



**UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-8064**

December 14, 2001

Earth Systems Pacific
ATTN: J. M. Sims
President
308 North First Street
Lompoc, CA 93436

SUBJECT: LICENSE AMENDMENT

Please find enclosed Amendment No. 03 to License No. 04-23286-01. You should review this license carefully and be sure that you understand all conditions. If you have any questions, you may contact me at (817) 860-8197.

NRC expects licensees to conduct their programs with meticulous attention to detail and a high standard of compliance. Because of the serious consequences to employees and the public that can result from failure to comply with NRC requirements, you must conduct your radiation safety program according to the conditions of your NRC license, representations made in your license application, and NRC regulations. In particular, note that you must:

1. Operate by NRC regulations 10 CFR Part 19, "Notices, Instructions and Reports to Workers: Inspection and Investigations," 10 CFR Part 20, "Standards for Protection Against Radiation," and other applicable regulations.
2. Notify NRC in writing of any change in mailing address.
3. By 10 CFR 30.36(b) and/or license condition, notify NRC, promptly, in writing, and request termination of the license:
 - a. When you decide to terminate all activities involving materials authorized under the license; or
 - b. If you decide not to complete the facility, acquire equipment, or possess and use authorized material.
4. Request and obtain a license amendment before you:
 - a. Change Radiation Safety Officers;
 - b. Order byproduct material more than the amount or form authorized on the license;
 - c. Add or change the areas or address(es) of use identified in the license application or on the license; or
 - d. Change the name or ownership of your organization.

5. Submit a complete renewal application or termination request at least 30 days before the expiration date on your license. You will receive a reminder notice approximately 90 days before the expiration date. Possession of radioactive material after your license expires is a violation of NRC regulations.

In addition, please note that NRC Form 313 requires the applicant, by signature, to verify that the applicant understands that all statements contained in the application are true and correct to the best of the applicant's knowledge. The signatory for the application should be the licensee or certifying official rather than a consultant.

NRC will periodically inspect your radiation safety program. Failure to conduct your program according to NRC regulations, license conditions, and representations made in your license application and supplemental correspondence with NRC may result in enforcement action against you. This could include issuance of a notice of violation; imposition of a civil penalty; or an order suspending, modifying, or revoking your license as specified in the "General Statement of Policy and Procedure for NRC Enforcement Actions" (Enforcement Policy), NUREG 1600.

Thank you for your cooperation.

Sincerely,

Jack E. Whitten, Senior Health Physicist
Nuclear Materials Licensing Branch

Docket: 030-30653
License: 04-23286-01
Control: 468800

Enclosures: As stated

MATERIALS LICENSE

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.

<p style="text-align: center;">Licensee</p> <p>1. Earth Systems Pacific</p> <p>2. 308 North First Street Lompoc, CA 93436</p>	<p>In accordance with letter dated September 28, 2001</p> <p>3. License number 04-23286-01 is amended in its entirety to read as follows:</p> <hr/> <p>4. Expiration date September 30, 2003</p> <hr/> <p>5. Docket No. 030-30653 Reference No.</p>
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<p>6. Byproduct, source, and/or special nuclear material</p> <p>A. Cesium 137</p> <p>B. Americium 241</p>	<p>7. Chemical and/or physical form</p> <p>A. Sealed Sources (Troxler Dwg. A-102112)</p> <p>B. Sealed neutron sources (Troxler Dwg. A-102451)</p>	<p>8. Maximum amount that licensee may possess at any one time under this license</p> <p>A. Not to exceed 10 millicuries per source and 60 millicuries total</p> <p>B. Not to exceed 50 millicuries per source and 300 millicuries total</p>
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9. Authorized use
A. and B. For use in Troxler Model 3400 Series Moisture-Density gauges to measure properties of construction materials.

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CONDITIONS
★ ★ ★ ★ ★

10. Licensed material may be used 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, including areas of exclusive Federal jurisdiction within Agreement States.

If the jurisdiction status of a Federal facility within an Agreement State is unknown, the licensee should contact the federal agency controlling the job site in question to determine whether the proposed job site is an area of exclusive Federal jurisdiction. Authorization for use of radioactive materials at job sites in Agreement States not under exclusive Federal jurisdiction shall be obtained from the appropriate state regulatory agency.

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**License Number
04-23286-01Docket or Reference Number
030-30653

Amendment No. 02

11. Licensed material shall be used by, or under the supervision and in the physical presence of, Ted Cios or individuals who have successfully completed the manufacturer's training program for gauge users and who have been designated by the Radiation Protection Officer, Ted Cios. The licensee shall maintain records of individuals designated as users.
12. Sealed sources containing licensed material shall not be opened.
13.
 - A. The source(s) specified in Item(s) 7.A. and B. shall be tested for leakage and/or contamination at intervals not to exceed 6 months. Any source received from another person which is not accompanied by a certificate indicating that a test was performed within 6 months before the transfer shall not be put into use until tested.
 - B. Any source in storage and not being used need not be tested. When the source is removed from storage for use or transfer to another person, it shall be tested before use or transfer.
 - C. The test shall be capable of detecting the presence of 0.005 microcurie of radioactive material on the test sample. If the test reveals the presence of 0.005 microcurie or more of removable contamination, the source shall be removed from service and decontaminated, repaired, or disposed of in accordance with Commission regulations. A report shall be filed within 5 days of the date the leak test result is known with the U. S. Nuclear Regulatory Commission, Region IV, 611 Ryan Plaza Drive, Suite 400, Arlington, Texas 76011, ATTN: Director, Division of Nuclear Materials Safety. The report shall specify the source involved, the test results, and corrective action taken.
 - D. The licensee is authorized to collect leak test samples for analysis by Radiation Detection Company or tests for leakage and/or contamination shall be performed by persons specifically licensed by the Commission or an Agreement State to perform such services.
14. The licensee shall conduct a physical inventory every six (6) months to account for all sources and/or devices received and possessed under the license. Records of the inventories shall be maintained for two (2) years from the date of each inventory.
15. The licensee may transport licensed material in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material".

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**

License Number
04-23286-01

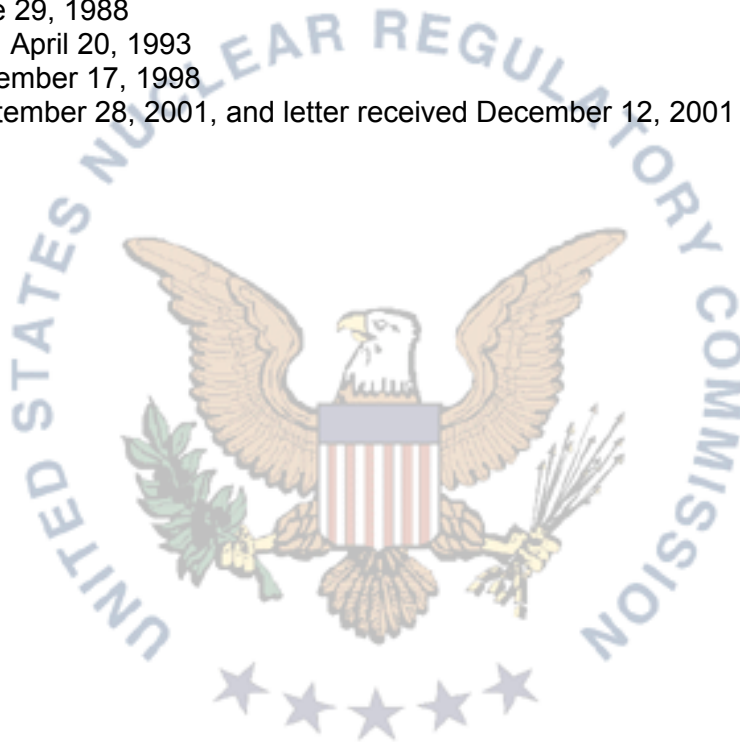
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16.

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 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. Letter dated June 29, 1988
- B. Application dated April 20, 1993
- C. Letter dated November 17, 1998
- D. Letter dated September 28, 2001, and letter received December 12, 2001



FOR THE U.S. NUCLEAR REGULATORY COMMISSION

/RA/

Date _____

By _____
Jack E. Whitten, Senior Health Physicist
Nuclear Materials Licensing Branch
Region IV
Arlington, Texas 76011