

(Subsequently, the following supplemental statements were filed for the record:)

SUPPLEMENTAL STATEMENT TO HOUSE COMMITTEE FOR THE DISTRICT OF COLUMBIA
REGARDING H.R. 6981 (GUDE BILL) AND H.R. 10017 (HORTON BILL)

During the testimony submitted to the Committee on Wednesday, August 16, 1967 by Mr. R. L. Counts and Mr. L. T. Via, of Steuart Petroleum Company, additional information was requested by Congressman Multer and Congressman Winn appertaining to that testimony.

These requests for additional information concerned:

1. The percentage of coal to residual oil usage by the Federal Government in the Washington, D.C. area.
2. The sulphur content of available coal.
3. The project number and full name and address of Mr. J. O. Copeland concerning the survey of heating equipment made by the Department of Health, Education and Welfare.

The current G. S. A. contract calls for a usage of approximately 420,000 tons of coal. The Federal Government currently uses 48% coal—52% oil, calculated on a B. T. U. basis.

The total sulphur content of coal mined in the bituminous fields of Virginia, Kentucky and West Virginia varies from .4% to 5.5% by weight on a dry coal basis. However, the availability of the low sulphur coal is limited.

The HEW survey referred to by Mr. L. T. Via in his testimony was conducted by Mr. John O. Copeland, Department of Health, Education and Welfare, U.S. Public Health Center, 1055 Laidlaw Road, Cincinnati, Ohio 45237, and was referred to as Project No. 103—Central Development Program.

L. T. VIA, Sales Manager,
Industrial Oil Burner Division,
Steuart Petroleum Company.

ADDENDUM BY L. T. VIA, SALES MANAGER, INDUSTRIAL OIL BURNER DIVISION,
STEUART PETROLEUM COMPANY

(Submitted by: Richard L. Counts, President Steuart Petroleum Company)

AUGUST 16, 1967.

Residual oil—properly burned—does not smoke! Smoke is the result of incomplete combustion and is principally caused by an insufficient amount of air mixing with the fuel being burned. Smoke *can* occur with the burning of *all* fuels.

"Perfect" combustion is that in which all of the combustible is burned while supplying only the exact amount of air to complete the reaction. In actual practice this condition is never attained and *additional* air—beyond the theoretical requirement is supplied to insure that combustion is complete. If this additional air is *not* supplied in sufficient volume—incomplete combustion and smoke results. This is not the fault of the *fuel*—but the fault of the equipment *burning* the fuel.

In practice, good combustion requires; a) proper proportioning of fuel and air, b) thorough mixing of fuel and air—and c) initial and sustained ignition of the mixture.

Residual oil can—and is being burned completely, efficiently and with practically zero smoke. This is accomplished when quality equipment is used, properly installed, and properly adjusted to supply sufficient combustion air to burn all the fuel.

The time of greatest potential for smoke emission occurs on a cold startup. That is, when the burner first fires into a cold combustion chamber and stack.

But even here, if the combustion cycle is so designed so that the startup occurs on "low fire" and remains on "low fire" until the combustion chamber refractory is heated to a point where it assists in supporting combustion—and *then* the burner switches to a "high fire" condition—incomplete combustion and smoke can virtually be eliminated.

Once the combustion chamber is hot—repeated cycles of the burner occur with a crisp, clean ignition—and produces no smoke. The combustion equipment, of course, must be serviced and maintained at a high efficiency just as an automobile must be checked and serviced to keep it running well.