



# **THREE DAY TRAINING PROGRAM ON OPERATION, MAINTENANCE & TROUBLE SHOOTING OF EFFLUENT TREATMENT PLANT**

**Under**

***Integrated Skill Development Scheme  
Ministry of Textiles, Govt. of India***

**22-24 February, 2012**

***Organized by:***

**Northern India Textile Research Association  
Sector-23, Raj Nagar, Ghaziabad-201 002  
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## **BACKGROUND**

Effectively, any effluent treatment plant can be divided into two parts. The first part, related to installation and commissioning of the plant, is selection of most suitable effluent treatment scheme, designing and building the various treatment subunits of the plant of proper size, right type of material of construction as well as configuration and proper commissioning. This part is mostly handled by consultants, contractors and vendors and the expenses incurred come under capital cost which is one time expenditure. The second part pertaining to day to day running of the plant is proper operation, maintenance and trouble shooting. Either owner (industry, municipality, society) or O&M contractor is responsible for this part and the expenses incurred are known as recurring expenses. Proper operation, maintenance and trouble shooting in tandem with right treatment scheme and its execution in the plant plays an important role in achieving the desired treated effluent or recovered water characteristics in a cost effective manner. In addition, quality of treated effluent, recurring cost per unit of treated effluent and life as well as performance of various equipments and instruments is highly dependent on how well the plant is operated and maintained.

For example, insufficient chemical dosing in the physicochemical treatment operation of ETP gives treated effluent having suspended/colloidal particles and residual color whereas excess chemical dosing than the required leads to wastage of costly dosing

chemicals, more sludge generation and high recurring costs. Similarly non maintenance of designed MLSS in aeration tank in the biological treatment process would result in treated effluent of higher BOD. There are numerous such factors which have to be controlled by the ETP operators and supervisors. Therefore, proper training of the manpower operating ETP/CETP is essentially required.

**Keeping the importance of manpower training in mind, NITRA is organizing three days training program on operation, maintenance and trouble shooting of Effluent Treatment Plant From 22 to 24 February, 2012.**

NITRA provides consultancy and training in pollution abatement & control, water recovery from wastewater, effluent treatment (process design, detail engineering drawings, commissioning & trouble-shooting), water audit etc and has more than 100 clients to its credit.

#### **TARGET GROUP**

Effluent Treatment Plant Incharge, supervisors and operators

#### **TOPICS TO BE COVERED DURING TRAINING**

- Effluent treatment – process description
- Operation, maintenance & trouble shooting of ETP

- Preliminary & physico-chemical treatment processes - Screens, O&G Traps , Equalization Tank, Chemical Dosing and Reaction Tank, Clarifier / Tube Settler etc
- Biological treatment processes - Aeration tank, Secondary clarifier etc.
- Sludge dewatering - Filter press
- Polishing treatment- Pressure filter, Activated carbon filter , RO etc
- Procedure for sampling and testing of parameters COD, BOD, O&G, TSS, pH, MLSS.

#### **VENUE**

Conference hall, NITRA, Ghaziabad

#### **TRAINING FEE**

Rs 4000/- (Rupees Four Thousand) per participant. The participants has to make their own arrangement for the accommodation. On request, NITRA would provide assistance for arranging accommodation.

#### **CONTACT DETAILS**

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**Three Day Training Programme  
on  
Operation, Maintenance and Troubleshooting  
of Effluent Treatment Plant**

**February 22-24, 2012**

**Registration Form**

1. Name.....
2. Designation.....
3. Company/ Organization.....
4. Mailing Address.....  
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.....  
.....  
Phone/cell.....Fax.....  
E-mail.....
5. Details of Additional Participants (Name & Designation) etc
  - i. ....
  - ii. ....
  - iii. ....
6. Payment Details  
(For training fee only. To be made in favour of NITRA payable at Ghaziabad )  
Bank draft/Pay order No.....Dated.....  
Bank name.....  
Amount.....