SUMMARY OF RECOMMENDATIONS FROM THE ANNUAL MEETING OF THE SCIENTIFIC ADVISORY COMMITTEE (SAC) OF THE TRANSURANIUM AND URANIUM REGISTRIES (USTUR)

RED LION HOTEL
PASCO, WA
APRIL 13-14, 2007

MEETING ATTENDEES:

SAC Members: Dennis Mahlum; Herman Gibb; Bill Hayes; Kathryn Meier; Bob Bistline; Bob Thomas.

DOE Representatives: Marsha Lawn, DOE/HS, Headquarters; Barbara Brooks (retired), DOE/HS, Headquarters; Jennifer Christensen, DOE/RL, Richland Operations Office.

Washington State University: James Kehrer, Dean College of Pharmacy; Vicky Carwein, Chancellor Tri-Cities Campus.

Consultant: Isabel Fisenne, Radiochemist.

Idaho State University (ISU): Rich Brey, Professor/Director Health Physics, and graduate students.

USTUR: Tony James, Director; Susan Ehrhart, Program Admisistrative Manager; Seigei Tolmachev, Laboratory Manager; and other Staff members of the laboratory.

MEETING PROGRAM:

The program was distributed over two days; Friday, April 13, 2007 and Saturday. The first day was primarily devoted to: a) Introduction of new SAC members and presentation of ground-rules for the meeting; b) Presentations by the DOE representatives; WSU representatives; and USTUR Directorship and Management; c) Scientific presentations from members of the USTUR Staff; the Severn Trent Laboratory (STL); and, from members of the ISU Graduate School.

Saturday, April 14, 2007, was devoted to a limited audience in which the more sensitive aspects of the USTUR program were presented and discussed. Isabel Fisenne presented her consulting report on radiochemistry followed by discussion by SAC members. The SAC met in executive sessions for the remainder of the day and developed a list of recommendations to be passed on to USTUR Directorship in the form of this report.

In general, it is the feeling of the SAC that the USTUR has advanced significantly over the past years, and particularly, during the last few. The directions in which its research is now headed appear to be scientifically and managerially successful and achievable. The SAC's major overall concern is that of securing adequate and timely funding from DOE to ensure the continuance of the project into its most fruitful period. A secondary concern is to avoid reaching too far too fast in attempting to improve various aspects of the project.

SPECIFIC RECOMMENDATIONS

Many recommendations were made throughout the two days and most have been captured here. They are listed by number for ease of reference, unless otherwise indicated.

1. There were several 'first orders' of business that affected the committee itself. Two SAC members, Dennis Mahlum and Kathryn Meier, were reinstated for 3-year terms, as their previous terms were expiring. Also, it was decided that Bob Thomas should continue as Chairman. Barbara Brooks, in view of her retirement from DOE, was asked to remain in some convenient and legal status as a non-salaried consultant to the program.

2. The SAC recognizes that Idaho State University (ISU) has an excellent health physics department, and it is recommended that USTUR continue to support the participation of ISU students in various aspects of the USTUR program.

3. Continue to have a close liaison with Dean Kehrer, as he is valuable and unique in understanding the scientific program and has a background enabling him to appreciate the management of projects like the USTUR in connection with a University. He is being most helpful in building and maintaining this liaison between Richland and his WSU campuses in Spokane and Pullman. Dr. Kehrer should be consulted on major decisions in the future and invited to all functions that seem feasible for his position.

4. It is recommended that alternative facilities be investigated for work on the Registries samples. At the time of this meeting, it was thought that the laboratory at CBC/CLS should be up and running as soon as possible to provide quality assurance support to commercial labs that may be chosen to perform radiochemical analyses for USTUR.

5. USTUR staff should consider the development of a technical basis document that defines the criteria for acceptable performance by commercial labs in their analysis of USTUR samples. Such a document should prove useful as a basis for establishing a contract with a commercial laboratory. This is a critical area to help ensure that the validity of ~~the~~ USTUR data are unquestioned in the scientific community.

6. Hasten the establishment of USTUR's quality assurance lab in order to fully utilize the existing radiochemists on USTUR staff.

7. In general, SAC agrees with USTUR's attempts to consolidate its facilities. SAC needs to be kept informed of the status of these activities and wants to make sure that everyone understands the impacts of such actions on the operations of USTUR programs.

8. SAC recognizes the benefits of utilizing ICP/MS for sample analysis and recommends USTUR's continued liaison with Northern Arizona University and their ICP/MS program. Satisfactory results should strengthen the desire for future interaction with similar laboratories for this purpose.

9. With regard to the priority of the three subcontracts USTUR expects to execute, SAC places first priority on those with ISU and PNNL, thinking that budget constraints may be offset by reducing the level of effort at commercial laboratories.

10. Keep the SAC informed about the development of USTUR's databases, and encourage SAC members to review them and provide comments. In view of the capabilities envisioned for USTUR's internal analytical database, staff should investigate the possibility of securing outside funding to support its development into a commercial product.

11. The major purpose of USTUR's research should be clearly defined and be consistent with USTUR's mission statement. This could include a paper that allows one to see how the program has adhered to the focus originally placed upon it by the Atomic Energy Commission five decades ago. It could also include discussions of implications of changes to the original mission.

12. With regard to increasing the interest in, and utilization of, USTUR's data and research materials, considerations should be given to classifying cases by the magnitude of doses incurred. However, the sharing of data and access via the Internet should be done with proper safeguarding.

13. One potential recommendation mentioned that beryllium analyses might be considered for the stored samples as workers were often exposed to beryllium compounds at weapons sites. However, the chemical analyses to determine the concentration of beryllium in tissues requires complicated pre-analyses sample preparations. This is a somewhat different direction for the Registries, and the costs in manpower and dollars may render it not feasible.

14. SAC notes that two of last year's (2006) recommendations have not been implemented: the review of USTUR's Policies and Procedures Manual; and a determination of the usefulness of USTUR's stored tissues. Their resolutions were discussed during the 2007 meeting.

15. Those working on the USTUR database should consider including the Russian data in some way. For example, the data for Mayak workers would be very interesting for comparison with our data. Perhaps Ms. McCord could look into this aspect as she completes the fine work she has started since joining USTUR.

16. It is recommended that the Directorship make a presentation to DOE Headquarters annually. It is essential to bring USTUR program results to staff on the funding side at DOE.

17. With regard to future SAC annual meetings, it is recommended that all USTUR staff, as well as any involved students, make presentations at the meeting. It would also be helpful to have the meeting materials printed in a larger font and include a list of acronyms likely to be used during the discussions.