### **Capabilities Statement**

# **25 September 2018**

**K&S Associates, Inc.** is an independent medical physics consulting organization offering accredited calibration services, and TLD patient dose measurement services. K&S is an Accredited Dosimetry Calibration Laboratory (ADCL). We are accredited by the American Association of Physicists in Medicine (AAPM) and American Association of Laboratory Accreditation (A2LA) for the calibration of Brachytherapy, Therapy, Diagnostic, and Survey Meter Equipment. Additionally, we are accredited by A2LA to ISO 17025: 2005 and ANSI/NCSL Z540-1-1994.

#### **Point of Contact Information**

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#### **Business Information**

DUNS Number: 075376988

NCAGE: 1U752

NAICS Codes: 541380; 541310; 541620; 541690; 622110

SIC Code: 8734

#### **Calibration Services**

K&S offers a full range of radiation therapy, diagnostic, brachytherapy, survey meter, environmental area monitors, and personnel and pocket dosimeter calibrations to include:

- 15 kVp to 250 kVp x-rays
- Cs-137 and Co-60 gamma rays
- Low Dose Rate (LDR) brachytherapy isotopes (Pd-103, I-125, Ir-192, Cs-131, Cs-137)
- High Dose Rate (HDR) (Ir-192) brachytherapy re-entrant well chambers
- mammography (23-35 kVp)
- radiographic (40-150 kVp)
- fluoroscopic (80-120 kVp)

- CT (110-140 kVp)
- Low Rate Dosimeters (70-110 kVp)
- Visible Light Meters Illuminance and Luminanc

## **Clinical Medical Physics Services**

As a medical physics consulting organization, K&S Associates, Inc. also provides professional, clinically oriented medical physics consulting to support the medical physics needs of hospitals and healthcare clinics.

K&S is staffed by experienced, qualified, and board certified Medical and Health Physicists. We provide a wide range of clinical, administrative, technical, and quality assurance support services as needed or requested.

We provide the following medical and health physics support to:

- Radiation Oncology facilities
- Diagnostic Medical Imaging facilities
- Nuclear Medicine facilities
- Hospital Radiation Safety Officers
- Radiation Shielding Design and Evaluation Surveys (x-ray, nuclear medicine, radiation oncology)
- Health Physics Services

K&S Associates, Inc. is fully capable of providing the following medical physics commissioning project services:

#### **Commissioning Services:**

- Clinical Linear Accelerators
- Treatment Planning Systems (including any beam modeling)
- CT & Conventional Simulators
- Low & High dose Brachytherapy Systems

We provide all equipment necessary to completely commission, calibrate, and verify:

- Linear Accelerator and/or Treatment Planning System
- Multi-Leaf Collimation system
- Small Field Dosimetry
- Enhanced Dynamic or Motorized Wedge
- IMRT, SBRT, SRS and VMAT programs
- HDR & LDR Systems
- CT, CT/PET & MRI Patient Simulating systems

We will perform Annual Linear Accelerator Calibrations to include the following services:

- TG-51 Photon & Electron Calibrations
- Dosimetry Factor Verification
- TG-142 Quality Assurance
- Complete documentation of all data and verification measurements are provided.

### **Medical Imaging Physics Services:**

We provide full Diagnostic Medical Physics services for hospitals and outpatient imaging centers including the following services:

- ACR mammography physics inspections
- ACR CT physics inspections
- ACR MRI physics inspections
- ACR nuclear medicine gamma camera inspections
- ACR PET inspections
- Annual TG-66 quality assurance for CT patient simulating systems
- Shielding design reports
- Shielding surveys
- Radiography and fluoroscopy physics inspections
- Dose calibrator quarterly linearity
- Dose calibrator annual accuracy
- Dose calibrator geometry
- Sealed source inventory
- Sealed source leak testing
- Quarterly audits of nuclear medicine
- Annual radiation safety program audit
- Health physics support for I-131 therapies
- Calibration of wipe counters
- Chi square testing of thyroid probe
- Radiation Safety training
- Radioactive materials licensing and license amendments
- Lead apron inspections
- Quarterly ALARA review of dosimetry records
- Fetal dose calculations
- Health physics support for Y-90 microsphere\_therapy (Sirspheres\_and Theraspheres)
- Shipping radioactive materials
- Minimum detectable activity determination
- Medical physics and health physics support for mis-administrations/medical events
- Health physics support for brachytherapy

### **Health Physics Services**

K&S is staffed by experienced, qualified, and Certified Health Physicists (CHP) capable of providing a broad spectrum of professional health physics consulting support to facilities or organizations. Some of the health physics services we provide include:

- Survey/inspections of x-ray generating equipment used by Federal, State and local governmental agencies; or private security firms
- Staff and personnel training in the transport of hazardous radioactive materials (DOT Training)along with general radiation safety
- Consulting services for radioactive waste management
- Industrial or manufacturing operations that use radioactive materials or x-ray generating equipment
- Radioactive Materials License
- Research and development support in which radioactive materials or x-ray generating equipment are used
- Personnel dosimetry consultation and support
- Perform swipe contamination surveys to include gamma-spectroscopy

## **Clinical Radiation Shielding Design and Evaluation Surveys**

K&S is capable of preparing radiation shielding designs for radiation oncology vaults, diagnostic x-ray rooms and special procedures room, and nuclear medicine facilities. We also provide any necessary shielding evaluation validation/verification x-ray and neutron surveys.