

## HLWYM HEmails

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**From:** Oleg Povetko  
**Sent:** Tuesday, November 08, 2005 7:17 PM  
**To:** Timothy McCartin  
**Subject:** FW: TPA Code Inventory

Tim,

Please find below some suggestions on the subject matter.

For long term nominal scenario TPA simulations I would recommend we remove Cs-135, Ni-59, C-14, Se-79, Nb-94, Cl-36, Cm-245, Cm-246 from aqueousnuclides list. In addition to that, for long term simulations, Am-241 can be removed with concurrent corresponding adjustment made to initial inventory of Np-237: the entire initial mass of Am-241 should be added to the initial mass of Np-237. I would, however, add U-235 > Pa-231 > Ac-227 chain for longer term runs as relatively significant contributor to the mean peak dose.

For each TPA subversion issued we can make radionuclide selection an iterative procedure. First, we establish screening peak and dose criteria at some arbitrary values (~90-95% for dose and ~40-70% for peak criteria). Only those dose peaks, if any observed, will be considered, which doses exceed certain fraction of peak mean dose. Then, we can make an initial full run with all remaining radionuclides and select several dose peaks using the peak criteria (~40-70%). For each peak we then can screen out those radionuclides contributing less than screening dose criterion value above (~90-95%). We'll name this resulting radionuclide set by the name of TPA subversion and use it for the rest of simulations involving this TPA subversion. Or, aqueousnuclides parameter may get some extension of its name corresponding to the subversion numerical value, if it's not too laborious to modify parameter name codewise with each subversion.

Oleg Povetko.

-----Original Message-----

**From:** Christopher Grossman [mailto:CJG2@nrc.gov]  
**Sent:** Tuesday, November 08, 2005 9:32 AM  
**To:** dpickett@cnwra.swri.edu; jmcumurry@cnwra.swri.edu; jwinterle@cnwra.swri.edu; lhoward@cnwra.swri.edu; opensado@cnwra.swri.edu; opovetko@cnwra.swri.edu; rbenke@cnwra.swri.edu; rnes@cnwra.swri.edu; smohanty@cnwra.swri.edu; <Olufemi Osidele; CJG2.twf4\_po.TWFN\_DO@nrc.gov; jxg4.OWGWPO02.HQGWDO01@nrc.gov; KLC.twf4\_po.TWFN\_DO@nrc.gov; RBC.twf4\_po.TWFN\_DO@nrc.gov; STG1.OWGWPO02.HQGWDO01@nrc.gov; TJM3.twf4\_po.TWFN\_DO@nrc.gov  
**Cc:** ACC.twf4\_po.TWFN\_DO@nrc.gov; BWL.twf4\_po.TWFN\_DO@nrc.gov  
**Subject:** TPA Code Inventory

**Item Type:** Appointment  
**Start Date:** Thursday, 10 Nov 2005, 10:30:00am (EST)  
**Duration:** 1 Hour  
**Place:** T-7 A1

**Location:** NRC: T-7 A1, CNWRA: A- 137  
**Time:** 10:30am ET; 9:30am CT  
**We will call the CNWRA at :** 210-522-5378

**Purpose:** To follow-up and discuss suggestions for modification to the base-case inventory data set for TPA 5.X.

Outcome: A consensus on path forward for radionuclides to include in TPA 5.X inventory base case data set.

Procedure: Tim McCartin will discuss proposals (to be delivered shortly by Tim) regarding inventory modifications and rationale. Staff should be familiar with Tim's proposals and ready to ask questions and discuss.

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**Received Date:** 11/8/2005 7:16:43 PM  
**From:** Oleg Povetko

**Created By:** opovetko@cnwra.swri.edu

**Recipients:**  
"Timothy McCartin" <Timothy.McCartin@nrc.gov>  
Tracking Status: None

**Post Office:** cnwra.swri.edu

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MESSAGE	2864	11/8/2005 7:16:43 PM

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