NUCLEAR REGULATORY AUTHORITY

Licensing Procedures

The procedures for an authorization application should include the following:

1. An Applicant files, with the Director General of the Nuclear Regulatory Authority, his/her notification of intent to apply for a facility license.

2. The Applicant then should file an application with the National Regulatory Authority.

3. The license application should be determined to be complete when the Authority finds that all information required has been submitted and any additional requirements have been satisfied.

4. The Authority may deny a facility license if the person fails or refuses to correct deficiencies in the application within 30 days after notification of such a deficiency by the Authority. Such summary denial should be accompanied by an explanation of the reasons for the denial.

5. The Authority should set a decision schedule, for each complete application, setting forth the date by which it intends to prepare a provisional license or provisional denial and to issue a final license decision. The Authority should adhere to such decision schedule unless it finds that an extension of the schedule, not to exceed 90 days, is necessary to protect public health or the environment, in which case the Authority must adhere to such decision schedule as extended.

6. The Authority should give notice of the commencement of the public comment period by mail to the person, and by publication in a daily or weekly newspaper of general circulation by broadcasting on radio stations serving such community.

7. The public comment period should continue for 45 days after the issuance of a provisional license or provisional denial. The Authority should extend the public

comment period if it issues a modified provisional license until 45 days after the issuance of such a modified provisional license.

8. Anyone may submit comments to the Authority during the comment period. The Authority should make copies of all comments received available to persons upon request.

9. The Authority should conduct at least one public meeting on the license application within the site community and other public meetings in neighboring communities.

10. The Authority should, prepare a provisional license. The provisional license should include facility design and performance specifications and all conditions required to operate the facility.

11. A copy of the provisional license should be sent to the Licensee and it should be accompanied by an explanation of the reasons therefore and a description of the procedures to be followed in reaching a final license decision

12. The Authority should send a copy of the final facility license decision to the Licensee. Such final decision should be accompanied by a summary response to comments received during the public comment period and an explanation of the reasons for any difference between the provisional license or denial and the final license decision.

Content of Application

An application for a facility license should include the general information, specific technical information, financial information, and the results of preoperational environmental monitoring report.

1. General Information Required

A. The general information should include each of the following:

a. Identity of the Potential Licensee including:
   i. The full name address, telephone numbers and description of the business or occupation of the Potential Licensee;
   ii. If the Potential Licensee is a partnership, the name and address of each partner and the principal location where the partnership does business.
   iii. If the Potential Licensee is a corporation or an unincorporated association:
      - The country where it is incorporated or organized and the principal location where it does business and
      - The names and addresses of its directors and principal officers;

b. If the Potential Licensee is acting as an agent or representative of another person in filing the application, all information required under **1. A.a-c**, must be supplied with respect to the other person.

B. Qualifications of the Potential Licensee:

a. The organizational structure of the Potential Licensee, both offsite and onsite, including a description of lines of authority, key positions and assignments or responsibilities, whether in the form of administrative directives, contract provisions, or otherwise. The Potential Licensee should, at any time during licensing, development, operation, closure, post-closure observation and maintenance or institutional control of the facility, immediately notify the Authority of any significant change in its organizational structure information;

b. The technical qualifications, including training and experience, of the Potential Licensee and members of the Potential Licensee's staff to engage in the proposed activities. Minimum training and experience requirements for personnel filling key positions must be provided. The Potential Licensee should, at any time during licensing, development, operation, closure, post-closure observation and maintenance or institutional control of the facility, immediately notify the Authority of any significant change in its technical qualifications information;

c. A description of the Potential Licensee's personnel training program; and,

d. A plan to maintain an adequate complement of trained personnel to carry out waste receipt, handling, treatment, storage, and disposal operations in a safe manner.

C. A description of the following:

a. The location of the proposed facility;
b. The general character of the proposed activities;
c. The types and quantities of waste to be treated, stored, and/or disposed of; and
d. The proposed facility and equipment.
e. Proposed schedules for construction, receipt of waste, treatment and storage of waste, and first emplacement of waste at the proposed facility.

D. The applicant should prepare, and submit as part of the application, a Safety Case (SC).

The applicant should provide the description of codes or software used in the development of Safety Assessment (SA)

2. Specific Technical Information Required

The specific technical information should include the following:

A. At the time a license application is submitted, the Potential Licensee should present the results of preoperational environmental monitoring conducted to provide basic environmental data on the facility and site characteristics. The Potential Licensee should include information about the ecology, meteorology, climate, hydrology, geology including geophysics and geotechnical engineering, geochemistry, seismology, and radiologic characteristics of the site and all other relevant information required and necessary to demonstrate the suitability of the site for the intended use.

B. For those characteristics that are subject to seasonal variation, any data collected by the Potential Licensee, together with data from the detailed site characterization conducted, should cover a period of at least 12 consecutive months.

C. The Potential Licensee should continue the preoperational environmental monitoring program through the Authority's license review period.

D. An identification of any known natural resources, the exploitation of which could result in inadvertent intrusion upon the site.

E. A description of the design features of the facility, its waste management areas and any disposal units including, in particular, design features or other provisions for normal and abnormal or accident conditions. The description should include those design features related to the following:

- Prevention or minimization of infiltration by water, plants, and animals;
- Water management features for water that may enter any disposal units or other waste management areas;
- Integrity and stability of engineered barriers;
- Stability of intruder barriers surrounding wastes;
- Facility drainage;
- Adequacy of the size of the buffer zone;
- Monitoring;
- Retrievability;
- Occupational exposures;
- Facility closure;
- Minimization to the extent practicable of long term active maintenance; and,
- Protection from inadvertent intrusion.
- Institutional control measures

D. A description of the relationship of the principal design features of the facility to the performance, the natural site characteristics and natural events or phenomena

associated with the site.

E. A description of codes and standards which the Potential Licensee has applied to the design and which will apply to construction of waste management areas and any disposal units. Such standards should meet the national building code standards.

F. A description of the construction and operation of the facility, its waste management areas and any disposal units. The description should include as a minimum the following:

- Methods of constructing any disposal units;
- Types of intruder barriers and onsite traffic controls;
- Methods and areas of waste treatment and storage;
- Drainage systems to control surface water or groundwater access to the wastes;
- Potential Licensee's environmental monitoring and surveillance;
- Receipt and handling of waste and inspection of waste and package integrity;
- Procedures for and areas of waste segregation;
- Any waste emplacement;
- Worker monitoring and surveillance;
- Survey control program; and,
- Methods to be employed in the handling and any disposal of wastes containing chelating agents or other non-radiological substances that might affect meeting the performance objectives.

G. A description of the kind, amount, classification and specifications of waste proposed to be treated, stored or disposed of at the facility and a description of total facility design capacity and facility expected operating life.

H. A description of the quality assurance program for the determination of natural site characteristics and for quality assurance during the design, construction, operation, and closure of the facility including, in particular, the receipt, handling, and emplacement of waste. Audits and managerial controls must be included.

I. A description of the radiation safety program for control of radioactive effluents to ensure compliance with the performance objective; for control of occupational radiation exposure to ensure compliance and for control of contamination of personnel, vehicles, equipment, buildings, and the facility. Both routine operations and accidents should be addressed. The program description must include procedures, instrumentation, facilities, and equipment.

J. A description of the Potential Licensee's environmental monitoring and the Potential Licensee's plans for taking remedial measures when necessary.

K. A description of the administrative procedures that the Potential Licensee will apply to control activities at the facility.

L. A description of the plan for facility closure and post closure observation and maintenance including those design features intended to facilitate facility closure and to minimize the need for long term active maintenance. Such plan should include:

a. A description of the relationship between individual waste containers (or disposal units, in the case of a disposal facility) and final closure;
b. Procedures to be implemented to ensure that any disposal units at a facility will not be adversely affected after closure.

M. A description of the waste containment within any disposal units as it applies to the design objective to provide total containment of wastes within disposal units.

N. A description of the circumstances under which retrieval of waste would be necessary or desirable and the plans and the procedures to be used to effect retrieval. The description should include an analysis of the impacts of waste retrieval on public and the safety and health of workers and the environment.

O. A description of the waste minimization program that would be instituted to reduce the volume and activity of radioactive waste generated at the facility.

P. The specific technical information should also include the following analyses needed

to demonstrate that the performance objectives will be met:

1. Pathways analyzed in demonstrating protection of the general population from releases of radioactivity should include air, soil, groundwater, surface water, plants and animals. The analyses should clearly identify and differentiate between the contributions from the natural site characteristics from those of human induced arising within the facility. The analyses should demonstrate that there is assurance that the exposures to humans from the release of radioactivity will not exceed the recommended dose limits for the public.

2. Analyses of the protection of individuals from inadvertent intrusion should demonstrate that waste classification and segregation requirements will be met and that intruder barriers will be provided

3. Analyses of the protection of individuals during operations should include assessments of expected exposures due to routine operations and potential accidents during handling, treatment, storage, and disposal of waste. The analyses should demonstrate that exposures would be controlled to meet the regulatory requirements of NRA.

4. Analyses of the long term stability of the facility and the need for active long-term institutional control after closure should be based upon analyses of active natural processes (such as, in the case of a disposal facility, erosion, mass wasting, slope failure, settlement of wastes, infiltration through adjacent soils, and surface drainage of the facility). The analyses should demonstrate that there will not be a need for long term active institutional control of the facility following closure.

A. The Potential Licensee should, at any time during licensing, development, operation, closure, post-closure observation and maintenance or institutional control of the facility, immediately notify the Authority of any significant changes in its SC required to be submitted. Such notification should l include a substitute SC, satisfying the requirements and demonstrating that the safety performance objectives are still intact.

3. Financial Information

A. The Potential Licensee should show that he/she either possesses the necessary funds or has reasonable assurance of obtaining the necessary funds, or a combination of the two, to cover the estimated costs of conducting all licensed activities over the planned operating life of the project, including costs of facility development, construction, operation, and closure.

B. The Potential Licensee should provide the Authority with a certification issued by the Bank that the amount expected to be contained in the institutional control account of the Radioactive Waste Trust Fund will be adequate to pay the costs of institutional control of the proposed facility. At any time that the Authority determines, based on changes in inflation, technology of facility operations or other changes that might have significantly altered the factual basis for the certification issued, it should immediately notify the Licensee. Such notification should include any proposal for changes in the schedule of surcharges for the Waste Management Fund.