

XGN - Xtended Green Node

Gujarat Pollution Control Board (GPCB) was constituted with a view to protect the environment, prevent and control pollution in the State of Gujarat. GPCB is the main beneficiary of the Xtended Green Node (XGN) software. The XGN system ensures effective monitoring and inspections of hazardous, bio-medical waste generation, treatment and its eventual disposal control certificates to that effect.



RAJNISH MAHAJAN
State Informatics Officer,
NIC Gujarat
rajnish.mahajan@nic.in



AMIT D SHAH
Principal Systems
Analyst, NIC Gujarat
amit.shah@nic.in

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Edited by **Vivek Verma**

XGN is a web enabled software developed by NIC Gujarat State Unit, in consultation with the GPCB Technical & Laboratory Teams, for the day to day operations of any State Pollution Control Boards in India. Out of the 18 Modules that have been identified, 12 have already been developed & implemented in the state since June 2008. The application is used by the staff of 18 field Offices and GPCB Head Office.

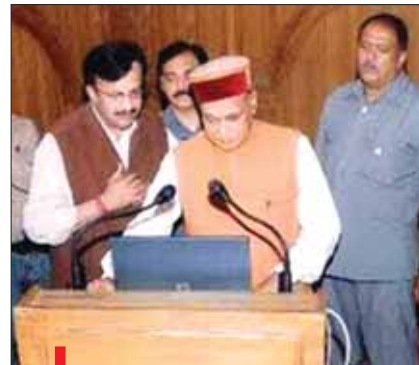
Number of Delivery Centres circles around the Head Office at Gandhinagar, 18 Regional Offices of GPCB at District HQs, 8 Laboratories, 18500+ Industries and 28000+ Hospitals and Clinics spread all over the state. Additionally 22 Treatment Stabilisation Disposal Facilities (TSDF), 30 Common Effluent Treatment Plants & 14 Common Bio-Medical Waste Operators are also delivery centres for XGN, averaging around 2400 users daily.

Although, geographically the centres are spread all across the state, but for an end user a system with a broadband connectivity is the minimum resource required to ensure its reach to a delivery centre. To facilitate usage of XGN by Small Scale Industries, who are devoid of connectivity and infrastructure, Kiosks have also been opened at some Industrial estates and Association offices.

XGN MODULES

Some of the XGN modules covering day to day functionalities are

Industry Profile: Sector, Location, Scale, Previous NOC - Authorizations Details, Products, Raw Material, Investment and Air/Water/Hazd Technicalities



XGN-launch in Himachal Pradesh by Hon'ble C.M Prof. Prem Kumar Dhumal

Online Application Module: For Industries covering NOC, CCA Application, Uploading Pages, Fee Payments, etc.

Applications Scrutiny System: e-Talk, whereby you can pass and receive message to/from the board, forms the base.

E-File Movement: Covers the file movement upto the Final GRANT/REJECT. It covers Putting up to, Queries, Replies, Notings, and Comments.

The Inspection Module: It covers Visits allocation, Inspections Due, MPRs, HO References, and Freezing of Inspection Reports.

The Laboratory Module: This module covers Sample collection, Dummying, Parameter Allotment, Testing Results and Reflection to various levels.

The Accounting Module: It covers Application Fees, Fees Slab, Lab Bills, Payments and Water Cess.

CPCB & GPCB Projects Monitoring: Sampling points parameters, GEMS / MINAR / AAQM etc.

Municipal Solid Waste Management System: 183 Local Bodies are the End Users.

XGN-Control Module: Tracking Management Keys to Implementation

Hazardous Waste Monitoring System: Facilitates monitoring of Hazardous wastes Generation, Manifests, Disposal and Recycling.

The LEGAL Module: Show cause notice, closure directions and bank guarantees.

The Water Cess Module (WTC): A total Online Application right from E>Returns to Assessment Orders & Payments.

The Bio-Medical Waste Management System: Briefly covers all the above Modules for Industries in brief, but with different parameters and modus operandi (**BMW Act**).

The Public Grievances/Complaints Redressal System: A G2G Utility (CRS).

CRITICAL INDICATORS

In order to have a better control, a robust monitoring mechanism by way of alerts has been integrated into the system. Some of the XGN generated alerts to Department for better follow-up & Industry Monitoring of Pollution Acts violations (Air, Water, Hazd) are -

- Industries due for Monitoring - District, SIDC wise.
- Applications in pipeline (workload coming month).
- Would be operating without Consents in coming 3 months.
- Watch Dog points for the next Inspections Visit to an Industry.
- TSDFs & CETPs Capacity v/s Current load of incoming waste.
- Staff & R.O. Head sitting on files since stipulated period of disposals.
- Comparison of Sample Results drawn by staff v/s N.G.Os.

REPLICABILITY AND SCALABILITY

XGN has gradually matured into a rugged & a reliable tool. It is a standardized product which can be replicated to other states to bring in standardization of official procedures. It is equally scalable as CPCB related requirements can be addressed by making a provision in the software.



XGN - Recipient of National e-Governance Award

CPCB Branches can also be given access to XGN so that they can have direct access to State's data relating to Inspection, Sampling, and Results & Compliance of Consent & CTE.

In last one year it has been replicated in 3 states namely H.P, Uttaranchal & Goa and requests have been received from 3 more states to have XGN implemented. A low customization expense needs to be borne by the respective state thus leading to a very generalized software running on common platform across various states. This ensures high scalability, reliability and replicability.

BENEFITS

- Increase in revenue from 28 Crores to 76 Crores.
- Non existence of BMW & Water Cess Files at Field Offices. Fully Online Application.
- SMS facility for all the 18 functionalities of Pollution Control Board for handlers of Industrial and hospital's bio-medical & hazardous waste.
- XGN has aided in acquiring ISO 9001, IS/ISO 14001:2004 certification & also getting the coveted NABL accreditation.
- 12% of staff has retired in last 3 Years and no new recruitment undertaken.
- 8 New Field Offices opened, Inspections have tripled, Samples drawn doubled and Legal actions have doubled.
- Paper Correspondence has totally

stopped between the Department and Industries/Hospitals as well as between Regional Offices & Head Office.

- Continuity of services and smooth transition in an event of new field offices being opened and bulk transfers taking place respectively.

ROAD MAP AHEAD

New concepts that are in pipeline and shall soon be introduced are -

- Introduction of PDA for the Monitoring Teams.
- GPS system for tracking the Movement of Hazardous Waste Carriers.
- Mobile computing by the Hospitals / Clinics for the Bio-Medical Waste generated and disposed off.

ACCOLADES

National Recognition: XGN has been awarded in different categories basically for BPR and total computerization. 1. National e-Governance Award 2009 (Categ : Process Re-engineering) 2. CSI Award 2009 (Special Recognition - Department Category).

For further information

RAJNISH MAHAJAN
State Informatics Officer
NIC Gujarat State Unit
Block-13 IInd Floor
New Sachivalya
Gandhi Nagar - 382 010
Ph: +91-2712-23223035
sio-guj@nic.in