Government of India
Atomic Energy Regulatory Board
Health and Safety Division
Niyamak Bhavan, Anushaktinagar,
Mumbai-400094.

Application for NOC/Type Approval of Medical Radiography/Fluoroscopy/Dental X-ray Equipment

(To be submitted by the manufacturer/assembler to the Chairman, Atomic Energy Regulatory Board, Niyamak Bhavan, Anushaktinagar, Mumbai-400094 with a copy to the Head, Radiological Physics and Advisory Division, Bhabha Atomic Research Centre, CT&CRS Building, Anushaktinagar, Mumbai-400094)

Separate form should be submitted for each type of medical diagnostic x-ray equipment

A. Details of applicant

1. a) Name and address of the applicant/local supplier with PIN code (in block letters)

b) Mode of communication: Telephone with STD code

Telephone																	
Fax																	
Telex																	
Telegram																	
E-Mail																	

2. a) Name and address of the manufacturer with PIN code

b) Mode of communication: Telephone with STD code

Telephone																	
Fax																	
Telex																	
Telegram																	
E-Mail																	

3. Person to be contacted regarding this application

Telephone									

4. Model name and type of equipment which is to be type approved

5. State whether Radiography/Fluoroscopy/Combined/Mobile/Dental/Special

6. This application is for

Type approval/NOC				
Renewal of type approval/NOC		Ref No.:	Date:	Valid till:

7. Place where the unit is to be type tested for type approval

B. Details of equipment specification

1. Name of the model of the unit

2. Type of unit : Radiography/Fluoroscopy/Dental/ Mobile/Portable/Any other (specify)

3. Additional facilities for special examination if any :

4. Maximum rating of the unit

   a) Kilovoltage :
   b) Milliampere :
   c) Exposure time (in seconds)

6. Number of x-ray tubes :

7. Year and country of manufacture of the equipment :

C. Details of x-ray tube

1. Name of manufacturer :

2. Type/Model - S.No. :

3.	Nominal maximum voltage in kV	:	
4.	Nominal continuous current rating in mA	:	
5.	Type of anode	:	Stationary/Rotating
6.	Anode heat capacity (Please enclose cooling curves)	:	
7.	Method of cooling the anode	:	
8.	Target material used and target angle	:	
9.	Number of focal spots, focal spots size and location of focal spot (specify the accuracy of the marking on the tube housing)	:	One/two Small : .....mm x .....mm Large : .....mm x.....mm Accuracy ..... mm
10.	Inherent filtration provided in mm and material used	:	
11.	Year and country of manufacture	:	

D. Details of generator

1.	Nominal voltage	:	
2.	Type of rectification	:	Half wave/Full wave/Multipulse
3.	Mains power requirements	:	

E. Details of x-ray tube housing

1.	Material of x-ray tube housing (shielding) and thickness. If the material used is other than lead, specify its lead equivalence	:	
2.	Leakage radiation from the tube housing (measured at maximum rating and measured values to be averaged over an area of 100 cm^2 at a distance of one metre from the target) for maximum number of radiographs in one hour	:	

F. Details of beam limiting devices and filtration

1.	Type of beam limiting device/ devices used	:	Light beam diaphragm/Cone/ Collimator/any special arrangements
2.	Leakage radiation through beam limiting devices under condition specified in E.2	:	..... μGy/h

3. Light beam and radiation beam congruence (attach a radiograph) : Within .....mm

4. Dimensions of cones provided : Dental/Radiography

5. Filtration provided

   a) Inherent/permanent filtration :

   b) Added filtration :

   c) Total (in mm of Al) :

G. Details of radiation output

1. X-ray beam output in µGy/mAs at 80 kV for 20 x 20 cm^2 field at one metre : ..... µGy/mAs

2. Exposure rate at table top for fluoroscopy for .... kV ..... mA (specify target to table top distance) : ..... µGy/min

3. Exposure rate on the surface of the florescence screen with 30 x 30 x 30 cm^3 water phantom (tissue equivalent phantom) ..... µGy/h

4. Radiation level at diaphragm control knobs for fluoroscopy machines at maximum technique factors with the water phantom : ..... µGy/h

H. Details of fluoroscopy machines

1. Minimum target to table top distance provided : .....cm

2. Lead glass backing of fluorescent screen (lead equivalent in millimetres) :

3. Tube to screen alignment at maximum field and FSD (specify the margin left all around the screen) :

4. Shutter movement mechanism :

5. Type of "ON"-"OFF" switch provided : Continuous/dead man type

6. Lead rubber flaps Size Lead equivalence

   a) Below the screen : ..... X.....cm^2 .....mm

   b) Sides of the screen ..... X.....cm^2 ..... mm

7. Automatic exposure termination device : Yes/No

8.	Material used for table top and aluminium equivalence of table top	:	

I. Details of image intensifier

1.	Image intensifier provided	:	Yes/No
2.	Screen size	:	
3.	High contrast resolution	:	
4.	Low contrast resolution	:	
5.	Functions of ABC	:	
6.	Provision for reading kV, mA and pulse repetition rate	:	

J. Any other relevant information you may like to furnish

K.	Specify the National Standards	:	Bureau of Indian Standards/any other(specify)

I certify that all the information furnished by me is correct to the best of my knowledge and belief.

Place :

Date :

Signature :

Name :

Designation :

(Seal of the institution)