

**Codification & Creation of Database of Lessee & Licensee
&
Web Based MIS for Steel & Mines**

Executive Summary

The Department of Steel & Mines is a one of the important Department of Government of Orissa. The main functions and activities of the Department of Steel and Mines are systematic survey and assessment of the mineral deposits of the State, their exploitation, administration of mines and mineral concession, enforcement measures for prevention of illegal mining and smuggling of minerals, assessment and collection of mining revenue.

It does study of the impact of mining operation on environment, formulation of appropriate environmental control measures and research and exploitation of areas and minerals for meeting the needs of mineral based industries in the State and Country. The Steel and Mines Department is the administrative Department of the Directorate of Mines, the Directorate of Geology and Orissa Mining Corporation Ltd.

There are 14 Circles and 6 Chemical Labs present throughout the state. Among 14 Circles 8 Circles are under Deputy Director Mines and the rest 6 Circles have separate Mining officers. The Circles under Deputy Director of Mines are Joda, Koida, Rourkela, Sambalpur, Talcher, Jajpur Road and Koraput. The Circles under Mines Officer are Cuttack, Berhampur, Baripada, Bhawanipatna, Keonjhar, Phulbani and Bolangir. The 6 chemical labs are Jajpur Road, Bolangir, Sambalpur, Joda, Berhampur and Bhubaneswar.

Objective of the Web Based MIS

To build an active database for Mining lease details to track online present status and to make it transparent MIS application. The Web Based MIS application will contain all the parameters ML, RML and Regulatory details. To make the site successful it must have different essential characteristic to different stakeholders, it must be accessible. After that a complete database will be created through which any type of MIS report can be generated at any time.

The proposed web based MIS will aim to be a premium information service to all Stake Holders.

All the Stakeholders will be provided with Secured Login ID and Password through which they will update their approval status online.

Content matrix will include name of the lessee, address of lessee, District, location, Block, GP, Village and etc. The concern users at different circle level can view their working area and update the same time to time.

Proposed Solution

The proposed online Web Based MIS will provide information of different 14 Mining Circles operating in the state. Information about the trading, Licensee, ML, RML, Lease period, Regulatory Acts & Rules of commodities will be available online to the registered members. The proposed system will enable the users and Stake Holders to gather information on real times basis what is happening at different Mining Circles. The Major Stake Holders are as below –

1. Department of Steel & Mines
2. Directorate of Mines
3. Revenue Department
4. Forest Department
5. Ministry of Environment & Forest
6. Orissa State Pollution Control Board
7. IBM (Indian Bureau of Mines)
8. Directorate General Mines and Steel (DGMS)
9. Ministry of Commerce and Industry (Explosive License)
10. Ministry of Coal
11. Mines Owner

The Mines Owner will update the following data –

- Update the GPS co-ordinates of Boundary Pillars,
- Update No. of Skilled, un-skilled Manpower & Machinery used.
- Update monthly return filing
- Update Mineral Dispatch in Domestic & Export with Sale Price

This product helps the targeted users with online information with the desired choices. Users can view for the different categories of products along with their features like ML/RML/Regulatory. Basically this product will generate the following data –

- Report on Details of Mining Leases & Expired of Mining Leases
- Report on List of mines, operational/non-operation in different circle
- Report on Verification of Records of ML & RML Grants
- Report on Renewal of Mining Leases with or without any forest land etc....
- Report on Quantity of Mineral Transported by Railway & by Road

These are some of the responsibilities of different stake holders for ML; they will update the following things in their Secured Login –

- Forest Department is responsible for giving Forest Clearance. It will update the various stages of forest clearance obtained from the application to the final disposal
- OSPCB is responsible for giving Pollution Clearance. It will update details of application and the final disposal.
- IBM and the State Government in Steel & Mines Department are responsible for providing Approval of ML, Lease Period, Issue of Terms & Conditions, and Survey of Granted Area. The Steel & Mines Department will update information on the Mining Plan.
- The Forest & Environment Department will update details of application and disposal of Environmental Clearance.

Concept -



Codification & Creation of Database of all who are in business with Deptt. of Steel & Mines

- Database of all Lessee, Licensee, Traders, Mineral Storage Depots along with scanned copies of Govt. Circulars.
- Database of Existing Steel Plants
- Database of MOU of New Production Units
- Database of Chemical Laboratories & Revenue collection for year wise analysis purpose

Officers Login:

The stake holders will be entering in the website by their respective Login ID and Password. They will be updating their required fields wherever required.

Reports:

- Report on ML / RML details
- Details of Trading/Storage Licenses
- Details of Crusher Unit/Mineral Processing Unit
- Reports on Steel Plants & MoUs.
- Report on revenue collection by Chemical Laboratory
- Reports on verification of records of ML & RML Grants.
- Report on Transit Permit issued to lessee.
- Report on quality dispatched through shipyard.

Features of the Product

The website will be customized around the workflow being followed at traditional online Web Based MIS. This new system will query the Data Warehouse to retrieve inquiry information at different levels. This will capture the following data –

- Basic Details of Lessee.
- Mining Lease Area & GPS Co-ordinates of Boundary Pillars.
- Granted Surface Area details with Order no. & Date
- Mining Plan, Forest, Environmental & OSPCB Clearance order details.
- Details of Skill , Unskilled Labor working & Machineries used
- Notice of opening of mines & IBM Approved Qty

- Issue of permit & Despatch Details
- Stock & dispatch details at Railway Siding & ship-yard
- Sale of Mineral incase of Domestic & Export. with Sale Price
- Inspection & violation Compliance as per the ACTs & Rules
- Details of licensee of depot include procurement and dispatch.
- Royalty Paid Till date, Arrear & Balance.
- Beneficiation unit available within the lease area.

The MIS report generated will give right data to the particular user. It will provide right functionalities at the directorate level. The officers can get the required data as per their requirement within the time line.

Users are free to browse few pages of the website but other vital information about the commodities is only accessible to the assigned members. The system will be simple in architecture but at the same time robust enough so that the time delays in retrieving information is minimal and at the same time leave room for future enhancement.

System Requirements

Based on the information gathered the scope of the system can be defined as follows:

- Design and development should be such that the system, though Simple is robust.
- Flexibility for configuring the system should be enough so that Users are not tied down.
- Periodic maintenance will be an administrative function allowing for maintenance by users.

System Description:

All the Stake holders will be provided Secured Login ID & Password through which they will update their activities time to time. They will be updating their own required field in ML/RML/Regulatory on time to time basis which will create a complete database of MIS report.

The required fields in **ML** to be filled are -

- Name of the lessee.

- Address & Contact No. of Lessee.
- Total Mining Area Lease
- Granted Surface Area.
- Order no. & Date of the Lease.
- Date of approval of Mining Plan.
- Date of approval of Execution.
- Date of Registration.
- Approval of Issue of Terms & Condition
- Letter of Intent from Govt. of India
- Diversion of Forest Land by MoEF
- Grant of Surface Right by Collector

The required fields in **RML** to be filled are -

- Date of Application.
- Lease Period.
- Date of Expiry
- Date of filing of Renewal.
- Date of Commencement of Mining Operation.
- Environmental Clearance.
- OSPCB Clearance
- TWP Clearance (Temporary Work Permit)

Benefits:

- Makes it easier for user to create, edit and publish content on a website, earlier website publishing has required significant technical skills like HTML, programming etc. By means of the present proposed web portal will allow non-technical authors and editors to easily and quickly publish their content.
- By means of the proposed web based MIS, the stakeholders will be able to do online transaction.
- By means of the proposed web based MIS, the users will download the forms, syllabus and other related documents instantly.
- The proposed portal will make the internal communications faster and convenient.
- Reduces time-to-publish, allowing users to get content published faster.
- Allow for the consistent management of metadata through content template structures. Of the many benefits this delivers a significantly improved search process.
- The portal can facilitate better content security. It can control the Rights of View, Manage & Edit.
- As the volume of documents, authors, editor's etc rise, this web based MIS will control & manage the Data in flow as well out flow in a smarter way.

Training:

IDCOL will impart training to the Users, thus will consists of:

- ✓ Theoretical and technical knowledge (For .NET)
- ✓ Group discussions.
- ✓ Self-learning techniques
- ✓ Practical hands-on training
- ✓ Through simulation techniques; and
- ✓ Self-learning computer aided packages.

- ✓ The training methodology so adopted creates step by step environment for all round development of skills and knowledge of the participants

Our flexible learning model expands choice on what, when, where and how people learn. It supports different styles of learning, including e learning. Selection of an appropriate mix of educational approaches is a function of the types of participants.

User manuals are very much essential in any software system. Specifically in an Web Based MIS application which is targeted at users in different capacities, it is important that the users get all the supporting on their own in an easy and lucid way for any of difficulties they find in the system.

IDCOL will adopt the following five processes while preparing the users' manual.

- ✓ Supplying a real manual
- ✓ Explaining the problem being solved
- ✓ Presenting the concept, not the features only
- ✓ Giving more than the users deserve
- ✓ Making the manual interesting and enjoyable to read

IDCOL provide users manual in two forms -

- ✓ Electronic
- ✓ Hardcopy

IDCOL will make available the electronic format user manual online in the Website as well as provide it in storage media for offline access too. And we will also provide the hardcopy of the manual.