

NORTHWEST AIRLINES® March 25, 2009 Northwest Airlines, Inc. Department Number C9025

7500 Airline Drive Minneapolis MN 55450-1101 nwa.com

Angela R. McIntosh, Director
U.S. Nuclear Regulatory Commission
Office of Federal and State Materials and Environmental Management Programs
Mail Stop T8-E24
Washington, DC 20555-0001

RE: Demand for Information on NWA's Tritium Exit Sign Program

Dear Ms. McIntosh:

In reference to your letter dated January 16, 2009 to Northwest Airlines, Inc. (NWA) and received by NWA on January 28, 2009, NWA accepts the opportunity to furnish information relevant to your Demand for Information.

According to your letter, the NRC is requesting information on the process NWA uses to track, transfer and dispose of the tritium powered exit signs in its possession.

NWA has designated the author of this response, the Radiation Safety Officer for the company. His contact information is:

Richard Blenkush Northwest Airlines, Inc. 7500 Airline Drive C9025 Minneapolis MN 55450 612-727-8937

NWA has two types of exit signs in its possession, aircraft exit signs and facility exit signs.

Facility Exit Signs

NWA had eight signs in a hangar facility at the Detroit Metro Airport. Due to the age of these signs in Detroit, they were recently disposed of with Self Powered Lighting of Berwyn, PA. A letter confirming this transfer to the disposal facility was sent to the NRC, Document Control Desk in Washington DC. NWA does not currently posses any exit signs of this type at the facilities for which it is responsible.

Aircraft Exit Signs

NWA has tritium powered exit signs on different models of the aircraft it operates and owns. The method NWA employs for tracking and controlling these signs is similar to the process of tracking many parts on a commercial aircraft. The Federal Aviation Administration (FAA) requires all airlines to closely track the purchase, installation, removal and repair of most parts that are installed on an aircraft. NWA's tritium exit signs are closely monitored via computer and handling procedures when not installed on an aircraft.

Below is the standard process for an NWA aircraft tritium exit sign.

- 1. The part is tracked by the manufacturer and listed on the records of the aircraft.
- 2. NWA aircraft receive a "line check" at least every seven days. All emergency exit signs on an aircraft are checked to ensure they are accounted for and not damaged.
- 3. The signs are located in very visible areas of the aircraft. A flight attendant would likely notice a missing or damaged sign during their pre-flight preparations.
- 4. The sign is not removed from the aircraft until it fails a luminescent test performed by a qualified technician. This test is performed during a "heavy check" of the aircraft, approximately every 18-24 months.
- 5. When removed by a qualified technician, the sign is routed back to the NWA Reclamation Department at MSP for proper disposal.
- 6. As the sign is considered a hazmat item per US CFR49, it is handled carefully and shipped back to MSP per the CFR regulations in a proper shipping container with cushioning material.
- 7. NWA Reclamation works with NWA Corporate Safety to ensure the sign is disposed of with a qualified disposal vendor and the Minnesota Department of Health, Radiation Department, is notified of this transfer to a disposal facility.

Some further aspects of the NWA program to ensure NWA maintains proper control of tritium powered exit signs:

- 1. NWA never transfers signs from one aircraft to another.
- 2. If a sign must be moved from one stock room to another stock room to ensure proper inventory levels, it is shipped per the DOT 49CFR Regulations and is tracked by NWA personnel via a cargo air waybill.
- 3. NWA never sells or transfers exit signs to any other company, except for proper disposal.
- 4. Due to the design and placement of the exit signs, they are not susceptible to damage or removal by inappropriate personnel. A search of the aircraft maintenance log books and computer issuance records for these parts shows that they are only replaced when they fail their luminescent test, performed during a "heavy check." A recent audit of these records found no signs being replaced due to damage or theft.
- 5. With the security requirements of all commercial aircraft, the location of the exit signs on our aircraft and the complicated process required to remove these signs, it would be nearly impossible for a sign to be damaged or removed by passengers or non-trained employees.

When NWA sends an aircraft to a vendor for scrap, the vendor removes the tritium exit signs and transfers them to a company that is certified to dispose of low level radioactive products. NWA's vendor for aircraft scrapping utilizes Thomas Gray and Associates in Orange, California for the disposal of NWA's aircraft tritium powered exit signs.

NWA has conducted an inventory of the exit signs it currently has installed on all aircraft: 1) it owns and operates; 2) it owns and leases to another FAA certified air carrier; 3) it leases from another company and operates; and 4) it has in its controlled stock rooms. The CRJ 200 and CRJ900 are owned by NWA but we do not have possession or control of these aircraft and all maintenance is performed by the lessor, as required by federal regulation. The table below shows results of this inventory. These totals match the records that NWA has for the signs installed on aircraft and in our stock rooms.

	Number	Number of	
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Aircraft	of	Exit Signs	Total
Type	Aircraft	per Aircraft	Signs
DC9-10	8	8	64
DC9-30	52	8	416
DC9-40	12	8	96
DC9-50	34	8	272
747-200	2	7	14
747-200F	12	2	24
757-200	32	1	32
CRJ200	141	4	564
CRJ900	36	6	216
Spares in NWA Stock Rooms			36
Total Signs for			
		NWA	1734

In conclusion, NWA feels that the very strict control it places on all of its aircraft parts, including tritium exit signs, ensures NWA meets the requirements of the NRC regulations for this device. The signs are controlled from the time they enter the possession of NWA until they are disposed of properly by either NWA or our aircraft scrap vendor.

If you have further questions, please contact me at 612-727-8937.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief after completion of a reasonable inquiry. Executed on March 25, 2009:

Richard Blenkush

Senior Engineer, Corporate Dangerous Goods and Safety