



Exploration on Informationization of Central Financial Special Project Declaration

Peng Luan, Gang Li*

Chinese Academy of Natural Resources Economics, Beijing, China

E-mail: pluan@canre.org.cn

*Corresponding Author E-mail:lg5791285@163.com

Abstract. In order to implement the priority strategy of resource conservation, accelerate the improvement of resource utilization efficiency and resource security capacity, approved by the State Council, the development of mineral resources conservation and comprehensive utilization of special, encourage and support the rational development and comprehensive utilization of mineral resources by mining enterprises. In order to improve the efficiency of the application, preliminary examination and review of mineral resources conservation and comprehensive utilization of special projects, and standardize the review process, the informationization of mineral resources conservation and comprehensive utilization of special project declaration was carried out by relying on the network to realize data collection, transmission, review and summary, and provide basic information and data for the establishment of mineral resources conservation and comprehensive utilization database.

Keywords: Keywords-financial special, mineral resources conservation and comprehensive utilization, informationization, project declaration

1 Introduction

China has always adhered to the basic state policy of resource conservation and environmental protection, and the development of mineral resources conservation and comprehensive utilization is not only an important measure to implement this state policy, but also an inevitable requirement to change the way of mineral resources utilization and the development mode of China's mining industry, improve the level of resource development and utilization and comprehensive utilization efficiency, and ease the pressure on resources [1]. It is also an inevitable requirement to transform the way of using mineral resources and the development mode of China's mining industry, improve the level of resource development and utilization and comprehensive utilization efficiency, and ease the pressure on resources [2]. Approved by the State Council, in 2010 the Ministry of Land and Resources, together with the Ministry of Finance, set up a special mineral resources conservation and comprehensive utilization, taking the form of "subsidies in lieu of awards" and demonstration projects to encourage and support

the rational development and comprehensive use of mineral resources in mining enterprises, and constantly improve the level of mineral resources development and utilization, and promote the development of recycling in the field of mineral resources. Economic Development [3]. Based on Browser/Server (B/S), this paper designs mineral resources protection and comprehensive utilization special projects declaration system (hereinafter referred to as the declaration system), which can improve the efficiency of the special application, preliminary examination and examination of the conservation and comprehensive utilization of mineral resources, and standardize the examination process.

2 Declaration System Process

In order to regulate the management of special projects and funds for mineral resources conservation and comprehensive utilization, the Ministry of Land and Resources has successively issued a series of relevant systems such as "Measures for the Management of Special Work for Mineral Resources Conservation and Comprehensive Utilization" and "Measures for the Management of Special Funds for Mineral Resources Conservation and Comprehensive Utilization" [4]. This paper sets up the system declaration process based on the above documents and systems, mainly divided into three types of users for mining enterprises, provincial competent departments and the Ministry of Land and Resources.

2.1 Abbreviations and Acronyms

The first step is to log in or register, the first time a mining enterprise logs into the declaration system, you need to register. The second step is to fill in the basic information of mining enterprises, mining enterprise users need to fill in the basic information of the declaration of mineral resources conservation and comprehensive utilization of enterprises. The third step is to fill in the mineral resources conservation and comprehensive utilization of "subsidies in lieu of awards" special declaration materials, you need to fill in the mineral resources conservation and comprehensive utilization of "subsidies in lieu of awards" to apply for the basic information of the mine table, income increment calculation table and project investment audit table. The fourth step is to submit to the provincial authorities for review and demonstration, according to the type of enterprise and enterprise registration to submit the report, the mining enterprise users in filling out the special declaration materials, according to the declaration channel, select the provincial authorities and submit the review and demonstration. The fifth step is the provincial authorities to review and prove the passage of the business users to download the relevant forms.

2.2 The provincial authorities user management process

Provincial authorities include provincial land resource management departments, land resource management departments of cities listed in the plan, central departments and

central enterprises. The first step is to log in or register, the provincial competent department users need to register for the first time to log in the reporting system, and each provincial competent department has two user accounts: the liaison officer and the management of "incentive funds in lieu of subsidies", the former has full authority, after the declaration materials submitted by the mining enterprises pass the examination and demonstration, the liaison officer is responsible for submitting. The latter has partial authority to edit the review opinions or review argumentation of the project elements of "subsidies in lieu of prizes", without the function of submitting to the Ministry of Land and Resources for review. The second step is to wait for the Ministry of Land and Resources to review the user information. After the provincial authorities register for the first time, they need to wait for the Ministry of Land and Resources to review. The third step is to review or issue review and justification opinions on the declaration materials. After the user information of the provincial competent department passes the review of the Ministry of Land and Resources, it will review or issue review and justification opinions on the special declaration materials submitted by the users of mining enterprises. The fourth step is to compile a summary of special funding applications, after completing the review and justification of all project declaration materials in this competent department, compile a summary of special funding applications. The fifth step is to submit to the relevant departments of the Ministry of Land and Resources for review. The competent departments at the provincial level will submit to the relevant departments of the Ministry of Land and Resources for review after compiling the summary table of special fund applications.

2.3 Ministry of Land and Resources user management process

The first step is to log in. Ministry of Land and Resources users need to log in to the declaration system through the network. The second step is to review and manage the users of provincial departments. The users of provincial departments include provincial departments of land resource management, departments of land resource management of cities listed in the plan, central departments and central enterprises. The third step is to issue audit opinions on the project declaration elements and declaration materials. The user of the Ministry of Land and Resources issues audit opinions on the declaration materials submitted by the provincial competent departments and fills in the declaration elements and declaration materials audit form.

3 System design

3.1 Overall functional design

Net Framework4.0, ASP.NET MVC development method, the key technologies used are the latest technologies of Microsoft web-oriented development. NET Entities Model, AJAX, MSDTC and other key technologies. The overall function of the declaration system is divided into five parts, which are "Award for Subsidy", "Demonstration Project", process management, user management, system management, etc. Each part covers different functions, which is divided into three major functions in terms of content

[5], one is Mining enterprise declaration function, including mining enterprise registration function, basic information and special reporting materials to fill out the function and achieve the filing function. The second is the approval function of the competent department, serving the provincial land resource management department, the Ministry of Land and Resources for the approval of special projects, including the online browsing function of enterprise declaration materials, the organization of experts to edit the evaluation function and the step-by-step reporting for the record function. Third is the information (resource) management function, which manages important information in the system, such as project management information, basic enterprise information, expert database information, etc. Its functions include statistical analysis of project information, basic enterprise information, etc.

3.2 System user and role design

The users of the system involve mining enterprises, provincial land resource management departments, the Ministry of Land and Resources, etc. First, the mining enterprises declaring mineral resources conservation and comprehensive utilization special projects are the basic users, who can edit and browse and export their enterprises' filing information through the system, and cannot modify the information after submission; second, the competent provincial departments (including provincial land resource management departments, single-tier city land resource management departments, central departments and The Ministry of Land and Resources, which can browse the declaration materials of enterprises in this province (region and city), convert and export data, fill in the review of the elements and review and justification opinions, and cannot modify the declaration information of enterprises; if the enterprises are not qualified after submission and need to modify the declaration information, the provincial authorities can return the declaration information submitted by enterprises; thirdly, the Ministry of Land and Resources, which can browse the declaration materials of all enterprises and the provincial authorities' elements review and review and validation opinions, perform data conversion output, responsible for compliance review of the declared materials, review and summarize the results of review and validation, and fill in the review opinions of the declared materials. Different roles are designed according to different users, and different roles have different permissions and play different roles [6], as shown in Table 1.

Table 1. Table of user roles and permissions

NO.	Character Name	Permissions
1	Mining companies	After the application is approved, the user fills in the information, submits it, and generates the report.
2	Provincial authorities user liaison	After passing the preliminary examination, it is responsible for submitting to the relevant departments of the Ministry of Land and Resources for review.

3	Provincial authorities incentive funds management users	With partial authority. Can be edited on the initial review of the incentive funds project comments or review of the main points, the demonstration project can only be viewed.
4	Provincial authorities demonstration project management users	With partial authority. You can edit the initial review of the demonstration project or the review of the main points, the incentive funds project can only be viewed.
5	DHS Users	Management of the provincial authorities user audit, the project declaration elements and declaration materials issued by the audit opinion.
6	System Administrator	System initialization settings, full access to system operations.

3.3 Database structure design

The database is based on Microsoft Sql server 2008 R2 database and the tables are designed to meet the third paradigm requirements to ensure correct data storage and operational efficiency. There are altogether 26 tables in the system database. The following is only the information table of common and associated mineral species for example, as shown in Table 2.

Table 2. The information table of common and associated mineral species

Name	Field meaning	Data type	Length	Primary key/foreign key	The default value
Id	Create common and associated ore information id	int	4	Y	NOT NULL
BasicInformationId	ID of the basic enterprise information	nvarchar	50	[EnterpriseBasicInformation] .[CreatUserId]	NULL
GBSKMC	Name of common and associated ore	nvarchar	30		NULL
YKZPW	Grade of original ore	nvarchar	20		NULL
TMCL	Proven reserves	decimal	(18, 2)		NULL
KCCL	Recoverable reserves	decimal	(18, 2)		NULL
BYCL	Reserves	decimal	(18, 2)		NULL

4 System main function implementation

The system is designed based on the Internet and Microsoft's new generation of service-oriented technology development. The login interface is shown in Figure 1, and the specific operations vary greatly by user type.

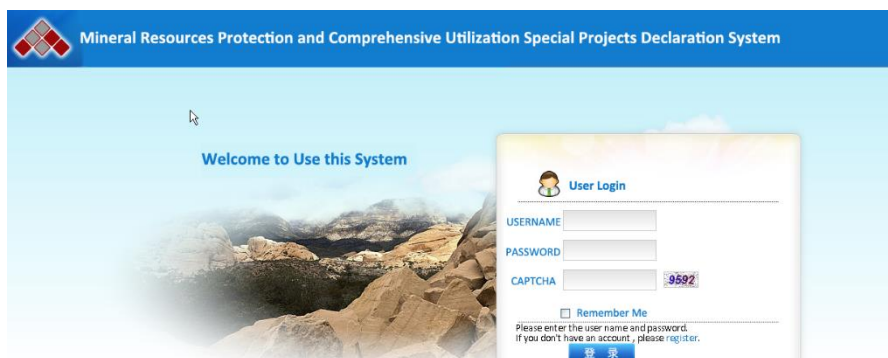


Fig. 1. System login screen

4.1 Mining enterprise user main function operation

First, fill in the basic information function of mining enterprises. In the enterprise basic information editing interface, as shown in Figure 2, the enterprise basic information form has more content, need to fill in the enterprise according to their own situation, in filling in the "enterprise type", there are two types of central departments (enterprises) and local enterprises, the content filled in has a direct relationship with the declaration of the enterprise reporting materials, if you choose If you choose the "central" option, that the declaration channel is the central department (enterprise); if you choose the "local" option, that the declaration channel is the provincial department of land and resource management or plan to single-listed cities.

Enterprise basic information editing

Company Profile	
Name of mining enterprise	<input type="text"/>
Contact number	<input type="text"/>
Address of correspondence	<input type="text"/>
Postal Code	<input type="text"/>
Enterprise economic type classification	<input type="text" value="Please select"/> <input type="button" value="v"/>
Type of enterprise economy	<input type="text" value="Please select"/> <input type="button" value="v"/>
Code of organization	<input type="text"/>
Type of Enterprise	<input type="text" value="Please select"/> <input type="button" value="v"/>
Type of the place where a local enterprise is registered	<input type="text" value="Please select"/> <input type="button" value="v"/>
Place of registration of enterprise	<input type="text" value="Please select"/> <input type="button" value="v"/>
Independent legal person or not	<input type="radio"/> Yes <input type="radio"/> No
Competent authorities	<input type="text"/>
Basic Information	
Annual sales revenue (ten thousand Yuan)	<input type="text"/>
Type of ore	<input type="text"/>
Genetic type of deposit	<input type="text"/>

Fig. 2. Basic information editing interface of mining enterprises

Second, fill in the special reporting materials function. In the application for mineral resources conservation and comprehensive utilization of "subsidies in lieu of awards" application mine basic information form interface, fill in the relevant information, if there are more than one mine, you can continue to fill in the reporting materials interface click the "Add" button to complete. Fill in the "mine location" option to note that the province filled in the province where the mine is located. Mining enterprises in the completion and submission of declaration materials, the system automatically submits the declaration materials to the provincial land resource management department where the mine is located for review of the elements.

4.2 The main functions of the provincial authorities user operations

First, the provincial authorities to review and validate the enterprise declaration materials. Provincial authorities can view the information of mining enterprises that can be reviewed and validated by provincial authorities, if the declaration materials of mining enterprises have been reviewed and validated, the information of "Passed" or "Failed" will be displayed under the corresponding "Provincial Review Results". Failed" information, if not yet reviewed and proved, it shows "unknown" information under the corresponding "provincial evaluation results". If the declaration material is not qualified, the provincial authority user can click the "Reject" button to enter the rejection interface. Click the "OK" button, you can reject the mining enterprise declaration materials, mining enterprises can modify the declaration materials, submit again and other actions. In the expert scoring and review and demonstration opinion editing interface, you can edit the technical experts' review and demonstration opinion, economic experts' review and demonstration opinion, the signature of the expert team leader, the opinion of the land and resources department, the opinion of the financial department and other information. For the review result, there are two options, one is "pass" and the other is "fail", the review result is "pass", the declaration material will be submitted to the Ministry of Land and Resources after submission.

Second, submit to the Ministry of Land and Resources for review. After the provincial authorities have compiled the summary of special fund applications, they can submit them to the relevant departments of the Ministry of Land and Resources for review. In the work status interface, as shown in Figure 3, the work status is stage 3, click "submit to the Ministry of Land and Resources" button, showing "provincial review and demonstration units can only be submitted once, and submit all the review and demonstration results, the review and demonstration results will not be changed after submission. " Message prompt. After completing the submission, the work status is stage 4, the review and demonstration results have been submitted to the Ministry of Land and Resources, the provincial authorities can only view the mining enterprises to declare the material review and demonstration opinions, can not edit. But the ability to review the work of the main elements. If the user of the provincial authority finds that there are problems with the materials submitted to the Ministry of Land and Resources, please contact the user of the Ministry of Land and Resources in time. The user of the Ministry of Land and Resources can reject the materials submitted by the provincial

authority, at this time, the provincial authority can not only view the review and demonstration opinions, but also re-edit the review and demonstration opinions, and can submit them to the Ministry of Land and Resources again after modification.



Fig. 3. Provincial user work status (stage 3) interface

4.3 The main functions of Ministry of Land and Resources user operations

First, ministry of Land and Resources users audit provincial users. In the user audit interface, select "To be processed" for the "Whether to process" drop-down menu option and "Provincial user" for the "User type" drop-down menu. Then click the "Query" button to enter the audit provincial user interface. If there are un-audited provincial users, select the "Pass" button or "Fail" button to complete the audit of provincial users.

Second, the user of the Ministry of Land and Resources will review the special declaration materials. In the special audit interface, select a provincial evaluation unit, click query, the interface will appear "summary table" button and "reject" button. Click the "Summary Table" button to download the summary table. By clicking the "Reject" button, the user of the Ministry of Land and Resources can reject the materials submitted by the provincial authorities. At this time, the provincial authorities can not only view the review and demonstration opinions, but also re-edit the review and demonstration opinions.

5 Conclusions

The declaration system is based on B/S (Browser/Server) structure, no software program needs to be installed, the user is through the browser interface to achieve the online declaration process. The declaration system is in strict compliance with the requirements of the management specification of mineral resources conservation and

comprehensive utilization, which not only provides the functions of collecting, browsing, querying and standardizing report output of special declaration information, but also sets up the management modes of mining enterprises, provincial land resource management departments and Ministry of Land and Resources users according to the management needs, making a set of software that can be applied in units at all levels, effectively improving the software Utilization efficiency, based on the basic information of mining enterprises filled in by enterprise users and the review and demonstration information of provincial evaluation units to form a complete basic database of special declarations, has laid a reliable foundation for the scientific analysis management and decision making level improvement of relevant management departments of the Ministry of Land and Resources.

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