Planned Special Exposures

A. **Purpose:** To standardize procedures for planned special exposures.

B. **Applicability/scope:** This policy applies to individuals who are identified to undergo a planned special exposure.

C. **Definitions**

1. Planned Special Exposure – an infrequent exposure to radiation, separate from and in addition to the annual occupational dose limits.

2. Standard Occupational Dose limits – occupational doses to any individual adult from licensed or registered activities to ensure that such dose does not exceed an annual limit, which is the lesser of a total effective dose equivalent of 0.05 Sv (5 rem) or the sum of the deep dose equivalent and the committed dose equivalent to any individual organ or tissue, other than the lens of the eye, equal to 0.5 Sv (50 rem); and annual limits to the lens of the eye equivalent of 0.15 Sv (15 rem), and a shallow dose equivalent of 0.5 Sv (50 rem) to the skin of the whole body or to the skin of any extremity.

D. **Procedures**

1. Prior to permitting an individual to participate in a planned special exposure, the following shall be determined for the individual:
   a. the internal and external doses from all previous planned special exposures; and
   b. all doses in excess of the limits, including doses received during accidents and emergencies, received during the lifetime of the individual;
   c. all lifetime cumulative occupational radiation doses.
   [ref. RCNY 175.03(c)(5)(ii)]

2. If a complete record of an individual's current and previously accumulated occupational dose cannot be obtained, the individual shall not be authorized to receive any planned special exposures.
   [ref. RCNY 175.03(c)(5)(v)(B)]

3. An adult worker may be authorized to receive doses in addition to, and accounted for separately from, the doses received under standard occupational dose limits [specified in RCNY 175.03(c)(1)] provided that each of the following conditions is satisfied:
   a. A planned special exposure is authorized only in an exceptional situation when alternatives that might avoid the higher exposure are unavailable or impractical.
   b. Before the planned special exposure occurs, this exposure is authorized in writing.
   c. Before the planned special exposure, the individual involved shall be informed of the purpose of the planned operation.
   d. Before the planned special exposure, the individual involved shall be informed of the estimated doses and associated potential risks and specific radiation levels or other conditions that might be involved in performing the task.
e. Before the planned special exposure, the individual involved shall be instructed in the measures to be taken to keep the dose ALARA considering other risks that may be present.

f. Prior to permitting an individual to participate in a planned special exposure, prior doses during the lifetime of the individual for each individual involved shall be determined.

g. A planned special exposure shall not be authorized if this exposure would cause an individual to receive a dose from all planned special exposures and all doses in excess of the limits to exceed standard occupational dose limits in any one year, and five times the standard occupational annual dose limits during the individual's lifetime.

h. Records of the conduct of a planned special exposure shall be maintained in accordance with RCNY 175.03(k)(7).

i. A written report in accordance with RCNY175.03(l)(4) shall be submitted to the Office of Radiological Health, NYC DOHMH.

j. The best estimate of the dose resulting from the planned special exposure shall be recorded in the individual's record and informs the individual, in writing, of the dose within 30 days from the date of the planned special exposure. The dose from planned special exposures shall not be considered in controlling future occupational dose of the individual pursuant to RCNY175.03(c)(1)(i) but shall be included in evaluations required by RCNY175.03(c)(6)(iv) and (v). [ref. RCNY 175.03(c)(6)(v)(B)]

E. Responsibilities
   1. Radiation Safety Officer – supervise this program
   2. Radiation Safety Office personnel – assist the RSO in implementing this program

F. Emergency contacts
   1. CUMC Radiation Safety Office – 212 305-0303

G. Cross References like URL, Forms, web addresses, etc. – N/A

H. Medical Surveillance – N/A

I. Recordkeeping
   1. Records of planned special exposures shall be kept in the Dosimetry program files.

J. Appendices – N/A

K. Forms – N/A

L. References – N/A

M. Acknowledgements – N/A