



Planned Activities of the Tritium/C14 Working Group

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Test Scenarios

Perch Lake scenario

Soybean scenario

Pickering scenario

Pine tree scenario

Mussel scenarios (uptake and depuration)

Pig scenario

Rice scenario (C-14)

Potato scenario (C-14)



Other Activities

Definition of OBT

Hypothetical acute-release scenarios

Contribution to TRS-364



Perch Lake Scenario

A test of models that predict steady-state tritium concentrations in chronically-contaminated aquatic ecosystems

This scenario is complete and the final report is posted on the EMRAS website.





Soybean Scenario

A test of models that predict the time-dependent behaviour of tritium in soybeans acutely exposed to elevated levels of HTO in air

Check one last model description





Pickering Scenario

A test of models that predict steady-state tritium concentrations in chronically-contaminated agricultural ecosystems

Finalize an appendix discussing the effect of averaging time on predicted concentrations





Pine Tree Scenario



A test of models that predict steady-state tritium concentrations in groundwater and pine trees in the vicinity of multiple chronic atmospheric tritium sources



At this meeting: Last opportunity for WG members to comment on the draft final report

After the meeting: Technical editing if required, followed by editing for English



Mussel Scenario - Uptake Phase

A test of models that predict the time-dependent behaviour of tritium in aquatic organisms exposed to an abrupt increase in tritium concentrations in their environment

At this meeting: Last opportunity for WG members to comment on the draft final report

After the meeting: Technical editing if required





Mussel Scenario – Elimination

- Similar to the uptake phase except that the mussels were exposed to an abrupt decrease in tritium concentrations in their environment
- At this meeting: Discuss the draft final report
- After the meeting: Revise and finalize the report



Pig Scenario

A test of models that predict the time-dependent behaviour of tritium in pigs subject to a contaminated diet. Both model-data and model-model comparisons are being undertaken

At this meeting: Discuss the draft final report

After the meeting: Revise and finalize the report, followed by editing for English





Rice Scenario (C-14)

A test of models that predict steady-state C-14 concentrations in rice growing near a continuous atmospheric source of C-14

At this meeting: Last opportunity for WG members to comment on the draft final report

After the meeting: Technical editing if required, followed by editing for English





Potato Scenario (C-14)

A test of models that predict the time-dependent behaviour of C-14 in potatoes acutely exposed to elevated levels of C-14 in air

At this meeting: Discuss the draft final report

After the meeting: Revise and finalize the report, followed by editing for English





Definition of OBT

- Agree on a final definition that is consistent with traditional analytical procedures and dose coefficients



Hypothetical Scenarios

- To assess the consequences of acute atmospheric tritium releases with the aim of providing guidance to decision-makers in managing accidents
- At this meeting: Discuss the draft final report
- After the meeting: Revise and finalize the report, followed by editing for English



Contribution to TRS 364

- TECDOC
 - At this meeting: Last opportunity for WG members to comment on the draft final report
 - After the meeting: Technical editing if required

- TRS
 - At this meeting: Present and discuss first draft of tritium/C14 chapter of the TRS
 - After the meeting: Revise and finalize the report



Other Activities

- Experience with Ian Fairlie
- Two presentations:
 - Environmental tritium modeling in India (P.M. Ravi)
 - The dynamics of OBT formation – its biological and biophysical growth (Franz Baumgaertner)
- Suggestions for next IAEA program
- Discussion of final WG report