**Laser Radiation Safety Course**

Singapore Environment Institute (SEI) will be conducting a General Course on Laser Safety. This course is designed for those who have little or no knowledge of Laser Safety but need to know its fundamental principles in the course of their work.

The course consists of a 2-day lecture from 9am to 5 pm each day with a 2-hour test on a separate date and the course fee is $670 inclusive of GST per participant. Certificate will only be awarded upon successfully passing the written test which comprised of 50 multiple choice questions.

**Syllabus:**

**1. Differences between Ionising radiation & Non-Ionising radiation**

**Characteristics, Sources, Types, Biological effects**

**2. Laser Radiation & Safety**

**a) Physical Characteristics for Laser Radiation**

**b) Sources for Laser Radiation and Types of Lasing Systems**

**c) Classification of Laser Devices**

**How laser systems are classified and Classes of Laser Systems**

**d) Laser Applications:**

**i Industrial applications & Examples**

**ii Medical applications & Examples**

**iii Research applications & Examples**

**e) Laser Radiation Hazards and its Exposure Limits**

**Ocular & Skin Exposure to Laser Radiation, and Exposure Limits**

**f) Laser Radiation Safety guides**

**3. Radiation Protection Act & Radiation Protection (Non-Ionising Radiation) Regulations**

**a) Ultraviolet sunlamps**

**b) Microwave ovens**

**c) Medical and Industrial Ultrasound Apparatus**

**d) Magnetic Resonance Imaging (MRI) apparatus**

**e) Entertainment Lasers**

**f) High Power Lasers**

**4. Various Types of NIR Licences Issued by RPNSD Licences N1, N2, N3, N4A, N4B**

Should you have any further enquiry, please contact:

 Singapore Environment Institute (SEI) at **1800-CALL NEA (1800-2255 632)**

 or email: nea\_seicustomer@nea.gov.sg