

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

In the Matter of  
Earth Exploration, Inc.  
Indianapolis, Indiana

)  
)  
)

Docket Number 030-32764  
License Number 13-26408-01  
EA-09-114

CONFIRMATORY ORDER  
(EFFECTIVE IMMEDIATELY)

I

Earth Exploration, Inc., (Earth Exploration or licensee) is the holder of Materials License No. 13-26408-01 issued by the U.S. Nuclear Regulatory Commission (NRC or Commission) pursuant to 10 CFR Part 30 on June 3, 1992. The license authorizes Earth Exploration to store portable gauges at its permanent facilities in Indianapolis and South Bend, Indiana, and to use those portable gauges at temporary job sites.

This Confirmatory Order is the result of an agreement reached during an Alternative Dispute Resolution (ADR) mediation session conducted on August 25, 2009.

II

On July 21, 2008, the NRC conducted an onsite inspection at the Earth Exploration main office in Indianapolis, Indiana, and at two temporary job sites in Indianapolis. Additional onsite inspections were held on August 14 and 15, 2008, at the South Bend field office and a temporary job site in South Bend, Indiana. The purpose of the inspections was to review licensee activities related to radiation safety and to assess licensee compliance with the Commission's rules and

Enclosure 1

regulations and with the conditions of the Earth Exploration license. As a result of the inspection observations, the NRC Office of Investigations (OI) initiated an investigation (OI Case No. 3-2008-026) and on April 27, 2009, the NRC preliminarily determined that apparent violations of NRC requirements had occurred at Earth Exploration. The apparent violations included failure to: (1) perform annual reviews of the radiation protection program as required by 10 CFR 20.1101(c); (2) perform leak testing of sealed sources as required by License Condition 13; (3) perform physical inventories every six months of sealed sources as required by License Condition 16; (4) ensure that dosimetry provided to gauge users was processed and evaluated by a processor approved through the National Voluntary Laboratory Accreditation Program as required by License Condition 21; (5) ensure through the Radiation Safety Officer that required tests and conditions of the NRC license are performed as required by License Condition 21; (6) secure, on multiple occasions, portable gauges using two independent physical barriers as required by 10 CFR 30.34(i); and (7) lock a gauge or gauge case when in storage as required by License Condition 19. Additionally, the NRC identified five potential violations of 10 CFR 71.5 in regard to transportation of radioactive material in accordance with Department of Transportation regulations in 49 CFR. These potential violations included failure to: (1) ensure proper/legible markings on packages as required by 49 CFR 178.3(a); (2) label transport packages as required by 49 CFR 172.403(b); (3) block and brace two packages as required by 49 CFR 177.842(b); (4) ensure the accessibility of shipping papers as required by 49 CFR 177.817(e); and (5) provide an emergency response telephone number which is monitored at all times when radioactive material is in transportation as required by 49 CFR 172.604(a)(1).

The results of the investigation were sent to Earth Exploration in a letter dated July 21, 2009. This letter offered Earth Exploration the opportunity to either participate in ADR mediation or to attend a Predecisional Enforcement Conference. In response to the NRC's offer, Earth Exploration requested use of the NRC's ADR process to resolve the issues. On July 31, 2009, the NRC and Earth Exploration agreed to mediation. On August 25, 2009, the NRC and Earth Exploration participated in an ADR session mediated by a professional mediator, arranged through Cornell University's Institute on Conflict Resolution. As used by the NRC, ADR is a process in which a neutral mediator with no decision-making authority assists the parties in reaching an agreement on resolving any differences regarding the dispute. This Confirmatory Order is issued pursuant to the agreement reached during the ADR process.

### III

During the August 25, 2009, ADR session, a preliminary settlement agreement was reached. The elements of the agreement consisted of the following:

1. Earth Exploration acknowledges the above violations and confirms that the violations have been corrected as of August 31, 2008.
2. Earth Exploration agrees to retain a qualified consultant to audit the performance of its radiation safety program on an annual basis for a period of five years, with the first audit occurring within three months of the date of the Confirmatory Order. Copies of the consultant's audit reports will be submitted to the Director for the Division of Nuclear Materials Safety, Region III, NRC, within six weeks following completion of the audit.

3. Earth Exploration agrees that the Radiation Safety Officer's supervisor, and two individuals acting as assistant Radiation Safety Officers, one each from the South Bend and Indianapolis offices, will receive training on how to manage a radiation safety program. The training is to be scheduled within three months of the date of the Confirmatory Order and the training is to be conducted within six months of the date of the Confirmatory Order. Within two weeks of completion of the training, Earth Exploration will submit to the Director for the Division of Nuclear Materials Safety, Region III, NRC, the course syllabus (to include the dates and location of the course) and a list of attendees.
4. Within three months of the date of the Confirmatory Order, Earth Exploration agrees to conduct "lessons learned" training, to be given by the Radiation Safety Officer and to be attended by all employees involved in gauge use, to address oversight of the radiation safety program; duties and responsibilities of the Radiation Safety Officer; and transportation, use, and security for portable gauges. The training shall also address employees' responsibility to report safety concerns to licensee management and the availability of informing the NRC of any concerns. Within two weeks of completing this internal training for all employees involved in gauge use, Earth Exploration will submit an outline of the presentation and a list of attendees to the Director for the Division of Nuclear Materials Safety, Region III, NRC.
5. Within 30 days of the date of the Confirmatory Order, Earth Exploration agrees to have the Radiation Safety Officer prepare and submit to the Director for the Division of Nuclear Materials Safety, Region III, NRC, a plan to inform other organizations of the lessons learned about the importance of ensuring robust radiation safety program requirements and developing the necessary infrastructure and communication paths to identify and

resolve competing priorities that may preclude successful implementation. As a part of the plan, Earth Exploration will submit either the article or a presentation outline to the Director for the Division of Nuclear Materials Safety, Region III, NRC, for review prior to its use.

6. Earth Exploration, by signing the Agreement in Principle, makes no admission that any employee of Earth Exploration deliberately violated any NRC requirements and this agreement is settlement of a disputed claim in order to avoid further action by the NRC.
7. The NRC agrees to not pursue any further enforcement action in connection with the NRC's July 21, 2009, letter to Earth Exploration. This does not prohibit the NRC from taking an enforcement action, in accordance with the NRC Enforcement Policy, if Earth Exploration commits a similar violation in the future or violates the Order.

On September 10, 2009, Earth Exploration consented to issuing this Order with the commitments, as described in Section V below. Earth Exploration further agreed that this Order is to be effective upon issuance and that it has waived its right to a hearing.

#### IV

Since Earth Exploration has agreed to take additional actions to address NRC concerns, as set forth in Item III above, the NRC has concluded that its concerns can be resolved through issuance of this Order.

I find that the licensee's commitments as set forth in Section V are acceptable and necessary and conclude that, with these commitments, the public health and safety are reasonably assured.

In view of the foregoing, I have determined that public health and safety require that Earth

Exploration's commitments be confirmed by this Order. Based on the above, and Earth Exploration's consent, this Order is immediately effective upon issuance.

V

Accordingly, pursuant to Sections 81, 161b, 161i, 161o, 182 and 186 of the Atomic Energy Act of 1954, as amended, and the Commission's regulations in 10 CFR 2.202 and 10 CFR Part 30, IT IS HEREBY ORDERED, EFFECTIVE IMMEDIATELY:

1. Earth Exploration shall retain a qualified consultant to audit the performance of its radiation safety program on an annual basis for a period of five years, with the first audit occurring within three months of the date of the Confirmatory Order. Copies of the consultant's audit reports will be submitted to the Director for the Division of Nuclear Materials Safety, Region III, NRC, within six weeks following completion of the audit.
2. Earth Exploration shall ensure that the Radiation Safety Officer's supervisor, and two individuals acting as assistant Radiation Safety Officers, one each from the South Bend and Indianapolis offices, will receive training on how to manage a radiation safety program. The training shall be scheduled within three months of the date of the Confirmatory Order and the training is to be conducted within six months of the date of the Confirmatory Order. Within two weeks of completion of the training, Earth Exploration shall submit to the Director for the Division of Nuclear Materials Safety, Region III, NRC, the course syllabus (to include the dates and location of the course) and a list of attendees.

3. Earth Exploration shall, within three months of the date of the Confirmatory Order, conduct "lessons learned" training, to be given by the Radiation Safety Officer and to be attended by all employees involved in gauge use. The training shall address oversight of the radiation safety program; duties and responsibilities of the Radiation Safety Officer; and transportation, use, and security for portable gauges. The training shall also address employees' responsibility to report safety concerns to licensee management and the availability of informing the NRC of any concerns. Within two weeks of completing this internal training for all employees involved in gauge use, Earth Exploration shall submit an outline of the presentation and a list of attendees to the Director for the Division of Nuclear Materials Safety, Region III, NRC.
4. Earth Exploration shall, within 30 days of the date of the Confirmatory Order, prepare and submit to the Director for the Division of Nuclear Materials Safety, Region III, NRC, a plan to inform other organizations of the lessons learned about the importance of ensuring robust radiation safety program requirements and developing the necessary infrastructure and communication paths to identify and resolve competing priorities that may preclude successful implementation. As a part of the plan, Earth Exploration shall submit either the article or a presentation outline, to the Director for the Division of Nuclear Materials Safety, Region III, NRC, for review prior to its use.

The Regional Administrator, Region III, NRC, may, in writing, relax or rescind any of the above conditions upon demonstration by Earth Exploration of good cause.

VI

Any person adversely affected by this Confirmatory Order, other than Earth Exploration, may request a hearing within 20 days of the Order's publication in the Federal Register. Where good cause is shown, consideration will be given to extending the time to request a hearing. A request for extension of time must be directed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, and include a statement of good cause for the extension.

A request for a hearing must be filed in accordance with the NRC E-Filing rule, which the NRC promulgated in August 2007, 72 Federal Register 49,139 (August 28, 2007). The E-Filing process requires participants to submit and serve documents over the internet or, in some cases, to mail copies on electronic optical storage media. Participants may not submit paper copies of their filings unless they seek a waiver in accordance with the procedures described below.

To comply with the procedural requirements associated with E-Filing, at least five days prior to the filing deadline the requestor must contact the Office of the Secretary by e-mail at [hearingdocket@nrc.gov](mailto:hearingdocket@nrc.gov), or by calling (301) 415-1677, to request: (1) a digital ID certificate, which allows the participant (or its counsel or representative) to digitally sign documents and access the E-Submittal server for any NRC proceeding in which it is participating; and/or (2) creation of an electronic docket for the proceeding (even in instances when the requestor (or its counsel or representative) already holds an NRC-issued digital ID certificate). Each requestor will need to download the Workplace Forms Viewer™ to access the Electronic Information Exchange (EIE), a component of the E-Filing system. The Workplace Forms Viewer™ is free and is available at <http://www.nrc.gov/site-help/e-submittals/install-viewer.html>.



Information about applying for a digital ID certificate also is available on NRC's public website at <http://www.nrc.gov/site-help/e-submittals/apply-certificates.html>.

Once a requestor has obtained a digital ID certificate, had a docket created, and downloaded the EIE viewer, it can then submit a request for a hearing through EIE. Submissions should be in Portable Document Format (PDF) in accordance with NRC guidance available on the NRC public website at <http://www.nrc.gov/site-help/e-submittals.html>. A filing is considered complete at the time the filer submits its document through EIE. To be timely, electronic filings must be submitted to the EIE system no later than 11:59 p.m. Eastern Time on the due date. Upon receipt of a transmission, the E-Filing system time-stamps the document and sends the submitter an e-mail notice confirming receipt of the document. The EIE system also distributes an e-mail notice that provides access to the document to the NRC Office of the General Counsel and any others who have advised the Office of the Secretary that they wish to participate in the proceeding, so that the filer need not serve the document on those participants separately. Therefore, any others who wish to participate in the proceeding (or their counsel or representative) must apply for and receive a digital ID certificate before a hearing request is filed so that they may obtain access to the document via the E-Filing system.

A person filing electronically may seek assistance through the "Contact Us" link located on the NRC website at <http://www.nrc.gov/site-help/e-submittals.html> or by calling the NRC technical help line, which is available between 8:30 a.m. and 4:15 p.m., Eastern Time, Monday through Friday. The help line number is (800) 397-4209 or locally, (301) 415-4737.

Participants who believe that they have good cause for not submitting documents electronically must file a motion, in accordance with 10 CFR 2.302(g), with their initial paper filing requesting

authorization to continue to submit documents in paper format. Such filings must be submitted by: (1) first class mail addressed to the Office of the Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, Attention: Rulemaking and Adjudications Staff; or (2) courier, express mail, or expedited delivery service to the Office of the Secretary, Sixteenth Floor, One White Flint North, 11555 Rockville, Pike, Rockville, Maryland, 20852, Attention: Rulemaking and Adjudications Staff. Participants filing a document in this manner are responsible for serving the document on all other participants. Filing is considered complete by first-class mail as of the time of deposit in the mail, or by courier, express mail, or expedited delivery service upon depositing the document with the provider of the service.

Documents submitted in adjudicatory proceedings will appear in NRC's electronic hearing docket which is available to the public at [http://ehd.nrc.gov/EHD\\_Proceeding/home.asp](http://ehd.nrc.gov/EHD_Proceeding/home.asp), unless excluded pursuant to an order of the Commission, an Atomic Safety and Licensing Board, or a Presiding Officer. Participants are requested not to include personal privacy information, such as social security numbers, home addresses, or home phone numbers in their filings. With respect to copyrighted works, except for limited excerpts that serve the purpose of the adjudicatory filings and would constitute a Fair Use application, participants are requested not to include copyrighted materials in their works.

If a person other than Earth Exploration requests a hearing, that person shall set forth with particularity the manner in which his interest is adversely affected by this Order and shall address the criteria set forth in 10 CFR 2.309(d) and (f).

If the hearing is requested by a person whose interest is adversely affected, the Commission will issue an Order designating the time and place of any hearing. If a hearing is held, the issue to be considered at such hearing shall be whether this Confirmatory Order should be sustained.

In the absence of any request for hearing, or written approval of an extension of time in which to request a hearing, the provisions specified in Section V above shall be final 20 days from the date this Order is published in the Federal Register without further order or proceedings. If an extension of time for requesting a hearing has been approved, the provisions specified in Section V shall be final when the extension expires, if a hearing request has not been received.

A REQUEST FOR HEARING SHALL NOT STAY THE IMMEDIATE EFFECTIVENESS OF THIS ORDER.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

***/RA by Cynthia D. Pederson Acting for/***

Mark A. Satorius, Regional Administrator, Region III

Dated this 1<sup>st</sup> day of October 2009