

## **APPENDIX C**

### **PROPOSED CONSEQUENCES OF CONCERNS/THRESHOLDS**

The proposed limits for onsite workers and the public are guidance for use as consequences of concern in the process hazard analysis that could trigger further accident analysis. The limits also serve as the thresholds that the accident analysis would use to determine that the sequence of events and established controls are adequate to protect the health and safety of the public.

#### **Normal Operations to Anticipated Operational Occurrences ( $10^1$ to $10^{-2}$ )**

- Onsite workers should not exceed 10 CFR 20.1201 limits for radiation exposure and 29 CFR Part 1910 Subpart Z limits for chemical hazard exposure.
- Offsite/members of the public should not exceed 10 CFR 20.1301 limits for radiation exposure and 29 CFR Part 1910 Subpart Z limits for chemical hazard exposure.

#### **Unlikely Events ( $10^{-2}$ to $10^{-4}$ )**

- Onsite workers could have exposures that exceed 10 CFR 20.1201 limits for radiation exposure and 29 CFR Part 1910 Subpart Z limits for chemical hazard exposure but not be exposed to levels that could result in death or serious injury.
- Offsite/members of the public could have exposures that exceed 10 CFR 20.1301 limits for radiation exposure and 29 CFR Part 1910 Subpart Z limits for chemical hazard exposure but below 5 rem total effective dose equivalent (TEDE) or 30 mg uranium in soluble form or below immediate danger to life and health (IDLH) levels for hazardous chemicals.

#### **Highly Unlikely Events ( $<10^{-4}$ )**

- A nuclear criticality.
- Onsite workers could be exposed to levels that could result in death or serious injury.
- Offsite/members of the public could have exposures that exceed 5 rem TEDE or 30 mg uranium in soluble form or be exposed to greater than IDLH levels for hazardous chemicals.

**NOTE: Frequencies other than the above may be attributed to the terms of unlikely and highly unlikely provided adequate justification is provided.**