From:	Smith, Tom
То:	Tony Gonzalez
Cc:	<u>Morioka, Lance</u>
Subject:	[External_Sender] FW: Reply to information request_ Control 636347
Date:	Monday, August 14, 2023 5:31:58 PM
Attachments:	image001.png
	Reply to NRC information request Signed Letterhead Control 636347.pdf
	RSO Training Certificate for T. Smith Control 636347.pdf
	RSO Course Outline Control 636347.pdf

RE: Control 636347

Subject: Change of radiation safety officers for license #5323232-01, Docket # 030-20394 CC: Lance Morioka, RSO

Dear Tony Gonzalez,

Per request regarding your letter dated August 1, 2023 the following three documents are attached:

- A signed and dated letter in company letterhead
- Improved scan of Thomas Smith's training certificate
- Outline for the Radiation Safety Officer training course attended by Thomas Smith

Thank you for your time and consideration. Please let me know if you need any additional information.

Respectfully, Thomas W. Smith

Tom Smith | Safety Coordinator | Par Hawaii Refining91-325 Komohana Street | Kapolei, Hawaii 96707Office: (808)-547-3873 | Mobile: (360)-770-6704 | Email: <u>TSmith@parpacific.com</u>

🕹 Par Hawaii Refining

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August 14, 2023 Nuclear Regulatory Commission 1600 E. Lamar Boulevard Arlington, TX 76011-4511

Attn: Tony J. Gonzalez, Health Physicist Organization

Subject: Change of Radiation Safety Officers (RSO) Re: License # 5323232-01, Docket # 030-20394 Control: 636347

Dear Tony Gonzalez,

Per request, attached is a copy of Thomas Smith's training certificate and a course outline from Nevada Technical Associates, Inc. of the 40-hour RSO course completed by Mr. Smith in November of 2022.

The course instructor was Dr. Roger Sit. Per the Nevada Technical Associates, Inc. website, "he is Radiation Safety Officer at the University of North Carolina, Chapel Hill. He is a board-certified Health Physicist and has a Ph.D. in nuclear engineering from the University of California at Berkeley. He was previously employed at Stanford Linear Accelerator Center and the University of California, San Francisco; and has more than 25 years of experience in research, medical, and accelerator health physics."

Hands-on training of Mr. Smith on the Par Hawaii Refining radiation sources was performed by the current RSO, Lance Morioka, Sr. Electrical Engineer over the course of the last year. This training consisted of review of the operating procedures, test run of emergency procedures, routine maintenance, and lock-out procedures. Mr. Smith is a former Operations Supervisor in the areas the fixed radiation sources are located, has assisted with the last two bi-annual radiation surveys, and has been the lockout/tagout element owner for several years.

If there are any questions or comments, please feel free to contact as follows:

Respectfully,

Jane Monista 8/14/2023

Lance R. Morioka, RSO Sr. Electrical Engineer Par Hawaii Refining 91-325 Komohana Street Kapolei, HI 96707 (808)547-3957 (Tel.) (808)547-3145 (Fax) Lmorioka@parpacific.com

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Thomas W. Smith Safety Coordinator Par Hawaii Refining 91-325 Komohana Street Kapolei, HI 96707 (808)547-3873 (Tel.) (808)547-3145 (Fax) Tsmith@parpacific.com

Thomas Smith

Kas successfully completed the 40 hour technical short course entitled

Radiation Safety Officer

November 14, 2022 - November 18, 2022

This certificate presented in Las Vegas, NP., November 18, 2022 By Nevada Technical Associates, Inc.

Approval codes for CE units are: ASRT, Class A, NVZ0143001, 43 Units. CIHCM Eligible

ROGER SIT

CERTIFICATE NUMBER: 1668441635

ASRT CEU EXPIRATION DATE: SEPTEMBER 1. 2025

Nevada Technical Associates, Inc. Radiation Safety Officer Course Outline

Starting time: 8:30 each day. The topics below will be more or less evenly distributed over the duration of the course.

1. Introduction

- a. Course objectives and schedule
- b. Origins of nuclear science
- c. Atomic structure, isotopes, nuclear stability
- d. Equations of radioactive decay
- 2. Radioactive Decay Processes
 - a. Alpha emission
 - b. Beta emission
 - c. Gamma emission
 - d. Other decay processes
 - e. Statistics of radioactive decay
- 3. Interaction of Radiation with Matter
 - a. Modes of interaction
 - b. Heavy charged particle interactions
 - c. Beta particle interaction
 - d. Gamma ray interaction
 - e. Neutron interaction
- 4. Radiation Detection and Measurement
 - a. Gas-filled chambers
 - b. Scintillation detectors
 - c. Semi-conductors
 - d. Photographic emulsions

- 5. Biological Effects of Radiation
 - a. Radiation quantities and units
 - b. Quality factors
 - c. Biological effects
 - d. Mechanisms of biological damage
 - e. Acute, whole-body gamma radiation
 - f. Risk of stochastic effects
 - g. Fatality rates in various industries
 - h. Radiation dose from natural and man-made sources
- 6. Shielding
 - a. Charged particle shielding
 - b. Photon shielding
 - c. Neutron shielding
 - d. Facility shielding
- 7. Personnel Radiation Dosimetry Devices and Methods
 - a. External monitoring
 - b. External dose evaluation
 - c. Internal monitoring
 - d. Internal dose assessment
- 8. Federal and State Regulations
 - a. Chronology of standards
 - b. Sources of standards, recommendations and requirements
 - c. Basis of Standards
 - d. Current regulations
 - e. Licensing procedures
- 9. Radiological Safety Surveys, Records and Documentation
 - a. Surveys and inspections
 - b. Radiological Controls and ALARA
 - c. Records and documents
 - d. Operating and emergency procedures and document control
- 10. Radioactive Material Transportation and Disposal Regulations
 - a. Applicable regulations
 - b. Categories, packaging and limits
 - c. Manifests, records, markings, and labels
 - d. Radwaste disposal methods, sites, records and regulations

- 11. Radiological Emergencies
 - a. Definitions, classifications and phases
 - b. Notifications and assistance
 - c. Response: isolation, radiation and medical evaluations
 - d. Review of accident causes and recent accidents

12. Drafting a Radiological Safety Plan (student exercise)

- a. Attendees prepare program
- b. Exercise review