

JUL 22 1985

Docket No. 30-08048

License No. 29-14171-01

Advanced Radiation Services, Inc.
ATTN: Mr. Anton Kurtz
President
271 Plainfield Road
Edison, New Jersey 08820

Gentlemen:

Subject: Inspection No. 30-08048/84-01

This refers to your letter dated April 16, 1985, in response to our letter dated June 6, 1984.

In your letter, you requested clarification of the violation listed as Item D in our Notice of Violation. The Notice of Violation clearly specifies the regulatory requirements and Parts of the Code of Federal Regulations that contain the requirements, the violation of the regulations that was identified, and the date on which the violation occurred. You, as a licensee, are expected to be knowledgeable of the regulatory requirements applicable to your authorized licensed activities. However, we are enclosing a copy of Subpart C - Shipping Papers of 49 CFR 172.200 for your review in preparing a response to the violation.

You are required to submit to this office within thirty days of the date of the letter a written reply, including (1) the corrective steps which have been taken and the results achieved; (2) the corrective steps which will be taken to avoid further violations; and (3) the date when full compliance will be achieved.

Your cooperation with us is appreciated.

Sincerely,

Original Signed By:
Francis M. Costello

John D. Kinneman, Chief
Nuclear Material Safety Section A
Division of Radiation Safety
and Safeguards

Enclosure:
Copy of 10 CFR 172.200

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29-14171-01 PDR

OFFICIAL RECORD COPY

RL ADVANCED RAD 84-01 - 0001.0.0
07/08/85

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RETURN ORIGINAL TO
REGION I

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cc:
Public Document Room (PDR)
Nuclear Safety Information Center (NSIC)
State of New Jersey

bcc:
Region I Docket Room (w/concurrences)

RI:DRSS	RI:DRSS
Rowe/ca	Costello
7/15/85	7/ /85

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OFFICIAL RECORD COPY

RL ADVANCED RAD 84-01 - 0002.0.0
07/08/85

NA Number	Section	Description
NA 9153	101	Zinc acetate
NA 9154	101	Zinc ammonium chloride
NA 9155	101	Zinc borate
NA 9156	101	Zinc bromide
NA 9157	101	Zinc carbonate
NA 9158	101	Zinc fluoride
NA 9159	101	Zinc formate
NA 9160	101	Zinc phenosulfonate
NA 9161	101	Zinc sulfate
NA 9162	101	Zirconium potassium fluoride
NA 9163	101	Zirconium sulfate
NA 9164	101	Uranic acetate
NA 9165	101	Organic peroxide liquid or solution, n.o.s.
NA 9166	101	Pyrethrin
NA 9167	101	Organic peroxide solid, n.o.s.
NA 9168	101	Hazardous substance liquid or solid, n.o.s.
NA 9169	101	Hazardous waste liquid or solid, n.o.s.
NA 9190	101	Ammonium permanganate
NA 9191	101	Chlorine dioxide hydrate frozen
NA 9193	101	Chickler corrosive liquid, n.o.s.
NA 9194	101	Chickler corrosive solid, n.o.s.
NA 9195	101	Metal alloy solution, n.o.s.
NA 9199	101	Chickler poisonous liquid, n.o.s.
NA 9200	101	Chickler poisonous solid, n.o.s.
NA 9201	101	Antimony trioxide
NA 9202	101	Carbon monoxide, cryogenic liquid
NA 9206	101	Methyl phosphonic dichloride

(49 U.S.C. 1803, 1804, 1808, 49 CFR 1.53, App. A to Part I)

[Amdt. 172-85, 48 FR 50446, Nov. 1, 1983, as amended by Amdt. 172-89, 49 FR 1385, Feb. 29, 1984; Amdt. 172-94, 49 FR 38134, Sept. 27, 1984]

Subpart C—Shipping Papers

§ 172.200 Applicability.

(a) *Description of hazardous materials required.* Except as otherwise provided in this subpart, each person who offers a hazardous material for transportation shall describe the hazardous material on the shipping paper in the manner required by this subpart.

(b) This subpart does not apply to any material other than a hazardous waste or a hazardous substance, that is:

(1) An ORM-A, B, or C, unless it is offered or intended for transportation by air when it is subject to the regulations pertaining to transportation by air as specified in § 172.101; or

(2) An ORM-A, B, or C, unless it is offered or intended for transportation by water when it is subject to the regulations pertaining to transportation by water as specified in § 172.101; or

(3) An ORM-D unless it is offered or intended for transportation by air.

[Amdt. 172-29A, 41 FR 40677, Sept. 20, 1976, as amended by Amdt. 172-58, 45 FR 34697, May 22, 1980; Amdt. 172-74, 47 FR 43065, Sept. 30, 1982]

§ 172.201 General entries.

(a) *Contents.* When a description of hazardous material is required to be included on a shipping paper, that description must conform to the following requirements:

(1) When a hazardous material and a material not subject to the requirements of this subchapter are described on the same shipping paper, the hazardous material description entries required by § 172.202 and those additional entries that may be required by § 172.203:

(i) Must be entered first, or

(ii) Must be entered in a color that clearly contrasts with any description on the shipping paper of a material not subject to the requirements of this subchapter, except that a description on a reproduction of a shipping paper may be highlighted, rather than printed, in a contrasting color (the provisions of this paragraph apply only to the basic description required by § 172.202(a) (1) and (2), and (3)), or

(iii) Must be identified by the entry of an "X" placed before the proper shipping name in a column captioned "HM." (The "X" may be replaced by "RQ," if appropriate.)

(2) The required shipping description on a shipping paper and all copies thereof used for transportation purposes, must be legible and printed (manually or mechanically) in English.

(3) Unless it is specifically authorized or required in this subpart, the required shipping description may not contain any code or abbreviation.

(4) A shipping paper may contain additional information concerning the material provided the information is not inconsistent with the required description. Unless otherwise permitted or required by this subpart, additional information must be placed after the basic description required by § 172.202(a).

(i) When appropriate, the entries "IMO" or "IMO Class" may be entered immediately before or immediately following the class entry in the basic description.

(ii) For a material meeting the definition of more than one hazard class, the additional hazard class or classes may be entered after the hazard class in the basic description.

(b) *Name of shipper.* A shipping paper for a shipment by water must contain the name of the shipper.

(c) *Continuation page.* A shipping paper may consist of more than one page, if each page is consecutively numbered and the first page bears a notation specifying the total number of pages included in the shipping paper. For example, "Page 1 of 4 pages."

(49 U.S.C. 1803, 1804, 1808; 49 CFR 1.53, App. A to Part 1)

[Amdt. 172-29A, 41 FR 40677, Sept. 20, 1976, as amended by Amdt. 172-29B, 41 FR 57067, Dec. 30, 1976; Amdt. 172-58, 45 FR 34697, May 22, 1980; Amdt. 172-58, 45 FR 74664, Nov. 10, 1980; Amdt. 172-75, 47 FR 44471, Oct. 7, 1982; Amdt. 172-90, 49 FR 10510, Mar. 20, 1984]

§ 172.202 Description of hazardous material on shipping papers.

(a) The shipping description of a hazardous material on the shipping paper must include:

(1) The proper shipping name prescribed for the material in § 172.101 or § 172.102 (when authorized);

(2) The hazard class prescribed for the material in the same section. Except for a proper shipping name that contains words describing more than one hazard class, inclusion of the hazard class is not required when the words of the proper shipping name contain the key word or words of the hazard class of the material, such as Flammable liquid; Poison B. liquid; Radioactive device; or Corrosive liquid;

(3) The identification number (preceded by "UN" or "NA" as appropriate) prescribed for the material in the same section; and

(4) Except for empty packagings, the total quantity (by weight, volume, or as otherwise appropriate) of the hazardous material covered by the description.

(b) Except as provided in this subpart, the basic description specified in paragraphs (a) (1), (2) and (3) of this section must be shown in sequence. For example: "Gasoline, Flammable liquid, UN1203".

(c) The total quantity of the material covered by one description must appear before or after, or both before and after, the description required and authorized by this subpart.

(1) Abbreviations may be used to specify the type of packaging and weight or volume. For example: "40 cyl. Nitrogen, Non-flammable gas, UN1066, 800 pounds; 1 box Cement, Flammable liquid, NA1133, 25 lbs."

(2) The type of packaging and destination marks may be entered in any appropriate manner before or after the basic description.

(d) Technical and chemical group names may be entered in parentheses between the proper shipping name and hazard class.

(e) Except as provided in §§ 171.11 and 171.12 of this subchapter, a material that is not a hazardous material according to this subchapter may not be described by a basic description on a shipping paper indicating it is a hazardous material.

(49 U.S.C. 1803, 1804, 1808; 49 CFR 1.53, App. A to Part 1)

[Amdt. 172-101, 45 FR 74665, Nov. 10, 1980, as amended by Amdt. 172-81, 48 FR 28098, June 20, 1983; Amdt. 172-94, 49 FR 38134, Sept. 27, 1984]

§ 172.203 Additional description requirements.

(a) *Exemptions.* Each shipping paper issued in connection with a shipment made under an exemption must bear the notation "DOT-E" followed by the exemption number assigned and so located that the notation is clearly associated with the description to which the exemption applies.

(b) *Limited quantities.* The description for a material offered for transportation as "limited quantity," as authorized by this subchapter, must include the words "Limited Quantity" or "Ltd Qty" following the basic description.

(e) *Hazardous substances.* (1) If the proper shipping name for a mixture or solution that is a hazardous substance does not identify the constituents making it a hazardous substance, the name or names of such hazardous substance constituents as shown in § 172.101 shall be entered in association with the basic description. This requirement also applies when descriptions from the Optional Table in § 172.102 are used.

(2) The letters "RQ" shall be entered on the shipping paper either before or after the basic description required by § 172.202 for each hazardous substance (see definition in § 171.8). For example: "RQ. Cresol, Corrosive material, UN2076, or Adipic acid, ORM-E, NA9077 RQ".

(d) *Radioactive material.* (1) The description for a shipment of radioactive material must include the following additional entries as appropriate:

(i) The name of each radionuclide in the radioactive material that is listed in § 173.435 of this subchapter. Abbreviations, e.g., "Mo" are authorized.

(ii) A description of the physical and chemical form of the material, if the material is not in special form (generic chemical description is acceptable for chemical form).

(iii) The activity contained in each package of the shipment in terms of curies, millicuries, or microcuries. Abbreviations are authorized. For the shipment of a package containing a highway route controlled quantity of radioactive materials (see § 173.403(i) of this subchapter), the words "Highway route controlled quantity" must be entered in association with the basic description.

(iv) The category of label applied to each package in the shipment. For example: "RADIOACTIVE WHITE-I."

(v) The transport index assigned to each package in the shipment bearing RADIOACTIVE YELLOW-II or RADIOACTIVE YELLOW-III labels.

(vi) For a shipment of fissile radioactive materials:

(A) The words "Fissile Exempt," if the package is exempt pursuant to § 173.453 of this subchapter, or

(B) If not exempt, the fissile class of each package in the shipment, pursuant to § 173.455 of this subchapter,

and

(C) For a Fissile Class III shipment, the additional notation "Warning: Fissile Class III Shipment. Do not Load More Than * * * Packages per Vehicle." (Asterisks to be replaced by appropriate number.) "In loading and Storage Areas, Keep at Least 20 Feet (6 Meters) from Other Packages Bearing Radioactive Labels."

(D) If a Fissile Class III shipment is to be transported by water, the supplementary notation must also include the following statement: "For shipment by water, only one Fissile Class III shipment is permitted in each hold."

(vii) For a package approved by the U.S. Department of Energy (DOE) or U.S. Nuclear Regulatory Commission (USNRC), a notation of the package identification marking as prescribed in the applicable DOE or USNRC approval. (See § 173.471 of the subchapter.)

(viii) For an export shipment or a shipment in a foreign made package, a notation of the package identification marking as prescribed in the applicable International Atomic Energy Agency (IAEA) Certificate of Competent Authority which has been issued for the package. (See § 173.473 of the subchapter.)

(e) *Empty packagings.* (1) Except for a tank car, or any packaging that still contains a hazardous substance, the description on the shipping paper for an empty packaging containing the residue of a hazardous material may include the word(s) "EMPTY" or "EMPTY: Last contained * * *" as appropriate in association with the basic description of the hazardous material last contained in the packaging.

(2) For empty tank cars, see § 174.25(c), of this subchapter.

(3) If a packaging, including a tank car, contains a residue that is a hazardous substance, the description on the shipping paper shall be prefaced with the phrase "EMPTY: Last contained * * *" and shall have "RQ" entered before or after the basic description.

(f) *Transportation by air.* When a package containing a hazardous material is offered for transportation by air

Advanced Radiation Service

271 PLAINFIELD ROAD

EDISON, NEW JERSEY 08820

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MS 18

April 16, 1985

U.S. Nuclear Regulatory Commission
Region I
631 Park Avenue
King of Prussia, PA 19406

Reference: Docket No. 030-08048

Dear Mr. Glenn,

As per your letter dated April 9, 1985, we have reviewed your statements and further amended the text of our Administrative and Operations and Emergency Procedures Manuals. We hope you find these revisions acceptable.

As to your letter dated June 6, 1984, regarding the routine safety inspections that were conducted by Mr. C. Rowe, and Mr. T. Thompson, our response is included. Thank you for your cooperation and patience with these matters.

Sincerely,

Anton S. Kurtz

Anton S. Kurtz

President

Advanced Radiation Service, Inc.

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