Administrative Order No. 45 July 14, 1993

SUBJECT

Establishment of the National and Regional Mining Titles System Centers and Establishing the Responsibility of the Mines and Geosciences Bureau and the Mines and Geoscience Development Service of the Regional Offices on the Mining Titles System Implementation

In order to ensure sustainability and coordination in the implementation of the Mining Titles System, the following guidelines establishing the national and regional centers as well as the responsibilities of the Mines and Geosciences Bureau (MGB) and the Mines and Geosciences Development Service (MSDS) are hereby promulgated for the guidance and compliance of all concerned:

- Section 1. Basic Policy and Objectives. It is the policy of the Department to enhance the contribution of our mineral resources for economic and social development and promote equitable access to these resources by different sectors of the population. Towards this end, the System seeks to attain the following objectives:
- 1.1 Increase the efficiency of mining titles management through the establishment of computer-based administrative system for the processing of mining rights applications;
- 1.2 Develop the skills of DENR personnel in computer technology;
- 1.3 Facilitate and provide guidance in the administration of mining rights; and
- 1.4 Create a national database that will improve the reliability of mining titles and enable the purging of invalid files to give greater confidence and security of tenure.
- Section 2. Title of the System. This computer-based administrative system shall be known as the Philippine Mining Titles System or MTS.

- Section 3. Definition of Terms. For the purpose of this order, the following terms, whether in singular or plural, and abbreviations shall have the following meanings:
- 3.1 **Data Exchange** refers to the physical transfer of data in magnetic media from the MGDS to MGB and vice-versa;
- 3.2 Installation Site refers to either MGB or MGDS where the MTS has been installed;
- 3.3 Macro-Regional Center refers to any of the three MGDS offices, namely: Regions IV, VII or XI responsible for assisting the regional offices within their respective areas of jurisdiction, as prescribed herein, to achieve a stable operation of the MTS;
- 3.4 Macro-Region Database Supervisor is a staff from the MGDS macroregional center in charge with the maintenance and ensuring stable MTS operation at installation sites within the macro-region's jurisdiction;
- 3.5 MGB Mines and Geosciences Bureau where the national database center is established:
- 3.6 MGDS Mines and Geosciences Development Service in the DENR regional offices where the MTS is installed;
- 3.7 MOO Mineral Operations Officer of the concerned MGDS office;
- 3.8 National Database Supervisor is a member of the MGB staff responsible for the consolidation of mining tenement databases from MTS installation sites nationwide and providing assistance in troubleshooting system problems in MGDS offices when requested;
- 3.9 **National System Coordinator** is a member of the MGB staff responsible for the coordination and evaluation of the operations of MTS nationwide;
- 3.10 Non-Macro Region Database Supervisor is a member of the staff of non-macro MGDS office responsible for the operations and maintenance of the MTS in the concerned MGDS office:

- 3.11 **System** refers to the Philippine Mining Titles System where a specialized computer software is used in the management of mining documents nationwide and operated by trained personnel of MGB or MGDS;
- 3.12 **System Manager** refers to a duly designated member of the MGB or MGDS staff, holding the position of either as National System Coordinator, National Database Supervisor, Macro-Region Database Supervisor or Non Macro-Region Database Supervisor and trained to manage and maintain the MTS;
- 3.13 **System Operator** refers to a member of the MGB or MGDS staff trained to handle the MTS software either to input or query data and prepare reports from the system.

Section 4. Establishment of MTS National and Regional Centers and Management of the MTS. For purposes of carrying out the intents of this Order, MTS centers shall be established at MGB as national center and the MGDS Offices as regional centers.

The national center shall have responsibility of coordinating the MTS operations in all regional installation sites including regular updating and maintenance of consolidated regional databases. Upon request by MGDS office(s), it shall assist MGDS regional centers to mitigate problems encountered during the operation of the system.

In the interim and until such time that all MGDS regional offices are fully capable and equipped with the necessary skills to maintain smooth operation of the system, three (3) macro-regional centers based in Regions IV, VII and XI shall be established to oversee and assist the operation of the MTS in other regional offices. These Macro-regional centers shall provide system expertise and service required to attain a stable operation in their respective offices including MGDS offices within their areas of jurisdiction more specifically described as follows:

DENR	Macro-Regional
Non-Macro Region	Center In-Charge
CAR	Region IV
Region I	Region IV
Region II	Region IV
Region III	Region IV
Region V	Region VII
Region VI	Region VII
Region VIII	Region VII
Region IX	Region XI

Region XI
Region XII Region XI

Services to be rendered by the Macro-regional center(s) to non macro-regions shall include:

- (a) restoration of the system in case of failure, diagnosing, testing and fixing for system faults;
- (b) installation or re-installation of the MTS software:
- (c) recovery or repair of damaged databases;
- (d) programming of utility and customized report modules needed by the office;
- (e) assistance in the selection and evaluation of software and hardware purchases;
- (f) provide information and advice on the development of other mining industry related system; and
- (g) training of staff in the use and management of the system.

Travel expenses, per diem and other related expenses of the system manager providing the above services shall be borne by the requesting office.

Non-Macro MGDS regional offices shall be responsible in the normal operation and safekeeping of the installed MTS in their respective sites. They shall call on their macro-regional centers for assistance in case of system troubles or failure.

The structural hierarchies of responsibility within the national, macro-regional and specific regional MTS centers are shown in Appendix 1. The Director of the MGB and Regional Technical Directors of MGDS are directly responsible in carrying out the tasks required by the Mining Titles System from their respective offices. The National Systems Coordinator shall assist the MGB Director in overseeing system operations at the national level. The Database Supervisors shall be responsible for building up and maintaining the databases, the system software and consumable at their offices. The System Operators shall handle all tasks relating to data entry and report preparation in the Mining Titles System upon the direction of their Database Supervisors.

- Section 5. Data Entry and Maintenance. As provided for by existing regulations, MGB and MGDS shall hold jurisdiction over the administration of certain mining titles and applications in the country such as Mineral Production Sharing Agreements (MPSAs) and various forms of mining permits and licenses in mineral and non-mineral reservation areas. They shall be responsible in the entry and maintenance of the corresponding mining tenement data required by the MTS and ensure the timely update and regular backup of these databases in their offices.
- **Section 6. Data Exchange.** In order to ensure availability of mining tenement data at any MTS installation site and achieve the national objective of building up a nationwide database, the following standard operating procedures shall be observed:
- 6.1 MGB shall maintain the National MTS Center where all existing mining tenement data in every installation site are forwarded, consolidated and maintained;
- 6.2 Each MGDS installation site shall send a complete copy of a pre-determined set of regional database files in 3.5" high density disk(s) to the MGB as of the close of business hours on the last business day of each month. It shall likewise submit the required number of disks as determined by MGB to be used in copying the appropriate data from the national database for its own use;
- 6.3 MGB shall consolidate all databases submitted by MGDS installation sites into a national database. After consolidating these databases, MGB shall provide every MGDS installation site, as much as practicable, with the appropriate files of the national databases for data query purposes. These national database files shall be copied by NGB in the disk(s) provided by MGDS concerned.
 - The DENR offices/attached agencies, other than MGB and MGDS, may be provided with the same databases under similar disk exchange scheme through written request with the MGB, subject to evaluation and approval of the MGB Director and prior clearance from the DENR Secretary.
- All dispatches of these databases must be sent through fastest available means of delivery such as private courier(s) or parcel service(s) so that receipt of the same can be achieved within 48 hours. In order to avoid delays, MGB should immediately alert regions whose transmittals have not been received on the fifth (5th) regular business day of the succeeding month.

MGB and MGDS should ensure that the packaging and transmission of databases are protected from any damage. All database package(s) must bear the security seal of either the office or the courier to discourage tampering. If the seal is broken, the receiver must immediately notify the sender and the magnetic media should not be utilized.

Section 7. Security and Maintenance of the System. MGB shall devise a standard security strategy and procedure to be enforced in all installation sites. Only authorized users as determined by the MGB Director for the national center and the MGDS Technical Directors for the regional installation sites can enter, amend, delete or update data in the system. Manipulation, processing or copying of databases other than that intended for the current version of the MTS shall not be allowed without prior written consent of the MGB Director.

The following measures shall be observed to ensure proper maintenance of the system.

7.1 Hardware

All MTS computer hardware(s) and equipment donated under the Natural Resources Management and Development Project (hereinafter, NRMDP) shall be used exclusively for the Mining Titles System or its related systems to be developed under the direction of MGB;

It shall be the responsibility of the office concerned (MGB or MGDS) to plan for the maintenance of the computer hardware(s) and other equipment installed for the MTS. They shall regularly plan ahead and allocate sufficient budget to meet both preventive and breakdown maintenance cost for these equipment/hardware. Where maintenance becomes impractical against replacement, MGB or MGDS concerned shall plan and initiate the acquisition of new hardware;

There should be a semi-annual inventory of all equipment used by the MTS. Serial number(s), location and physical condition of the equipment should be recorded as part of the inventory process. MGDS offices should provide a copy of this inventory to the National MTS Database Centre.

All MTS hardware and equipment should be placed and installed in a physically secured and pleasant working environment within the MGB or MGDS office to prevent theft, vandalism or unauthorized use and to provide appropriate protection from dust, heat, humidity and direct sunlight.

Subject to existing accounting and auditing requirements, breakdown maintenance should be done as much as possible by the accredited EPSON Computer servicing agents in order to ensure guaranteed performance and hardware efficiency.

7.2 Software

In order to achieve a standard output and operation of the system at any installation site and to prevent unnecessary maintenance expenses for trouble(s) resulting from any deviation on the system adopted, only the official version of MTS software, as certified by the National MTS Center, should be installed in the MTS computer hardware.

The official copy of application softwares provided by NRMDP should be the only softwares to be installed in the MTS hardware. The installation of illegal or pirated software such as video games should not be allowed in the MTS hardware to avoid contamination of the system with software viruses which may damage the MTS databases and its related files. The official virus detection and removal software provided by NRMDP should be installed in the system to minimize database corruption or damage. The MGB and MGDS should exert every effort to procure a copy of the latest and effective virus removal and detection software to protect its accumulated database files in the event that the original software becomes obsolete.

7.3 Consumables

Adequate supply of consumable should be planned ahead and provided to ensure smooth and uninterrupted operation of the MTS. Acquisition of consumables shall be the responsibility of the concerned MTS installation site. A monthly inventory of consumable should be made to control and monitor consumption.

7.4 Call For System Support and Assistance

Normal software problems should be reported immediately to the Macro-Region Database Supervisor. The circumstances describing how the problem occurred should be clearly documented in a step list fashion including a printout of error messages appearing on the monitor screen, if possible. If a telephone facility is available, this report should be relayed immediately to the macro-regional centre so that an early solution to the problem could be recommended. A courier or fax service would be more appropriate if a detailed documented report is available. If the Macro-Region Database Supervisor may not be able to figure out some solutions to the problem, the National MTS Centre should be consulted for

advice. In any case, all software problems encountered at installation sites should be reported by Regional Database Supervisors to the MGB to serve as basis for formulating plans and actions to anticipate similar problems likely to be encountered by other sites.

7.5 Training of System Managers and Operators

As part of the strategy to make the MTS sustainable in the long term, the MGB or MGDS Directors should initiate and organize the conduct of training of selected members of the staff from their offices to produce a pool of trained personnel qualified to manage and operate the system in case of resignation, long periods of absences or inavailability of existing system managers and operators. In their order of importance, selection criteria should be based on the commitment of the individual to accept responsibility as a system manager or operator, computer programming background (for system managers), knowledge about mine titling administrative procedures and an acceptable level of aptitude.

7.6 Enhancement and Modification of the System

Administrative processes or demands for specific information from the MTS may change through the passage of time due to new laws or policies and the desire for procedural improvements from both management and users. Should the MGB and MGDS Directors perceived the relevance of such change(s), a systematic and uniform procedure to incorporate the change(s) in the MTS should be followed.

Proposal(s) for MTS modification(s)/upgrade(s) should be prepared containing the following minimum information:

- a) Title of Proposed Amendment
- b) Purpose of the Amendment
- c) Details of the Amendment
- d) Perceived Benefits of the Amendment

Said proposal(s) should be forwarded to the MGB Director who shall cause the assessment of the proposed change(s) by the national system managers in consultation with the macro-regional centers and other authorities to evaluate its feasibility and implications. If merit for such modification(s)/ upgrade(s) could be established, a recommendation for undertaking the amendment together with a detailed proposal shall be submitted for approval of the MGB Director.

Formal analysis, design and construction of the revised or modified system shall be carried out at the MGB and/or MGDS. The reliability or accuracy of the modified system shall be tested using the existing data prior to implementation at MTS installation sites. Corresponding revisions to the User's and technical Manuals shall be prepared by MGB with the assistance of macro-regional centers.

7.7 System Monitoring

All MTS installation sites (MGDS and MGB) shall submit reports required by the MGB Director in order to effectively monitor, identify problems and evaluate performance of the Mining Titles System for the purpose of improving and refining its current version.

Section 8. Effectivity. This Order shall take effect immediately.

ANGEL C. ALCALA Secretary

Recommended by:

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