U.S. NUCLEAR REGULATORY COMMISSION
REGION I

Report No. 030-19392/93-001

Docket No. 030-19392

License No. 20-20539-01 Priority 4 Category E Program Code 03620

Licensee: Biomeasure, Inc.
27 Maple Street
Milford, Massachusetts 01757-3650

Facility Name: MG Industries

Inspection At: 11-15 "E" Avenue
Hopkinton, Massachusetts 01748

Inspection Conducted: December 6, 1993

Inspectors: Kathleen A. Dolce 1/13/94
Kathleen A. Dolce, Health Physicist date
Nuclear Materials Safety Branch
Division of Radiation Safety and
Safeguards

Approved by: M. Shanbaky 1/13/94
Mohamed M. Shanbaky, Chief date
Research and Development Section
Division of Radiation Safety
and Safeguards

Inspection Summary: Closeout Inspection on December 6, 1993, (Inspection No. 030-19392/93-001).

Areas Inspected: Announced, closeout inspection limited to survey of facility for residual contamination prior to amendment of license and release of facility for unrestricted use. Seventeen wipes were taken and assayed for removable beta activity.

Results: No violations were identified. No removable radioactive contamination was detected. No remaining radioactive material was found. The results of the survey performed by the licensee are documented in the licensee's letter dated May 17, 1993 and reflect the condition of the facility.

DETAILS

1. Persons Contacted

Sylviane Moreau, Radiation Safety Officer
Jim Blye, Manager, MG Industries

2. Background

Licensed material was used at the licensee's facility located at 11-15 "E" Avenue, Hopkinton, Massachusetts. The address has recently changed to 9 Avenue E, but represents the same physical space and building. The building is 15,000 square feet and is constructed of cinder block walls. Two-thirds of the building is warehouse space; the other third is office space. The warehouse section has a 12 foot steel girder ceiling with fluorescent lighting. The warehouse floor is made of concrete with an epoxy finish. The office area has an 8 foot ceiling and is carpeted.

At this location, the licensee was authorized to use tritium, carbon-14, phosphorus-32, calcium-45, chromium-51 and iodine-125 for research and development activities. According to the floor plans submitted by the licensee, radioactive materials were used in the bioanalytical, chromatography HPLC, cell culture, receptor cell biology, molecular biology, biochemistry, organic synthesis, and counting laboratories. Radioactive materials were also used in the surgical suite and animal rooms. Copies of the floor diagrams, submitted by the licensee, are attached (See Attachments 1 and 2). These diagrams identify the location of the above mentioned areas in the facility.

In December 1992 the licensee notified Region I of their intent to move to a new facility. In a letter dated January 26, 1993 the licensee submitted a closeout survey which consisted of 13 wipes. The licensee demolished the interior walls (gutting the facility) and vacated the 11-15 "E" Avenue address because their lease expired. In addition, the licensee capped and sealed all floor drain piping.

Two-thirds of the property is currently vacant. One-third is occupied by MG Industries, a specialty gas products company. MG Industries granted NRC access and approval to survey the facility for residual radioactive contamination.

No safety concerns or items of noncompliance were identified.

3. Survey for Removable Contamination

A wipe survey for removable radioactive contamination was performed. Sixteen wet wipes were taken to detect tritium and carbon-14 contamination. The seventeenth wipe is a background sample. These wipe samples were immediately placed in liquid scintillation vials containing 10 milliliters of de-ionized water. The inspector took wipes on the floor, walls, and sealed floor drain pipes in areas that radioactive materials may have been used or stored by the previous tenant, Biomeasure, Inc. (see Attachment 3 entitled "NRC Numbered Wipe Locations").

The seventeen wipe samples were analyzed in a Packard TriCarb liquid scintillation counter that is calibrated with NIST traceable standards. The lower limit of detection (LLD) is 21 disintegrations per minute (dpm) per wipe for tritium and 10 dpm per wipe for carbon-14. No detectable contamination was identified. The following table provides more detail for each wipe location.

Wipe No.	Wipe Location	H^3 wipe result (dpm)	C^{14} wipe result (dpm)
1	back corner of loading dock (used to be the decay-in-storage area for licensee)	<LLD	<LLD
2-4	from loading dock to office area doorway (used to be organic synthesis laboratory)	<LLD	<LLD
5-7	VACANT AREA: middle portion of building from loading dock area to office area (used to be animal rooms, surgery, biochemistry, molecular biology, and cell culture laboratory)	<LLD	<LLD
8-10	VACANT AREA: middle portion of building from loading dock to entrance way to other portion of the facility (used to be the chromatography laboratory)	<LLD	<LLD
11-13	VACANT AREA: from office area to loading dock (used to be the bioanalytical laboratory)	<LLD	<LLD
14-15	VACANT AREA: from loading dock to middle of building against outside wall (used to be the bioanalytical laboratory)	<LLD	<LLD
16	office area carpet (used to be the counting laboratory)	<LLD	<LLD
17	background sample	8 cpm	16 cpm

No safety concerns or items of noncompliance were identified.

4. Residual Materials

No remaining radioactive material, residual radioactive contamination, or equipment was identified by the inspector. The area now occupied by MG Industries has gas cylinders in the warehouse and the office area has furniture. In the other areas of the building, there is no furniture or equipment. The office area and warehouse are completely abandoned and uninhabited.

The areas previously used by the licensee at the facility were free of radioactive contamination and clear of any obstructions.

No safety concerns or items of noncompliance were identified.

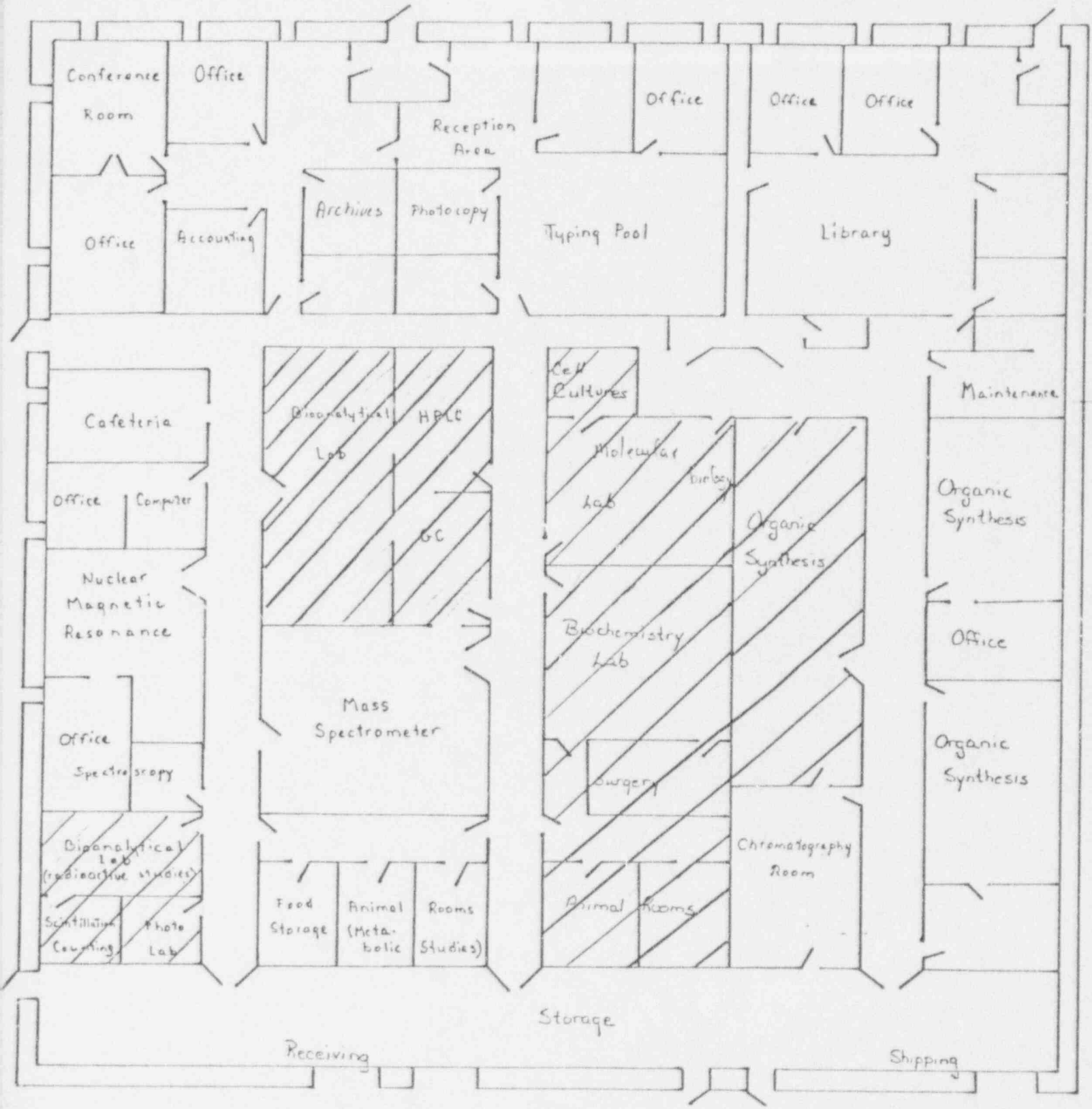
5. Exit Interview

The results of the closeout safety inspection could not be discussed with the licensee because the licensee was unable to attend the inspection.

FACILITIES

Attachment 1

15000 SQUARE FEET

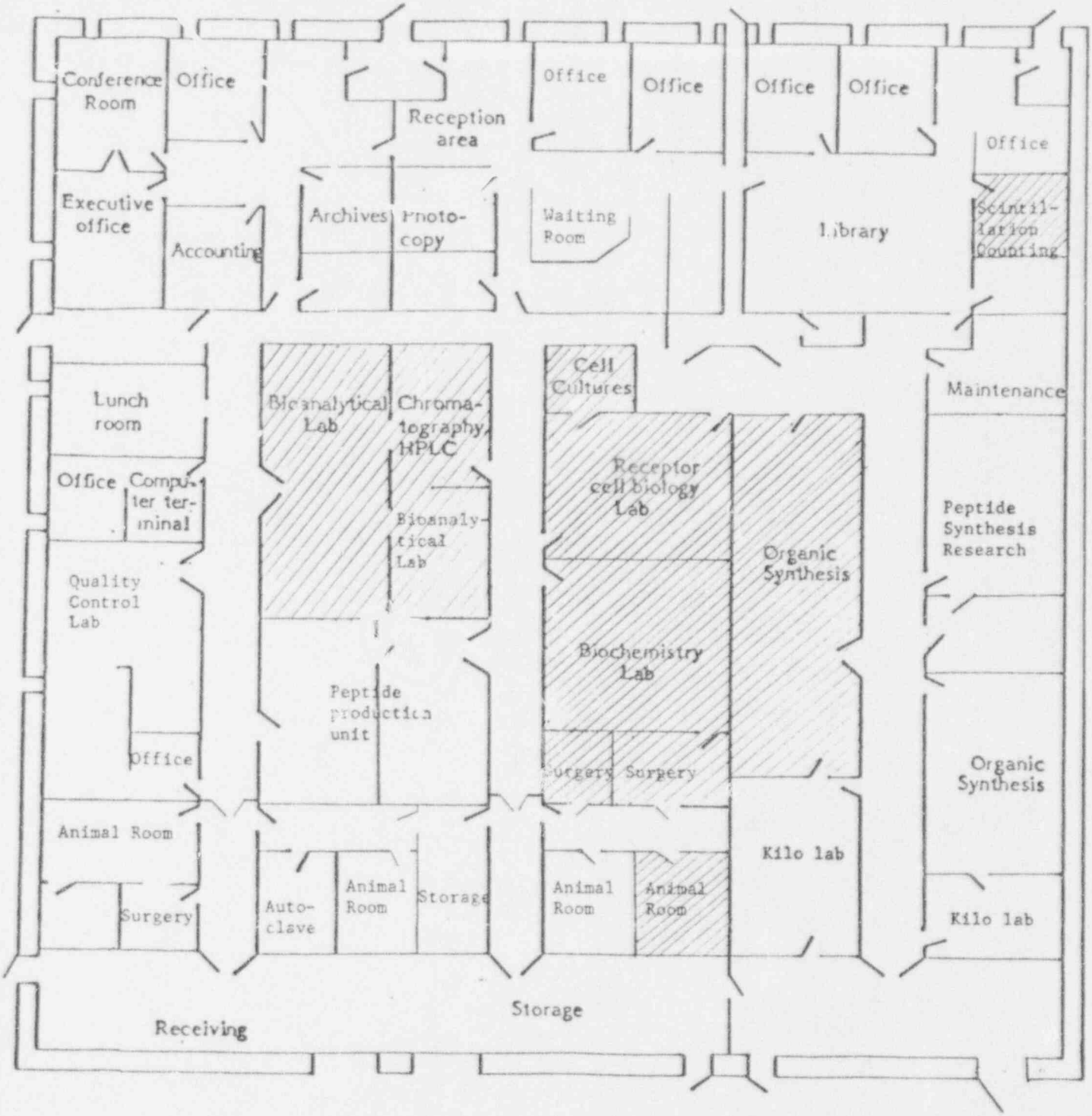


EXCERPT FROM LICENSE APPLICATION DATED February 18, 1982

FACILITIES

Attachment 2

15,000 Square Feet



EXCERPT FROM LICENSEE'S LETTER DATED April 22, 1987

Attachment 3

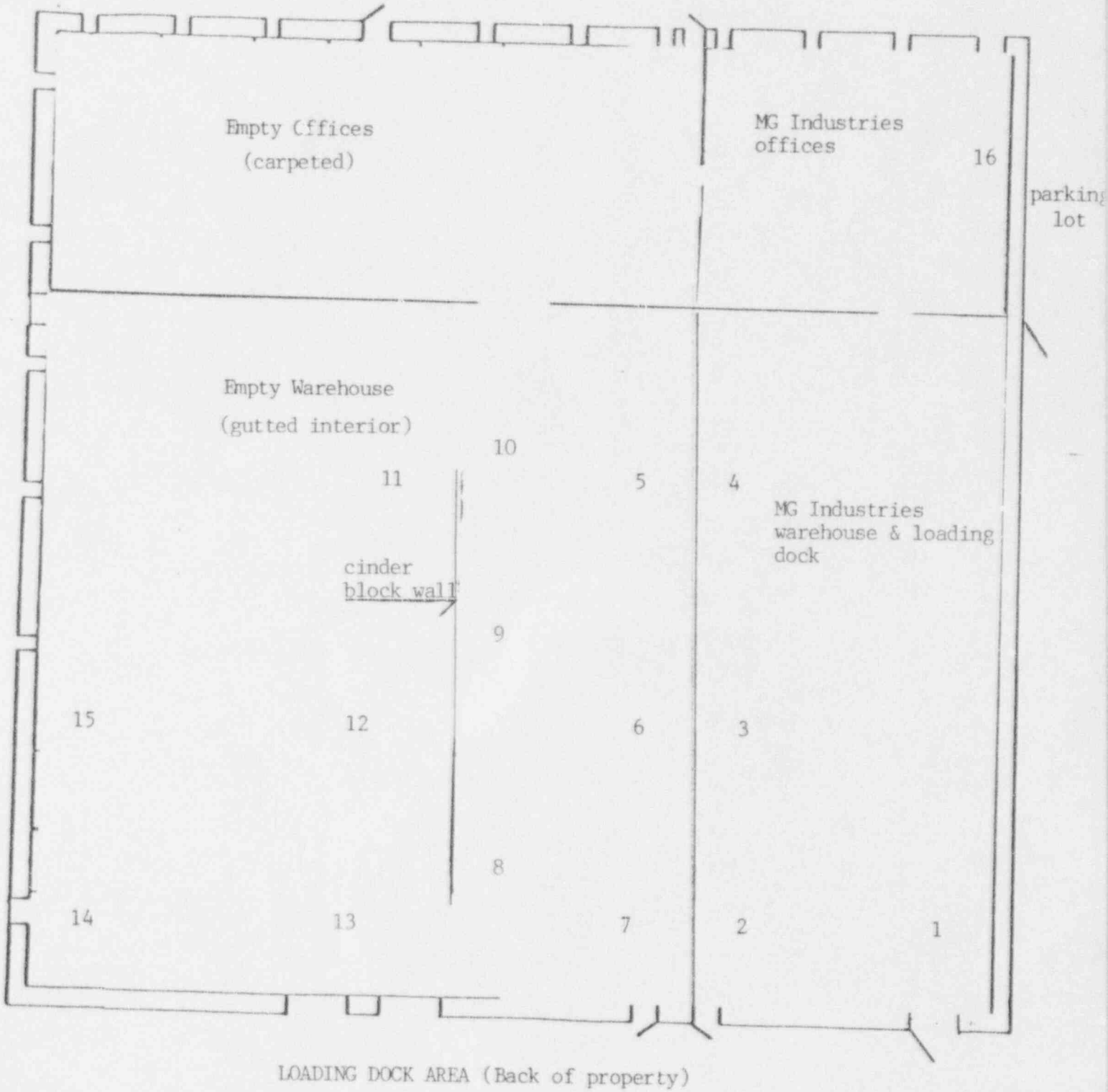
NRC NUMBERED WIPE LOCATIONS

Previous occupant:
Biomeasure, Inc.
11-15 "E" Avenue
Hopkinton, Massachusetts

New occupant:
MG Industries
Specialty Gas Products
9 Avenue E
Hopkinton, Massachusetts

FACILITIES

15,000 Square Feet



LOADING DOCK AREA (Back of property)