

FANR ADVICE:

USE OF MOBILE MEDICAL X-RAY EQUIPMENT OUTSIDE LICENSED FACILITIES

IMPORTANT:

FANR licensees planning to use mobile medical radiological devices outside authorized facilities **MUST** obtain FANR approval prior to commissioning such equipment.

Licensees **MUST** obtain FANR approval prior to acquisition or temporary possession of medical radiology equipment which is **additional** to their licensed inventory.

Medical facilities currently not licensed by FANR to conduct regulated activities involving radiological equipment classified as regulated material **WILL NOT** be granted approval to commission or operate a diagnostic radiology service outside an authorized medical facility.

FANR APPROVAL:

Use of mobile medical x-ray equipment outside licensed facilities requires FANR approval. In these circumstances, FANR will assess each Licensee application strictly on the basis of justification, whereby the clinical need outweighs the radiological risk to the public, patients and staff.

Emergency situations are an integral part of medical practice and thus, unusual clinical circumstances do not alone, justify deviation from established working protocols and the regulatory requirements for radiation safety and protection of the public, patients and clinical staff, including dose constraints.

FANR may issue approval valid for specific time period based on the application made and justification to use mobile medical x-ray equipment outside licensed facilities to the Licensee that can demonstrate that applicable FANR regulatory requirements can continue to be met. In particular, that worker exposure can be constrained to less than 1 mSv per year, and exposure to all others constrained to 0.1 mSv per year. In so doing, the Licensee must show that the organization and layout of supervised and controlled area ensures radiation safety and protection in accordance with FANR REG 24 and specifically Articles (8-9, 20-22, 24, 29, 32-33).

Medical x-ray equipment installed in a temporary location must not be operated until it can be demonstrated that commissioning quality control (QC) testing, including radiation output, shielding and other safety requirements have been performed and satisfactory results obtained, as specified in FANR REG 24 and specifically Articles (34-39, and 41).

After FANR approval to temporarily operate mobile medical x-ray equipment at a location outside an authorized facility the Licensee shall perform commissioning QC tests.

Immediately upon completion of commissioning QC tests, the Licensee shall submit all QC results to FANR via fanr.licensing@fanr.gov.ae.

The Licensee shall inform FANR no later than *three days* after QC test results have been submitted to FANR, of readiness to commence operation of mobile medical x-ray equipment at an authorized temporary location. Operation of the equipment may not commence until FANR final approval is formally received.

FANR ADVICE ON OFF-SITE LOCATION AND OPERATION OF MOBILE MEDICAL X-RAY FACILITIES:

1. TEMPORARY ENCLOSURE:

Ideally, mobile x-ray equipment to be used temporarily outside an authorized facility should be located in a spacious room of brick or concrete construction with wall, floor and ceiling thicknesses sufficient to attenuate radiation to the greatest extent. However, where this is not available, a tent, vehicle or other temporary enclosure may be utilized, providing the enclosure has at least the following attributes:

- Located within premises of a Licensee authorized by FANR *specifically* to operate radiological equipment in a temporary location.
- Located such that a perimeter of at least 10 metres can be clearly demarcated, within which there are no other buildings or areas where people may be present.
- That the perimeter can be controlled at all times, both during radiological equipment operation and outside machine operating hours.
- Provided with a stable and adequate electrical power supply.
- Installed with air conditioning, both in the radiation area and in associated locations where staff work or patients and the public wait.
- Provided with two changing rooms, equipped with chair, clothes hanger, and mirror.

- That patient waiting areas and reception are at least 10 metres away from the source of ionizing radiation.
- That Licensee staff, workers, patients and others entering the temporary enclosure or its associated facilities can comply with health and safety standards, and the UAE Contagious Disease Center rules.

2. RADIATION PROTECTION:

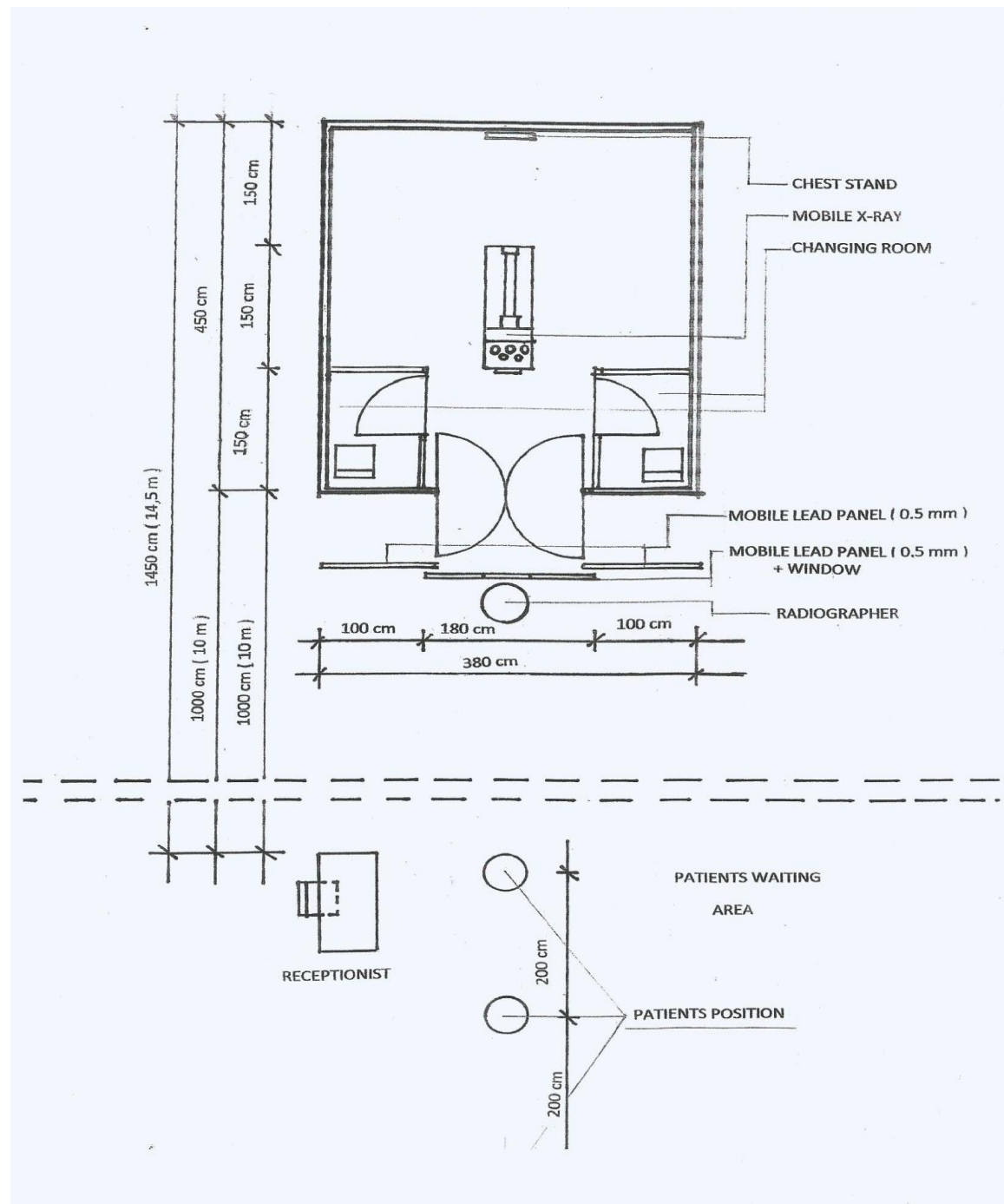
- Only qualified radiographers and radiologists participating in the licensee's individual exposure monitoring programme may operate mobile medical x-ray equipment at an authorized temporary location.
- Mobile medical x-ray equipment at an authorized temporary location will be operated strictly in accordance with established working protocols and the regulatory requirements for radiation safety and protection of the public, patients and clinical staff, including dose constraints.
- Patients must be radiologically examined only according to the instructions of a radiologist, following referral guidelines where these are established and in accordance with regulatory requirements for justification and optimisation of exposure.
- Licensee shall be able to demonstrate the regular and continuous rotation of occupationally exposed staff (radiographers, radiologists, specialist nurses and similar) to limit their exposure to radiation in a working environment not optimized for radiation protection.
- The patients' waiting area shall be as far as is practical from the radiation source and shall be shielded along its length by material demonstrated through approved methods to have the equivalent radiation attenuation of at least 0.5mm lead.
- During exposure radiographers and other staff necessarily present, shall stand behind a 0.5mm lead-equivalent panel which includes a patient observation window also of 0.5mm lead equivalence.
- Before each exposure is made, radiology staff must check that all lead-equivalent panels capable of being moved are in the correct position and if aligned as a single barrier, that they overlap by at least 20 cm.

3. LAYOUT OF A TEMPORARY ENCLOSURE FOR MEDICAL X-RAY PURPOSES:

The following schematic describes organization of an enclosure and surrounding areas temporarily assigned for the purpose of radiologically imaging patients outside a FANR approved facility.

Scheme: Temporary enclosure (such as a tent) and surrounding area installed with mobile medical x-ray equipment.

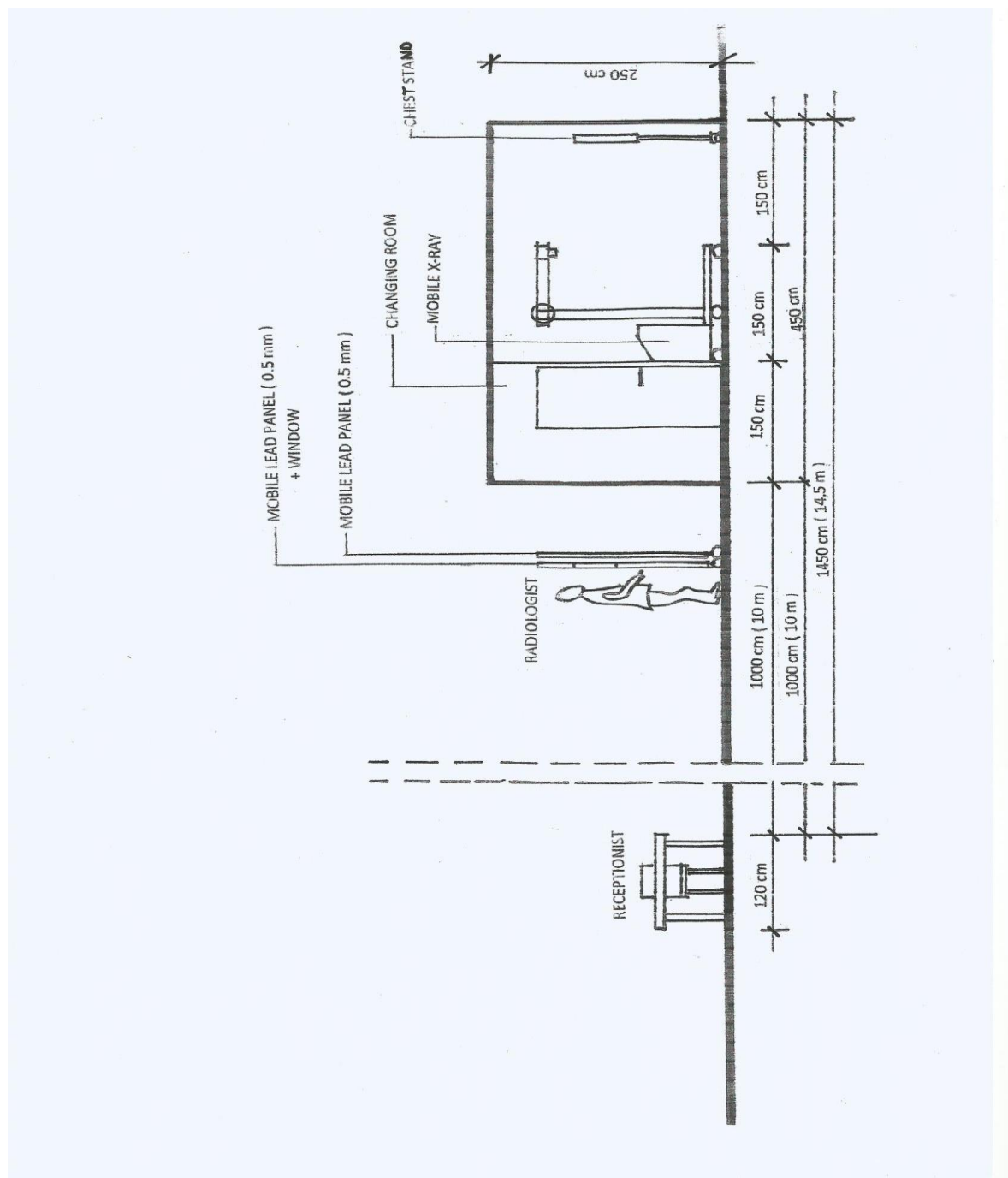
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