

## **LOW AND MEDIUM LEVEL RADIOACTIVE WASTE REPOSITORY: THE ACCESS TO INFORMATION**

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### **ABSTRACT**

The technological option for the nuclear energy and the society welfare must be carried on together. Access to qualified information should be allowed to the ones responsible for the preparation of material related to the project as well as to all the interested parties involved. The aim of this paper is to give some guidelines to be followed during the project implementation to guarantee this access. Complete information should be available to those involved in the project in a common database, a virtual library, where every document might be obtained. Information should be updated continuously, allowing access, through reliable search and storage tools. Every step of the project development should be well documented containing data and any eventual modification. To guarantee an open and participative conduction of the Project, several tools might be employed, according to the development of the project. Some of the suggested strategies refer to: informative and educational materials production; public consulting; interaction groups; meetings with people - mainly residents or inhabitants and specialists and stakeholders. The criteria to identify information to be released should be: novelty, impact and public interest. The rule should be to give information to all interested ones, avoiding hidden intentions. The strategy should be elaborated according to the local inhabitant's profile. Communication should be mainly done in a personal way. The responsibility for providing the information should be under an Informative Committee created specifically for communication of the project, supervised by the General Coordination and the Technical Committees.

### **1. INTRODUCTION**

Access to information is a key component to have the transparency needed for the credibility of the project and of the organizations involved. The purpose should be to offer adequate information to all the interested parties, employing appropriated media and professionals prepared to address the information according to the specific requirements.

The responsibility for providing the information should be under an Informative Committee created specifically for communication of the project, supervised by the General Coordination and the Technical Committees. The Informative Committee should be composed of a sufficient number of qualified individuals.

Establishing direct contacts with the public is a good communication strategy: interviews, opinion surveys, meetings, workshops. It is important to have trained technical leaders who can interact as the spokespersons, according to the specific public and situation. They should be well prepared, concerning the information to be given. Information given by different spokespersons should be consistent [1,2].

Advice from communication specialists is fundamental along the development of the project. Specialists from marketing, public opinion surveys, risk perception, besides journalists and technical staff are needed.

Those involved in the meetings should be motivated and have information about the project. They should have previous training to get self-confidence and pass trustfulness concerning the requested information.

## **2. INFORMATION TO BE AVAILABLE**

Information should be available to the interested parties, including those defining policies and strategies, as well as the evaluation criteria and the financial conditions. Agreements and contracts should be released. Exception should be made to legally protected information or to avoid that non confirmed information might generate speculative behavior [1,2].

The criteria to identify information to be released should be: novelty, impact and public interest. The rule should be to give information to all interested ones, avoiding hidden intentions.

Information concerning the repository implantation and operation should be considered relevant to all the interested parties. Health, environment, economical impacts and collective security are some of the main questions.

Complete information should be available to those involved in the project in a common database, a virtual library, where every document might be obtained. Information should be continuously updated, allowing access through reliable search and storage tools. A directory containing the names of those involved in the project, working on public information should be available. Additional resources, such as discussion lists, real time chats, improving communication among those involved in the technical aspects should also be employed. Every step of the project development should be well documented containing data and any eventual modification.

Some topics to be discussed include biological radiation effects and health risks from a nuclear waste disposal. Biologists, physicians and health professionals may explain questions concerning the impacts on the ecosystem and on the local population. Some professionals from the repository operation should be trained to answer questions about the project, but professionals from other institutions should also be indicated to give legitimacy to the proposal.

The project database should provide all information relative to the project. For example, during the licensing, the geological and geophysical data, besides data concerning the pre-operational development period should be available; in the operational stage, data from environmental monitoring should also be available. All these aspects should be defined in a detailed way before the project is started, indicating how the information will be accessed and who will be responsible for it.

### 3. WAYS TO MAKE THE INFORMATION AVAILABLE

Local population characteristics and adequate language are important when making the information available. Cultural and educational level should be considered to choose the communication media and the strategies to be followed. Each period and the corresponding target group must be correctly identified. Internet and other electronic media should be considered as potential tools for messages and information dissemination about specific topics.

To guarantee an open and participative conduction of the project, several tools might be employed, according to the development of the project. Some of the suggested strategies are [1-3]:

- Informative and educational materials production: distribution of folders, newsletters, displays, films, announcements, internet, conventional media, etc;
- Public consulting: opinion surveys, inquiry by phone, interviews, etc;
- Interaction groups (specialists and local public): discussion panels, iterative panels, agreement meetings;
- Meetings with people (mainly residents or inhabitants): round tables with the local councillors, local residents and local NGOs; formation of local committees, workshops;
- Meetings with people (specialists and stakeholders): workshops, mapping, electronic messages;
- Already existing process might contribute to the local process discussions – Agenda 21, Sustainable Development Committees, network community planning, debates forum.

Other channels would be distribution of easy to understand and visually interesting informative materials, facility visits video films, etc.

The way mass media will give updated information about the project to the population should be strictly defined and followed.

It is also needed to keep the interested parties informed on the existing mechanisms to address any complains concerning the project in local and national level and to get the solutions for them. All of the possible mechanisms should be employed: letter, email, phone calls, personal contact, etc. One possibility is the creation of a technical office or an information center in the location. It is important to assure that the regulatory agency is taking care of all the requirements needed for the installation. The manager and regulatory agency responsible for licensing and technical control of the project should be accessible and give the confidence needed to the project.

It is important not only to give access to the information, but to give enough time for them to be processed by the interested parties. The informative material must be clear, precise, containing objective messages and avoiding doubtfulness. It should be available anytime, most probably in a permanent information center located in the siting area.

The timing involved in the access to information process is very sensible and varies according to the stage of the project. The timeline of the project development, continuously updated, should be easily accessible.

Several points of access to the information should be installed, mainly in the region of the repository siting. The information centers should have multimedia features. Kits for teachers and students, delivered on demand should be available. The virtual libraries are another interesting option, allowing unrestricted access to information. Location of these points will depend on the location characteristics – public buildings, terminal bus station, are some examples. It should be kept in mind that local population concentration points are good places to be used.

Public meetings are an important tool for discussion of problems related to the project affecting the local community. The time delay between these meetings and the decision making should be enough to assure that the public suggestions may be considered. Depending on the stage of the project development this time delay may be longer or shorter. The important thing is not to quantify the time interval but to verify the feedback from each leading action – to follow the after public meeting happening, for example. All the meetings should be registered.

#### **4. REACHING THE TARGET GROUP**

Information should be available to the local residents – radio, newspapers, brochures and leaflets, employing language adequate to the local population. Special attention should be given to choose the more convenient communication media, taking into account the population characteristics, like educational and cultural level. The strategy should be elaborated according to the local inhabitant's profile. Communication should be mainly done in a personal way. Each step of the project should be evaluated considering the public to be reached [1,2].

The best ways to define the strategies to reach the target group are the knowledge of the local population profile: their habits, traditions and lifestyle.

It is important to provide access to information for study and analyses by independent agents. It is also essential the regulatory agency action to assure credibility to the project, by giving their approval to the technical work. The local follow-up should be continuous and well coordinated. The academic community participation should be encouraged, making the repository an object of study, in its different aspects. Permanent visiting programs and interchange with other research and education institutions should also be stimulated. Adequate material should be provided for teachers and students, for the different educational levels. Training courses about waste radioactive repository should be organized for the teachers. This kind of work will guarantee the continuity and longevity of the project. Partnership with education offices and NGOs are equally important.

#### **5. INFORMATION MANAGEMENT**

Information management should be proactive whenever possible. A media observatory, for example, might be a useful tool to provide prompt answers to the questioning from the community or the press.

To assure that information requested or any complains relative to the project will have immediate analyses, it is crucial the verification concerning their origin and, when it is the

case, to have their demands cared for. A data book should be kept registering all the specific demands and how they were solved. It is important to keep an open communication channel between the area receiving the complaints and people from the executive area, allowing agility in the process of communication, perception and action. None of the involved parties should feel left out of the decision process [1,2].

Creation of a committee formed by local community representatives and members from the repository coordination is a suggestion to guarantee more transparency to the process. This committee might include members from the Public Ministry and from the regulatory agencies (Ibama – Brazilian Environment Institute, Health and Transport Ministry, for example). A similar committee was created in United Kingdom, but composed mainly of technical personnel. In the Brazilian project it would work as an external control, bringing also representatives from other institutions to evidence the seriousness of the project [1].

Surveys should be made to evaluate the comprehension level from the interested parties after the access to information process was started. People directly involved in the project should live nearby the siting location in order get the feedback from the population and to intercede whenever needed. Some direct evaluation should also be made to measure the knowledge level from the local population. These surveys help as direct measurement tools for the project development [3].

## 6. CONCLUSIONS

As it is known that “the greater the level of knowledge, the more favorable the opinion that citizens have on nuclear energy“ [4] it is highly recommended that the public information programs should begin as early as possible taking into account sociopolitical issues. A good understanding of the project is needed to efficiently involve the public to the decisional process.

Some hints to improve the access to the information process are summarized as follows:

- Criteria to identify information to be released
- Knowing the target group – local population
- Meetings with public, specialists and stakeholders
- Distribution of easy to understand and visually interesting informative and educational materials.
- Common database with updated information
- Information management committee

Finally, more important than the available information is the credibility shown during the project development.

## REFERENCES

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