

Here are the parameters we agreed to fix. If someone's model has different parameters that we need to fix, please send an email to me and Lauren. These are the notes from the last day.

Scenario C, River Model:

- do same radioisotopes in water as in Sizewell, plus tritium, I-131
- Don't need to do atmospheric for this Scenario
- Tritium & I-131 release: 1 TBq/a
- Chalk River
- Use real measurements (not now, maybe in future IAEA program).
- Rudie check if CR is done before in VAMP.
- 50 year integration time.
- List of parameters:
 - Cream: length of compartment, width, and depth.
 - Water flow rate.
 - Sediment flow rate.
 - Suspended sediment load
 - Depth of bed sediments
 - Sediment density
 - Kd
 - Concentration factors for fish

These Required for each compartment in cream.

Distance to critical group or point of interest. (possibly more than one depending the pathway).
Which side of the river is the release w.r.t the receptor?

Participants will send Trev & Lauren any other parameters which they have in their codes.

How far we are going to model.
Concentrations downstream.

Irrigation
See which pathways & habit data (obtain from assessment).

Preliminary pathway list:

- Fish consumption
- Drinking water (is it treated?)
- Irrigation (crops? Agriculture?)
- External exposure (standing by the river & swimming).
- Water to animals who drink from the river

Time spend at location.

ID locations of where the drinking water is obtained (after how many km?).

Drinking water is after treatment (filtered &/or treated). (assume no effective treatment).

Double check if these isotopes... are released.

Outputs:

- Do all pathways at 3 or 4 distances:
 - Could do all pathways each distance downstream...
 - Or could do each pathway at a specific distance.
 - More info if we do the first one...

Actually habits may dictate the above, but can still do concentration profiles (concentration in sediment and water) of the river.
Activity concentrations and doses down stream.

(Note mistake in SRS-19 (figure 12, assessment on other side of the river should not include factor Pr).

Dose coefficients for ingestion, external gamma & beta. (could be the same as the marine).. need new data for new nuclides.

If possible use dose coefficients from Scenario Av2.