

**CONFERENCE CALL WITH AREVA-RICHLAND TO DISCUSS MISCHARACTERIZATION
OF A SAMPLING CYLINDER IN THE SUPERCRITICAL CARBON DIOXIDE LICENSE
AMENDMENT**

March 30, 2010

U.S. Nuclear Regulatory Commission (NRC) Representatives: Rafael Rodriguez and Alex Murray

AREVA-Richland Representatives: Loren Maas, Murphy Carmichael, and Sydney Koegler

During this conference call, the NRC staff discussed with AREVA its understanding of the information contained in AREVA's March 23, 2010, letter regarding a mischaracterization of one of the process tanks in the supercritical carbon dioxide (CO₂) amendment. The mischaracterization involved V-72, a tributyl phosphate (TBP) holding tank, which was confused with V-71, a TBP/CO₂ separator tank. AREVA had V-71 in mind when they answered a request for additional information (RAI) dealing with Accident Sequence 186-94 in the Integrated Safety Analysis (ISA) Summary in the area of chemical safety. V-72 will be a 4-liter sampling cylinder that AREVA plans to use as a process tank to support the proposed operations; such cylinder complies with the requirements of the Department of Transportation-3A 1800/TC-3ASM 124. AREVA indicated that they have many of these cylinders onsite. AREVA then described the process operations involving V-71 and V-72. V-72 will collect product from V-71 (located upstream) before it is transferred to the next stage of the CO₂ process. AREVA stated that the worst-case scenario would result in a maximum pressure in V-72 of 550 pounds per square inch (absolute), which is well below its design pressure. The NRC staff inquired about the inventory of licensed material inside V-72 when compared with V-71. AREVA indicated that the inventory of material would be less for V-72 than V-71. In addition, AREVA indicated that V-71 would be pressurized while V-72 would normally be open to the atmosphere. Therefore, a catastrophic release on V-71 would result in a consequence of concern which, according to AREVA, would not be the case for V-72. AREVA further stated that if both tanks had the same inventory of licensed material, the dispersion of the material in V-71 would result in a consequence of concern given the additional energy that a pressurized environment creates.

The NRC staff inquired about AREVA's choice for using sampling cylinders in a manner that appears to be inconsistent with its intended design (i.e., stationary and permanent use involving highly corrosive material versus temporary use and handling of low corrosivity material). AREVA indicated that such decision was made for convenience and expedience, but the ISA showed that the radiological and chemical consequences of this cylinder would not exceed the performance requirements. The NRC staff also inquired about whether Accident Sequence 186-94 (originally described in the context of V-72) could apply to V-71. AREVA indicated that such scenario was possible, but it was not described in the ISA Summary that was submitted with the license amendment application or any of the RAI responses. The NRC staff indicated that they would like to evaluate such accident sequence for V-71. Finally, the NRC staff indicated that they would discuss with management before deciding how to proceed with this new information.