RESPONSES TO QUESTIONS OF THE SUBCOMMITTEE ON SCIENCE, RESEARCH, AND DEVELOPMENT BY DR. CHARLES A. BISHOP, U.S. STEEL CORP.

Question 1: How does the steel industry view the possibilities for recycle of metals in manufactured goods—autos, refrigerators, and so forth?

Answer: The steel industry has through the years been a purchaser of scrap for recycle. According to a recent statement before the Senate subcommittee considering bill S. 3400, Mr. W. S. Story, executive vice president of the Institute of Scrap Iron & Steel, stated that in the past 2 years steel mills and foundries bought more than 30 million tons of prepared scrap annually. This included more than 6 million tons

of auto scrap.

Scrap may be contaminated with foreign materials such as copper, nickel, zinc, lead, tin, aluminum, rubber, plastics, and so forth. While none of these foreign materials are helpful, at least three—copper, nickel, and tin—cannot be removed in the normal course of making steel. Accordingly, preparation of scrap by the scrap dealer is the only safeguard. However, I understand a great deal of thought is being given in many different quarters to solving the segregation problem by mechanical and magnetic methods.

In reading about the recycling of scrap, it is apparent that there are many ancillary problems, such as the collection of scrap in a neighborhood, the legal redtape as to the ownership of discarded vehicles, refrigerators, and other junk left on public property, and the ultimate

transporation of the processed scrap to the steel plants.

Question 2: Regarding the need in a number of industries for a process to remove SO₂ from stack gases, could this best be attacked by Federal R. & D. contracts, or by an interindustry cooperative pro-

gram, or by individual process engineering companies?

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Answer: Since so many industries burn coal and oil, there is a broad interest in processes for removing SO₂ from stack gases. I believe that the initial studies should be carried out by Federal R. & D. contracts, either by Government agencies such as the Bureau of Mines, or by private research groups. For processes which show promise, grants should be made for demonstration plants to test the engineering design features.