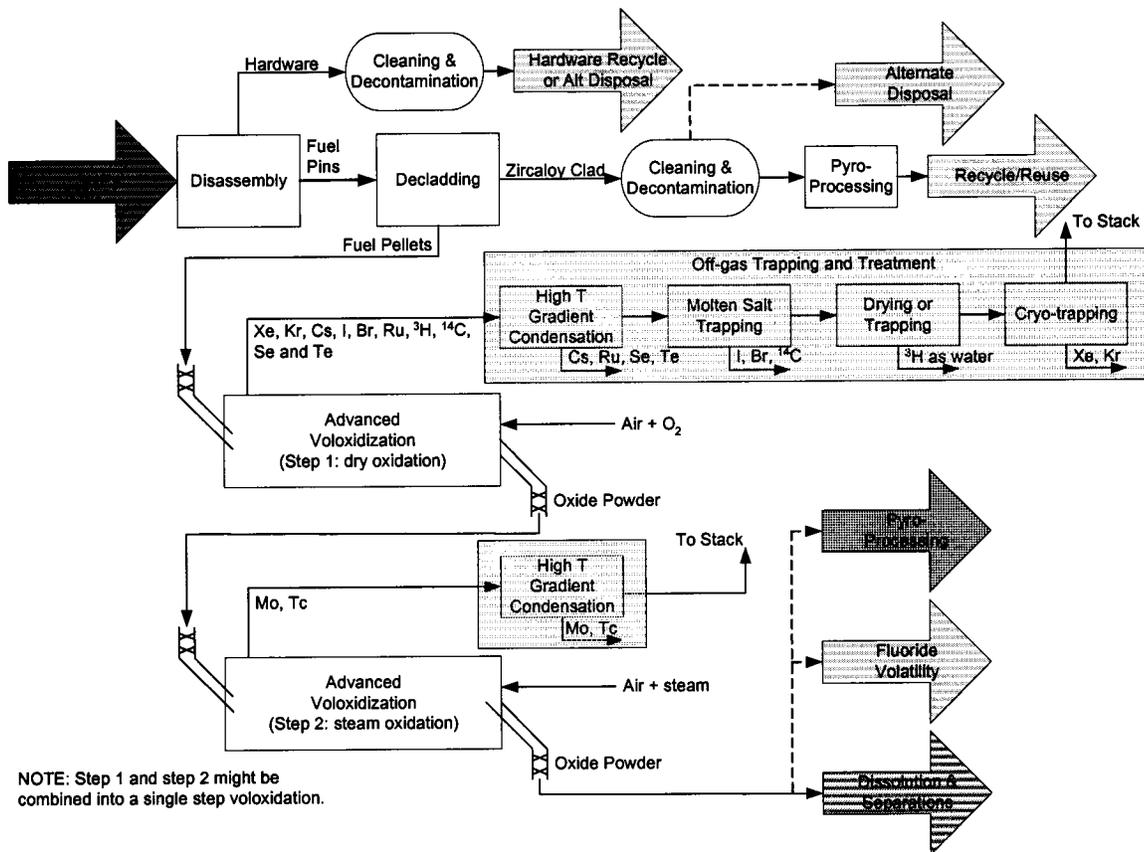


# Advanced Head-End Processing of Spent Fuel

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Development efforts toward an advanced dry head end for the processing of U.S. spent fuel, based on the “older first” concept, have just started and include the collection of previous experiences and lab scale experiments. The overall objective of the proposed process is to separate the hardware and cladding with the minimum degree of retained contamination and to simplify the global separations scheme by up-front oxidative-volatilization removal of several fission products all in a practical and cost effective manner. Early removal of the volatile and semi-volatile fission products (e.g. Cs, Ru, Tc, Mo) significantly benefits subsequent aqueous, pyrometallurgical, or halide volatility separations systems. Another possible goal for aqueous processing includes the oxidation of the noble metal fraction to reduce insoluble solids and colloids in the dissolver. A progress report will be presented.



I propose this communication to be presented as: An oral presentation

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