Metorex

DL-032895_05

March 28, 1995

Licensing Assistance Section
US Nuclear Regulatory Commission
Region I
475 Allendale Road
King of Prussia, PA 19406-1415

Re: License No. 37-28461-01, Docket No. 030-31437
License No. 37-28461-02G, Docket No. 030-31454

Gentlemen,

With this letter we apply for the renewal of our existing materials licenses:

No. 37-28461-01 for possession and use, and
No. 37-28461-02G for distribution,

in their entirety with the following exceptions:

RE: License No. 37-28461-01, for possession and use.

1. Remove item C, Cesium 137, sealed source (Amersham Model CDC-707), intended for use in Beltcon 100GS Gamma Backscatter Gauge.

2. In item D, Americium 241, remove Amersham Model AMC.18, which was intended for use in Beltcon 100GS Gamma Backscatter Gauge.

It has been verified that neither Outokumpu Electronics nor Metorex Inc. have ever sold or installed the Beltcon 100GS system in the USA. It has been also verified that there is no Beltcon 100GS installation in the USA to be serviced. Since Metorex Inc. does not intend to carry this device in its product portfolio, we request that these sources are removed from our license. We have already requested removal of the Beltcon 100GS device from the Registry of Sources and Devices.

3. In item D, Americium 241, please add Isotope Products Model GFS. The maximum activity for this model would be 30 mCi.

4. Remove item F, Nickel 63, foil source (Amersham Model NBC-3 , intended for use in Scintirex EVD-1, portable explosive vapor detectors. Due to unfavorable business environment Metorex Inc. (formerly Outokumpu Electronics Inc.) has never used or distributed Scintirex devices and it does not intend to do so.

METOREX INC.

Street address
880 Town Center Drive
Langhorne, PA 19047

Telephone
1-215-741-4482

Telefax
1-215-741-6385

5. We propose that the requirement of performing wipe tests on the outside of the package and packing material the sources are received in from the supplier (manufacturer) be removed, and that only the source wipe test requirement is left. All isotopes purchased by Metorex are solid form, sealed sources (capsules), and as such do not pose the risk of leakage during transport. Therefore, we feel that this requirement may not be justified. This requirement has been written into the original application by then the acting RSO for Princeton Gamma Tech (PGT), who based his application on the PGT's license. To my knowledge PGT may have been using unsealed isotopes in their past activities. During the five year period of our activity we did not observe a positive wipe test on any package.

RE: License No. 37-28461-02G, for distribution.

1. Please delete from our license for distribution "Princeton Gamma Tech Model 100 Chemical Analyzer". This is the first device listed in item 11 of our license. Metorex does not have intention of distributing this device, nor did it distributed any during the period of this license. It is our understanding that Princeton Gamma Tech discontinued production of that device and that it only provides service for their old customers possessing Model 100.

2. Please delete from this license the two last devices, that is Model Beltcon 100GS Gamma Backscatter Gauge, and Scintirex Limited Model EVD-1, portable explosive vapor detector. Metorex does not intend to distribute these devices, nor did it distributed any in the past.

3. Please rephrase the table in item 11, as follows:

Device Model Number	Isotope	Source Model Number	Maximum Activity per Source in millicuries
1. Metorex Inc., formerly Outokumpu Electronics, Models 820, 840, and 880 portable x-ray fluorescence analyzer	Iron 55	Amersham IEC.A1 or DuPont NER-462 or Isotope Products XFB	80
	Cadmium 109	Amersham CUC.D1 or Amersham CUC.D1N or DuPont NER-465 or Isotope Products XFB	20
	Americium 241	Amersham AMC.L2 or DuPont NER-478 or Isotope Products XFB or Isotope Products GFS	30
	Curium 244	Amersham CLCL or Isotope Products XFB	100

Device Model Number	Isotope	Source Model Number	Maximum Activity per Source in millicuries
2. Metorex Inc., formerly Outokumpu Electronics, Model DOPS x-ray fluorescence probe	Iron 55	Isotope Products XFB	40
	Cadmium 109	Amersham CUC.D1 or Amersham CUC.D1N or DuPont NER-465 or Isotope Products XFB	20
	Curium 244	Amersham CLCL	100
	Americium 241	Amersham AMC.D2 or DuPont NER-478 or Isotope Products XFB or Isotope Products GFS	30
3. Metorex Inc., formerly Outokumpu Electronics, Model SAPS x-ray fluorescence probe	Iron 55	Isotope Products XFB	40
	Cadmium 109	Amersham CUC.D1 or Amersham CUC.D1N or DuPont NER-465 or Isotope Products XFB	20
	Curium 244	Amersham CLCL	100
	Americium 241	Amersham AMC.D2 or DuPont NER-478 or Isotope Products XFB or Isotope Products GFS	30
4. Metorex Inc., formerly Outokumpu Electronics, Model HEPS x-ray fluorescence probe	Iron 55	Isotope Products XFB	40
	Cadmium 10[illegible]	Amersham CUC.D1 or Amersham CUC.D1N or DuPont NER-465 or Isotope Products XFB	20
	Curium 244	Amersham CLCL	100
	Americium 241	Amersham AMC.D2 or DuPont NER-478 or Isotope Products XFB or Isotope Products GFS	30
5. Metorex Inc., formerly Outokumpu Electronics, Model LEPS x-ray fluorescence probe	Iron 55	Amersham IEC.A1	80
6. Metorex Inc., formerly Outokumpu Electronics Model SLPS x-ray fluorescence probe	Iron 55	Amersham IEC.A1	40

Device Model Number	Isotope	Source Model Number	Maximum Activity per Source in millicuries
7. Metorex Inc., formerly Outokumpu Electronics, Model SSPS x-ray fluorescence probe	Iron 55	Isotope Products XFB	40
	Cadmium 109	Amersham CUC.D1 or Amersham CUC.D1N or DuPont NER-465 or Isotop Products XFB	20
	Americium 241	Amersham AMC.D2 or DuPont NER-478 or Isotope Products XFB or Isotope Products GFS	30
8. Metorex Inc., formerly Outokumpu Electronics, Model Courier 10 x-ray fluorescence analyzer	Iron 55	Amersham IEC.A1	80
	Cadmium 109	Amersham CUC.D1 or Amersham CUC.D1N	20
	Curium 244	Amersham CLCL	100
	Americium 241	Amersham AMC.D2	30
9. Metorex Inc., formerly Outokumpu Electronics, Model Courier 20 x-ray fluorescence analyzer	Iron 55	Amersham IEC.A1	200
	Cadmium 109	Amersham CUC.A1 or Amersham CUC.A1N	20
	Curium 244	Amersham CLC.A1	100
	Americium 241	Amersham AMC.A1	30

I took the liberty of numbering the devices in the table for ease of reference.

Please note that the items 2 trough 7 are essentially not new, but a different way of referring to the devices specified in item 1. The probe models listed individually in items 2 to 7 are the very same probes which would be connected to Models 820, 840 and 880 portable x-ray analyzers. Models 820, 840, and 880 are selfcontained electronic units which support the operation of the probes. However, it is always the probe which contains the radioisotope(s) and any mechanisms enabling source exposure for measurement, and shielding of the source when not in use.

Miniaturization and technology development made it possible to fit the electronics necessary to control the probe onto a single board which can be plugged into any IBM compatible computer, while the analytical software can be put on the floppy disk. This way the probe become independent from the limitations of the selfcontained instrument. This solution allows for quick and easy updates and expansion of capabilities of the instrument. At the same time <u>there have been no changes to the construction of probes, specifically none that would affect radiation safety</u>.

We have discussed with the NRC Sealed Source Safety Section the issue of registering only the probes as the radioactive devices. As the matter of fact it was with great contribution of Mr. Douglas A. Broaddus, who reviewed our Registration Certificate, that we came to this solution. The Certificate, NR-701-D-101-G, makes already this distinction. Mr. Broaddus was also kind to offer help in clarifying this issue if needed. He can be contacted at 301-504-2503. It was also his suggestion that this change is not treated as an amendment but a different wording of the information already contained in the license. We would like to keep the item 1 in its old form because of the number of instruments which have been distributed in the past as the self contained systems.

Enclosed please find two checks for a total of US$ 5,700.00 to cover the renewal fees.

I hope the information provided is sufficient. If there are any questions regarding this application, please contact me at 215-741-4482.

Sincerely,

Stanislaw Piorek, Ph.D.
Radiation Safety Officer,
Vice President,
Research and Technology Development

Enclosure: Checks Nos. 6996 and 6998.

cc: Joseph P. Loftus, President, Metorex Inc.
Douglas A. Broaddus, Mechanical Engineer,
NRC Washington, DC

BETWEEN:

LICENSE FEE MANAGEMENT BRANCH, ARM
AND
REGIONAL LICENSING SECTIONS

(FOR LFMS USE)
INFORMATION FROM LTS

PROGRAM CODE: 03214
STATUS CODE: 2
FEE CATEGORY: 3B 3N
EXP. DATE: 19950430
FEE COMMENTS: _____
DECOM FIN ASSUR REQD: N

LICENSE FEE TRANSMITTAL

A. REGION I

1. APPLICATION ATTACHED
APPLICANT/LICENSEE: METOREX INC.
RECEIVED DATE: 950329
DOCKET NO: 3031437
CONTROL NO.: 121556
LICENSE NO.: 37-28461-01
ACTION TYPE: RENEWAL

2. FEE ATTACHED
AMOUNT: $4,300.00
CHECK NO.: 6988

3. COMMENTS

SIGNED M. A. Parkin
DATE 4/11/95

B. LICENSE FEE MANAGEMENT BRANCH (CHECK WHEN MILESTONE 03 IS ENTERED / √ /)

1. FEE CATEGORY AND AMOUNT: 3B 3N $4,300

2. CORRECT FEE PAID. APPLICATION MAY BE PROCESSED FOR:
AMENDMENT ____
RENEWAL ✓
LICENSE ____

3. OTHER _____

SIGNED [signature]
DATE 4/11/95