IOCL's 290 km , 14" /12" NB Chennai- Bangalore product pipeline from CPCL's Manali Refinery, Chennai to Bangalore Terminal.
9. 25th March'10.: GAIL(India) Ltd's 71.60 km , 36" diameter Natural gas Pipeline from Chainsa – Sultanpur (Jhajjar).
10. 26th – 27th March'10 : IOCL's 109.811Km , 10" NB Bijwasan – Panipat Naphtha pipeline .
11. 28th March'10. : IOCL's Crude Blending facilities (CEIL's) at Radhanpur pump station of Mundra – Panipat crude oil pipeline.
12. 9th -10th April'2010 : GAIL(India) Ltd's 122.159 km , 48" diameter Natural gas Pipeline from Bajhera to Chiansa section of Vijapur - Dadri Pipeline.
13. 4th-5th June'2010: IOCL's Naphtha Tank and associated facilities at Bijwasan.
14. 29th June to 2nd July'2010 : Amod – Hazira product pipeline of IOCL, 93.378 Km long having dia 12.75" OD x 0.219 " WT , 0.375", 0.438", 0.250" WT API 5LX 60 grade pipe. The designed capacity of the pipeline is 1.8 MMTPA .
15. 14th – 16th July'2010 : The pipeline section between Dadri to Panipat consists of 131.818 km long, 30" OD x 11.1mm, 11.9mm, 12.7 mm and 15.9mm mainline API 5LX 70 grade pipe . The designed capacity of the 30" pipeline is 10 MMSCMD (Million Metric Standard cubic meter per day).
16. 23rd - 24th July'2010 : GAIL's Focus energy Pipeline from Langtala to Ramgarh power plant of RVUNL, 86.207 km long, 10.75" OD x 6.4 mm, 7.1mm, 7.8 mm and 12.7 mm wall thickness API 5LX 42 grade pipe. The designed capacity of the pipeline is 1.2 MMSCMD (Million Metric Standard cubic meter per day).
17. 3rd to 5th August'2010 : HPCL's SPM and associated offshore facilities at Vizag consistinf of Single Point Mooring (SPM), PLEM , 48" OD x 20.6 mm, API 5L X-65Gr , 4.054 km subsea pipeline from SPM to Landfall point.
18. 8th – 10th September'2010 : ONGC's crude oil pipeline fron CTF, Mehsana to CTF, Nawagam as a replacement of the existing pipeline. The pipeline section between Mehsana to Nawagam consists of 77.09 km long, 14" OD x 8.7mm, 9.5mm wall thickness API 5LX 46 grade pipe. The designed capacity of the 14" pipeline is 2.75 MMTPA (Million Metric ton per annum).

MARKETING COORDINATION

1. 3rd -4th Feb'2010 : IOCL's LPG Bottling Plant Dumad.
2. 16th March'2010 : HPCL (MSV) LPG Bottling Plant at Bhadurgarh.

SURPRISE SAFETY AUDITS

MARKETING COORDINATION.

1. 3-4th Feb'2010 : IOCL's LPG Bottling Plant at Dumad.
2. 24- 25th Feb'2010 : IOCL's LPG Bottling Plant at Tikri Kaln.
3. 8- 9th March'2010 : HPCL's POL Terminal at Mathura.
4. 11- 12th March'2010 : BPCL's LPG Bottling Plant at Hariyala.
5. 12 – 13th March'2010 : IOCL's POL Terminal at Sabarmati.
6. 13th March'2010 : HPCL's LPG Bottling Planat at Gandhinagar.
7. 17th March'2010 : HPCL's POL Terminal Rairu.
8. 17th March'2010 : IOCL's POL Terminal Rairu.
9. 18th March'2010 : BPCL's POL Terminal at Bakania.
10. 22nd March'2010 : HPCL's Bijwasan POL Terminal
11. 23rdMarch'2010 : BPCL's Bijwasan POL Terminal.
12. 24th March'2010 : IOCL's LPG Bottling Plant at Etawah.

CONSENT GIVEN BY OISD FOR OFFSHORE INSTALLATION

(a) 8th Oct' 2009 : Fixed offshore installation : BCPA -2 of ONGC.
(b) 12th Oct' 2009 : Mobile offshore Drilling Unit (Drill Ship DD KG-1)- of ONGC.

सच्ची लगन तथा निर्मल उद्देश्य से किया हुआ प्रयत्न कभी निष्फल नहीं जाता।

(c) 21st Oct' 2009 : Mobile offshore Drilling Unit (Jack Up)- Great Drill Chetna of ONGC.

(d) 3rdNov' 2009 : Consent for Mobile offshore installation FPU- TAHARA of HARDY Exploration.

(e) 6th Nov' 2009 : Mobile offshore Drilling Unit (Jack Up)- Great Drill Chitra of ONGC.

(f) 14th Dec' 2009 : Consent for operation of already operating mobile offshore installation 'PPA- and TPP of BGEPIL.

(g) 15th Dec.' 2009 : Fixed offshore installations : RS- 15, RS-16 & RS-17 of ONGC.

(h) 21st Dec' 2009 : Fixed offshore installations : C- 22P, C-24P, C-39P1, C-39 PA of ONGC.

(i) 19thJan' 2010 : Design ,Construction and establishment consent for SPM and Connecting offshore pipeline for HPCL, Vishakhapatnam.

(j) 22th Feb' 2010 : Mobile offshore Drilling Unit - Black Ford Dophin of RIL.

(k) 3rd March' 2010 : Mobile offshore Drilling Unit- DD KG-2 of RIL.

(l) 7th Sept' 2010 : Design ,Construction and establishment consent for SPM and Connecting offshore pipeline for IOCL, Pardeep.

हार्दिक स्वागत

श्री थंगराज शेलामुथ्थु

श्री थंगराज शेलामुथ्थु ने अपनी मूल कंपनी इंडियन ऑयल कॉर्पोरेशन लिमिटेड की बोंगाईगाँव रिफाइनरी यूनिट से स्थानातरित होकर 4 अप्रैल 2010 को तेल उद्योग सुरक्षा निदेशालय में प्रतिनियुक्ति पर अतिरिक्त निदेशक (प्रक्रिया) के पद पर कार्यभार ग्रहण किया है। श्री थंगराज केमिकल इंजीनियर है एवं बोंगाईगाँव रिफाइनरी एवं पेट्रोकैमिकल लिमिटेड के बोंगाईगाँव रिफाइनरी में पिछले तीस वर्षों से प्रोजेक्ट, ओ.एम.एस., एल.पी.जी. और पालीमर स्टेपल फाईबर यूनिट में कार्य कर चुके हैं। तेल उद्योग सुरक्षा निदेशालय में आने से पूर्व वे बोंगाईगाँव रिफाइनरी में वह उप महाप्रबंधक (उत्पादन) के पद पर कार्यरत थे।

तेल उद्योग सुरक्षा निदेशालय श्री थंगराज शेलामुथ्थु के कार्यभार ग्रहण करने पर उनका हार्दिक स्वागत करता है।

श्री के. सी. नन्दी

श्री के. सी. नन्दी ने अपनी मूल कंपनी हिन्दुस्तान पेट्रोलियम कार्पोरेशन लिमिटेड की भुवनेश्वर रीजनल ऑफिस, उड़ीसा इकाई से स्थानांतरित हो कर 10 मई 2010 को तेल उद्योग सुरक्षा निदेशालय में प्रतिनियुक्ति पर संयुक्त निदेशक (विपणन प्रचालन) के पद पर कार्यभार ग्रहण किया है। श्री के. सी. नन्दी मैकेनिकल इंजीनियर हैं एवं पिछले 21 वर्षों से हिन्दुस्तान पेट्रोलियम कार्पोरेशन लिमिटेड के विपणन विभागों में कार्यरत थे। ओ.आई.एस.डी. में आने से पहले श्री नन्दी हिन्दुस्तान पेट्रोलियम कार्पोरेशन के भुवनेश्वर स्थित कार्यालय मं प्रबंधक संचालन के पद पर थे।

तेल उद्योग सुरक्षा निदेशालय, श्री के. सी. नन्दी के कार्यभार ग्रहण करने पर उनका हार्दिक स्वागत करता है।

श्री वरुण प्रकाश

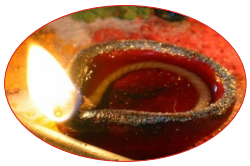
श्री वरुण प्रकाश ने अपनी मूल कंपनी हिन्दुस्तान पेट्रोलियम कार्पोरेशन लिमिटेड की मुंबई रिफाइनरी इकाई से स्थानांतरित हो कर 1 जुलाई 2010 को तेल उद्योग सुरक्षा निदेशालय में प्रतिनियुक्त पर सहायक निदेशक (विपणन-प्रचालन) के पद पर कार्यभार ग्रहण किया है। श्री वरूण प्रकाश मैकेनिकल इंजीनियर हैं एवं पिछले 4 वर्षों से हिन्दुस्तान पेट्रोलियम कार्पोरेशन लिमिटेड की मुंबई रिफाइनरी के तकनीकी विभागों में कार्यरत थे। ओ.आई.एस.डी. में आने से पहले श्री वरूण प्रकाश हिन्दुस्तान पेट्रोलियम कार्पोरेशन की मुंबई रिफाईनरी में इंजीनियर के पद पर थे।

तेल उद्योग सुरक्षा निदेशालय, श्री वरूण प्रकाश के कार्यभार ग्रहण करने पर उनका हार्दिक स्वागत करता है।

हमे आशा है कि उपरोक्त अधिकारियों के अनुभवों से तेल उद्योग सुरक्षा निदेशालय को काफी लाभ होगा।

दीपावली की शुभकामना

स्वस्थ्य मन निरोगी काया
न कोई बैरी न ही पराया
धन हो उचित
न अधिक अभिलाषा



और स्वर्ग की क्या परिभाषा
ऐसे स्वर्ग की लेकर भावना
हम करते हैं आपकी मंगल कामना।।

- ओ.आई.एस.डी. परिवार

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