

ADVISORY COMMITTEE ON REACTOR SAFEGUARDS
UNITED STATES ATOMIC ENERGY COMMISSION
WASHINGTON 25, D.C.

December 15, 1958

Honorable John A. McCone
Chairman, U. S. Atomic Energy Commission
Washington 25, D. C.

Subject: THE WAHLUKE SLOPE

Dear Mr. McCone:

At the request of the Atomic Energy Commission the Advisory Committee on Reactor Safeguards summarizes its views with respect to the proposal to remove restrictions which have heretofore limited the development of the so-called secondary zone of the Wahluke Slope as an agricultural area.

The program, which the Commission has underway, increasing the degree of confinement of fission products in case of accidents to the Hanford reactors will substantially decrease the hazard to the occupants of the Wahluke Slope. After these changes have been completed, the risk from the reactor plant to the health and safety of occupants of this area should be low enough to allow normal use of the secondary zone. Since it is expected that the population growth in this area will be slow in the first few years and the changes will be completed in this time the secondary zone may be released now.

Pertinent to this question are the following facts:

- 1) The Hanford reactors have been in successful operation for many years without experiencing any incident that created a significant hazard on the Slope.
- 2) There have been over the years continuing improvements in the design and operation of these reactors which have substantially reduced the probability of serious accidents.
- 3) Despite these favorable developments, the Hanford reactors continue to pose potential risks to the public that are greater than those of many other reactors, including the large power reactors now under construction at other locations. The reasons for this are associated partly with the early basic design of the Hanford reactors and partly with their role in national security.

- 4) Recent studies have indicated the possibility of effecting a significant additional reduction in potential hazard to the public by improvements in the airtightness of the present reactor buildings and by the provision of suitable filters that will permit better confinement of any radioactive products that may be accidentally released from the reactors.

After careful consideration of all known factors affecting the overall safety of the Hanford operation, and to the things that have been done and can still be accomplished to reduce the hazard to the public, the Committee has reasoned as follows:

- A) While distance from the reactors offers no certain protection against the radioactivity that may be released in a reactor accident, it does provide an important factor of safety which should always be preserved at Hanford by the permanent retention of the exclusion area known as the primary control zone.
- B) The settlement of the Wahluke Slope, to the extent that it attracts settlers from distant locations, will expose increasing numbers of people to the possible consequences of a reactor accident.
- C) The risks of living on the Slope, while not negligible, are significantly less than they have been in the past and with the proposed changes in confinement will not be much greater than those existing at more distant locations.

Sincerely yours,

/s/ C. Rogers McCullough

C. Rogers McCullough
Chairman

cc: Alvine R. Luedecke, GM
Harold L. Price, DLR