

FORM I

(See rule 4)
Government of India
Atomic Energy Regulatory Board

Application for Authorisation to Dispose of Radioactive Waste

(This form is meant to assess the suitability of the institution for carrying out waste disposal operations).

1. Name & address of the applicant :
2. (i) Name of the employer:
(ii) Name of the Head of the installation :
3. Department in which the radioactive waste will be disposed of :
4. Name and designation of the Head of the Dept. :
5. Name of the individual who is entrusted with day to day administration of radiation protection in the department (Radiological Safety Officers) :
6. Are the persons doing radiation work members of the personnel monitoring service ? If so, please give details :
7. Give details of the experience, if any, of the staff members in handling radioactive waste in Appendix I. :
8. Give details or particulars of radioactive wastes for which the application is made in Appendix II. :

* Complete address of the installation with Telephone No. (during and outside office hours) and telex number, if any, may please be provided in the space provided below :

9. (a) Please attach to this application the following drawings:-
 - (i) A SITE PLAN of the installation (1:500 scale or as appropriate) of the installation indicating the locations of buildings, producing the radioactive waste and the buildings for its conditioning, packaging and ultimate disposal. Please indicate the points of discharge of radioactive effluents into the environment. Also indicate the nature of occupancies and land utilisation in the neighbourhood of the above buildings and water resources of the above land and their utilisation.
 - (ii) ARCHITECTURAL BLUEPRINTS (1:50 scale or as appropriate) with dimensions of each of the buildings housing the waste producing, conditioning and disposal equipment and systems. Please indicate in the blue prints the nature of work carried out

in each room. Further, please mark clearly the locations of the radioactive waste generating conditioning and packaging equipment and storage facility, work benches, sinks, fumehoods, decontamination equipment, monitoring and surveillance equipment and specify the nature of occupied or other areas around the rooms or in the rooms in question as applicable.

(iii) A drawing showing CONSTRUCTIONAL DETAILS of radioactive waste storage facilities available (e.g. lead container, concrete closest or vaults etc.)

(b) Please provide details of any special ventilation facilities incorporated (such as fumehood, stacks, exhausts, general air inlet and exhaust facilities for the rooms etc.)

(c) Please indicate where —

- (a) the floor areas of the rooms are covered with special material such as linoleum ?
- (b) the workbenches are covered with stainless steel or polythene sheet ?
- (c) the walls are coated with stripable paint or nonporous washable paint ?
- (d) Please state whether —
 - (i) the installations in the plans are to be built;
 - (ii) existing rooms are to be modified as per the plans;
 - (iii) rooms already built and fitted up as per plan.

10. List of equipment available with the department (alongwith their specifications) where the radioactive waste will be handled. Please give details including the numbers of equipment available with you under each category (attach additional sheets if necessary).

(A) Equipment for collection of radioactive wastes (unconditioned);

(B) System for transporting unconditioned waste within the installation;

(C) Equipment for conditioning radioactive waste;

(D) Equipment for transportation of conditioned waste packages;

(E) Equipment for package handling and shipment at repository sites;

(F) Equipment for monitoring and surveillance;

(G) Details of safety devices incorporating in the systems to contain the radioactive effluents and control their releases (Please give their design features, technical specifications and analysis of their behaviour under off normal conditions).

11. Please give a brief description of the proposed procedures for :

(a) Shut down and stabilisation of waste disposal site after intended period of operation.

(b) Observation and maintenance of stabilised disposal site for institutional control.

(c) Provision of funds and financial assets for the above shut down and institutional control for 100 years.

12. Please give details of anticipated accidents and procedures to be followed for their management (attach emergency preparedness plan, if available).
13. Any other relevant information the applicant wishes to furnish in support of his case.
14. I hereby certify that —
- (a) all the statements made above are correct to the best of my knowledge and belief.
 - (b) the radioactive waste will not be disposed off except as specified under paragraph 8 of this form.
 - (c) radioactive waste will not be moved from the authorised place without prior approval of the competent authority.
 - (d) radioactive waste packages will be transported outside the restricted area in duly shielded containers and after obtaining the necessary safe transport certificate from the competent authority.
 - (e) full facilities will be accorded by us to any authorised representative of the competent authority to inspect the department in which the radioactive waste will be handled.
 - (f) radiation monitoring and environmental surveillance shall be provided in the installation and in the restricted areas to ensure adequate protection.
 - (g) the radioactive waste will not be sold, rented or transferred to any other Institution, without prior approval of the competent authority.
 - (h) all recommendations that may be made from time to time by the competent authority in respect of radiation safety measures will be duly implemented.

Date : _____

Signature and Seal of the
Head of the Installation(s)

Place: _____

Appendix I (Form I)

Name of the person	Academic qualification and designation	When and where the radioactive wastes were handled	Type of experience or training
1	2	3	4

Appendix II (Form I)

Name and address of the Department or Laboratory in which the waste originate	Brief description of the process giving rise to the radioactive wastes	Brief description of physical state & chemical characteristics of radioactive waste and name of radionuclides contained in it	Volume of the unconditioned waste and its weight (give separately for liquids, solids etc.)	Description of the conditioning method and details of packaging employed for transportation of the waste	Total Activity of each of the principal radio-nuclides present in the waste package	Weight and volume of the conditioned waste package and total number of packages (of each type)
1	2	3	4	5	6	7

Mode of transport of the waste package to the ultimate disposal site	Method of ultimate disposal of the waste	Name and address of the institution undertaking the ultimate waste disposal	Maximum waste quantity that will be disposed off annually (give separately for each type)	Address & location of the waste repository or burial site	Name and address of the person with whom the ownership title of the land of waste repository or burial rests	Remark (if any)
8	9	10	11	12	13	14