

NAME OF APPLICANT: **Ideal Source Quality Assurance, LLC**
ADDRESS (physical location): **409 Vandiver, Building 4, Columbia, MO**
TYPE OF LICENSE: **Possession of irradiated topaz gemstones**
DOCKET NO.: **030-37513**
CONTROL NO.: **316378**
NRC REVIEWERS CONDUCTING THE VISIT: **Kevin Null**

NAMES AND TITLES OF APPLICANT PERSONNEL CONTACTED DURING VISIT:

William Yelon, Ph.D. (Owner, Operator and RSO)

AREAS DISCUSSED OR REVIEWED DURING THE PRE-LICENSING VISIT

1. Business Operations
2. Facility
3. Radiation Safety Operations
4. Personnel

APPLICANT (Management Representative) :

[See attached for signatures]

Signature and date

NRC REVIEWER:

[See attached for signature]

Signature and date

Date of Revision: July 5, 2007

Version 3

B/B

NAME OF APPLICANT:
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AREAS DISCUSSED OR REVIEWED DURING THE PRE-LICENSING VISIT

1. Business Operations
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APPLICANT (Management Representative) :

William B Geph 9/19/07
Signature and date

NRC REVIEWER:

Kevin A. Neel 9/19/07
Signature and date

NAME OF APPLICANT: **Ideal Source Quality Assurance, LLC**

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PRE-LICENSING VISIT SUMMARY:

Ideal Source Quality Assurance, LLC (ISQA) has applied to the NRC for a new license to possess irradiated topaz gemstones. The licensee will be performing QA/QC on the stones to verify that they contain radionuclides that are below exempt quantities. Subsequent to QA/QC studies, the stones will be transferred to Ideal Source International, LLC, for distribution under an exempt distribution license that will be issued by NRC HQ. The reviewer evaluated the areas below in order to reasonably ensure that the applicant will use the requested radioactive materials as intended:

1. Business Operations

ISQA is owned and operated by Dr. William Yelon. Dr. Yelon has leased office space in an office building located in Columbia, Missouri. Dr. Yelon will also be the RSO and only authorized user on the license. He is also on staff at the University of Missouri - Rolla as a part-time professor in chemistry and materials research, and holds an adjunct position at the University of Missouri - Columbia in physics and nuclear sciences.

ISQA is registered with the State of Missouri, and does not have a Federal Tax ID number because ISQA does not have any employees. Dr. Yelon provided the reviewer with a copy of the lease agreement for the office space, and allowed the reviewer to view his State of Missouri driver's license. To further demonstrate the viability of ISQA, Dr. Yelon also showed the reviewer evidence that ISQA holds a checking account with the 1st National Bank and Trust in Columbia, Missouri. The reviewer was also provided a copy of canceled check #1009 in which Dr. Yelon purchased office supplies to support the business.

2. Facility

The reviewer toured Dr. Yelon's recently leased office space, and areas where gemstones will be stored and analyzed. The office is located in a business park that has 6 stand-alone office buildings. Dr. Yelon's office is located in Building no. 4, suite 201. Building 4 is shared by several other small businesses. The reviewer concluded that ISQA is located in a building that will adequately support intended operations.

3. Radiation Safety Operations

During the tour of the facility the reviewer noted that Dr. Yelon had purchased equipment needed to conduct licensed operations. For example, equipment in place at the time of the visit included a fire-rated combination safe for storing irradiated gemstones, a NaI detector within a lead-lined cylinder for analyzing the radionuclide content of gemstones, a Rad Alert Inspector Exp radiation detector coupled to a pancake probe, and several pocket dosimeters. Dr. Yelon also provided a copy of a purchase order for a decon kit, and lead bricks that will be used as needed for additional shielding.

Based on the tour of the facility, an interview of Dr. Yelon, and a review of records, the reviewer concluded that ISQA is well-prepared and well-equipped to effectively operate a radiation safety program.

4. Personnel

This is a small, one-person business that will be receiving and analyzing irradiated gemstones. Dr. Yelon does not plan to hire additional staff at this time. However, he has purchased several pocket dosimeters to monitor visitors, or any employees that may be hired in the future.

No issues were identified.

5. Overall Assessment

Based on results of the site visit and interview conducted, the reviewer concluded that the new applicant demonstrated a well thought out plan for the use of licensed material, with a clear goal to use the requested radioactive materials as intended.

Kristi A. Rice 9/25/07
Reviewer Signature and date

[Signature] 10/1/2007
Supervisor Signature and date

Date of Revision: July 5, 2007

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