DL-041696_03

David C. Fitterer
Radiation Safety Officer
Maxim Technologies, Inc.
662 Cromwell Avenue
St. Paul, MN 55114

Dear Mr. Fitterer:

Enclosed is Amendment No. 28 to your NRC Material License No. 22-01376-04 in accordance with your request.

Please review the enclosed document carefully and be sure that you understand all conditions. If there are any errors or questions, please notify the U.S. Nuclear Regulatory Commission, Region III office at (708) 829-9887 so that we can provide appropriate corrections and answers.

Please be advised that your license expires at the end of the day, in the month, and year stated in the license. Unless your license has been terminated, you must conduct your program involving byproduct materials in accordance with the conditions of your NRC license, representations made in your license application, and NRC regulations. In particular, note that you must:

1. Operate in accordance with NRC regulations 10 CFR Part 19, "Notices, Instructions and Reports to Workers; Inspections," 10 CFR Part 20, "Standards for Protection Against Radiation," and other applicable regulations.

2. Notify NRC, in writing, within 30 days:

   a. When the Radiation Safety Officer permanently discontinues performance of duties under the license or has a name change; or

   b. When the licensee's mailing address changes (no fee is required if the location of byproduct material remains the same).

3. In accordance with 10 CFR 30.36(b) and/or license condition, notify NRC, promptly, in writing, and request termination of the license when you decide to terminate all activities involving materials authorized under the license.

4. Request and obtain a license amendment before you:

   a. Change Radiation Safety Officers;

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U.S. NUCLEAR REGULATORY COMMISSION

MATERIALS LICENSE

Amendment No. 28

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93 438), and Title 10, Code of Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 36, 39, 40, and 70, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations, and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

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Licensee	
1. Maxim Technologies, Inc. 2. 662 Cromwell Avenue St. Paul, MN 55114	In accordance with the letter dated March 22, 1996 3. License Number 22-01376-04 is amended in its entirety as follows: 4. Expiration Date November 30, 1998 5. Docket or Reference No. 030-14347

6. Byproduct, Source, and/or Special Nuclear Material	7. Chemical and/or Physical Form	8. Maximum Amount that Licensee May Possess at Any One Time Under This License
A. Cesium-137	A. Sealed source (Troxler Dwg. No. A-102112)	A. No single source to exceed 9 millicuries
B. Americium-241	B. Sealed source (Troxler Dwg. No. A-102451)	B. No single source to exceed 50 millicuries
C. Cesium-137/ Americium-241	C. Sealed source (Troxler Dwg. No. A-100281)	C. No single source to exceed 10 millicuries of cesium-137 and 50 millicuries of Americium-241
D. Americium-241	D. Sealed source (Troxler Dwg. No. A-102451)	D. No single source to exceed 40 millicuries
E. Cesium-137	E. Sealed source (Troxler Dwg. No. A-102112)	E. No single source to exceed 10 millicuries
F. Americium-241	F. Sealed source (Troxler Dwg. No. A-100608)	F. No single source to exceed 100 millicuries

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6. Byproduct, source, and/or special nuclear material	7. Chemical and/or physical form	8. Maximum amount that licensee may possess at any one time under this license
G Cesium-137	G. Sealed source (Troxler Dwg. No. A-102112)	G. No single source to exceed 10 millicuries

9. Authorized Use:

A. and B. To be used in Troxler Electronic Laboratories, Inc. Model 3400 series gauges to measure moisture/density of construction materials.

C. To be used in Troxler Electronic Laboratories, Inc. Model No. 2401 gauge to measure moisture/density of construction materials.

D. To be used in Troxler Electronic Laboratories, Inc. Model 3216 Roof Reader II gauge to measure moisture content of construction materials.

E. To be used in Troxler Electronics Laboratories, Inc. Model 1351 depth density gauge.

F. To be used in Troxler Electronics Laboratories, Inc. Model 3241 series gauge for asphalt content measurements.

G. To be used in Troxler Electronic Laboratories, Inc. Model 4640 Series Thin Layer Density Gauge for measurement of density of asphalt overlays.

CONDITIONS

10. Licensed material specified in 7.A. through 7.G. may be used at the licensee's facilities located at the following locations and at temporary job sites of the licensee anywhere in the United States where the U.S. Nuclear Regulatory Commission maintains jurisdiction for regulating the use of licensed material.

662 Cromwell Avenue
St. Paul, Minnesota

3908 Commerce Court Southwest
Rochester, Minnesota

2821 Plant Street
Rapid City, South Dakota

4649 Joles Avenue
Chippewa Falls, Wisconsin

2540 South Carleton Ave.
Appleton, Wisconsin

601 East 48th Street North
Sioux Falls, South Dakota

555 South 72nd Avenue
Wausau, Wisconsin

640 West Main
Lead, South Dakota

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11. A. Licensed material shall be used by individuals who have successfully completed the device manufacturer's training course or the training course outlined in application dated June 11, 1993, instructed by David C. Fitterer, Claire Christians, Richard Schurger, or Douglas Ellingsen, and have been designated by the licensee's Radiation Safety Officer. The licensee shall maintain records of the individuals who have been designated as authorized users.

B. The Radiation Safety Officer for this license is David C. Fitterer.

12. A. Sealed sources and detector cells shall be tested for leakage and/or contamination at intervals not to exceed 6 months or at such other intervals as specified by the certificate of registration referred to in 10 CFR 32.210.

B. Notwithstanding Paragraph A of this Condition, sealed sources designed to emit alpha particles shall be tested for leakage and/or contamination at intervals not to exceed 3 months.

C. In the absence of a certificate from a transferor indicating that a leak test has been made within 6 months prior to the transfer, a sealed source or detector cell received from another person shall not be put into use until tested.

D. Sealed sources need not be leak tested if:

(i) they contain only hydrogen-3; or

(ii) they contain only a radioactive gas; or

(iii) the half-life of the isotope is 30 days or less; or

(iv) they contain not more than 100 microcuries of beta and/or gamma emitting material or not more than 10 microcuries of alpha emitting material; or

(v) they are not designed to emit alpha particles, are in storage, and are not being used. However, when they are removed from storage for use or transferred to another person, and have not been tested within the required leak test interval, they shall be tested before use or transfer. No sealed source or detector cell shall be stored for a period of more than 10 years without being tested for leakage and/or contamination.

COPY

E. The leak test shall be capable of detecting the presence of 0.005 microcurie of radioactive material on the test sample. Records of leak test results shall be kept in units of microcuries and shall be maintained for inspection by the Commission. If the test reveals the presence of 0.005 microcurie or more of removable contamination, a report shall be filed with the U.S. Nuclear Regulatory Commission and the source shall be removed immediately from service and decontaminated, repaired, or disposed of in accordance with Commission regulations. The report shall be filed within 5 days of the date the leak test result is known with the U.S. Nuclear Regulatory Commission, Region III, 801 Warrenville Road, Lisle, Illinois 60532-4351, ATTN: Chief, Nuclear Materials Safety Branch. The report shall specify the source involved, the test results, and corrective action taken. Records of leak test results shall be kept in units of microcuries and shall be maintained for inspection by the Commission. Records may be disposed of following Commission inspection.

F. The licensee is authorized to collect leak test samples for analysis by ICN of Irvine, California or Microtec Services, Inc. of Pasadena, Texas. Alternatively, tests for leakage and/or contamination may be performed by persons specifically licensed by the Commission or an Agreement State to perform such services.

13. Sealed sources or detector cells containing licensed material shall not be opened or sources removed from source holders by the licensee.

14. When performing tests at temporary job sites, the authorized user shall not leave the moisture/density gauge unattended. Upon completion of tests the device shall be locked in the licensee's vehicle or a secure building to prevent unauthorized use, loss, or theft.

15. The licensee shall conduct a physical inventory every 6 months to account for all sources and/or devices received and possessed under the license. Records of inventories shall be maintained for 5 years from the date of each inventory, and shall include the quantities and kinds of byproduct material, manufacturer's name and model numbers, location of the sources and/or devices, and the date of the inventory.

16. The licensee is authorized to transport licensed material only in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."

17. Each portable nuclear gauge shall have a lock or outer locked container designed to prevent unauthorized or accidental removal of the sealed source from its shielded position. The gauge or its container must be locked when in transport, storage, or when not under the direct surveillance of an authorized user.

MATERIALS LICENSE
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18. Any cleaning, maintenance, or repair of the gauge(s) that requires removal of the source rod shall be performed only by the manufacturer or by other persons specifically licensed by the Commission or an Agreement State to perform such services.

19. The licensee shall exchange film badges on a monthly basis.

20. In addition to the possession limits in Condition 8, the licensee shall further restrict the possession of licensed material to quantities below the minimum limit specified in 10 CFR 30.35(d) for establishing decommissioning financial assurance.

21. Except as specifically provided otherwise in this license, the licensee shall conduct its program in accordance with the statements, representations, and procedures contained in the documents, including any enclosures, listed below. The U.S. Nuclear Regulatory Commission's regulations shall govern unless the statements, representations, and procedures in the licensee's application and correspondence are more restrictive than the regulations.

    A. Application dated June 11, 1993; and

    B. Letters dated December 17, 1993, March 21, 1994, July 27, 1994, September 27, 1995, January 9, 1996 and January 24, 1996.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date 4/16/96

By _____
Nuclear Materials Licensing Branch, Region III

COPY

BETWEEN:

LICENSE FEE MANAGEMENT BRANCH, ARM
AND
REGIONAL LICENSING SECTIONS

(FOR LFMS USE)
INFORMATION FROM LTS

PROGRAM CODE: 03121
STATUS CODE: 0
FEE CATEGORY: 3P
EXP. DATE: 19981130
FEE COMMENTS:
DECOM FIN ASSUR REQD: N

LICENSE FEE TRANSMITTAL

A. REGION

1. APPLICATION ATTACHED
APPLICANT/LICENSEE: MAXIM TECHNOLOGIES INCORPORATED
RECEIVED DATE: 960401
DOCKET NO: [illegible]434
CONTROL NO.: [illegible]
LICENSE NO.: [illegible]
ACTION TYPE: AMENDMENT

2. FEE ATTACHED
AMOUNT: 290
CHECK NO.: [illegible]

3. COMMENTS

SIGNED [illegible]
DATE 4/5/96

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ms

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

1. FEE CATEGORY AND AMOUNT: 3P $290

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

3. OTHER

SIGNED SC
DATE 4/8/96

RECEIVED
APR 16 1996
REGION III

Log APR 5 III
Remitter
Check No. 181934
Amount $720
Fee Category 3P
Type of Fee REN
Date Check Rec'd 4/1
Date Completed 4/2/96 JK