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THIS IS UNEVALUATED INFORMATION

1. On 7 May 1952, the Scientific-Technical Council (Wissenschaftlich-Technischer Beirat) of the DDR Zentralamt für Forschung und Technik (ZAFT) met to establish research directives for Fachgebiet Kohle und Energie in the Research and Development Department of ZAFT. 25X1

Five million DM East will be granted Fachgebiet Kohle und Energie in 1953 to carry out the research projects which were approved at the meeting. The corresponding sum for 1952 was 2.8 million DM East. The meeting agreed on the following directives for 1953.

2. Work currently in progress on DDR lignite deposits is to be continued. The project concerns the location of deposits, determination of quantities of lignite, and its technical and chemical analysis. By 1952 a complete catalogue of all East German deposits is to be finished.

3. Hard coal in the Doberlug-Kirchhain region is to be analyzed with a view towards its processing possibilities and its use in industry. Although the deposits were opened following the war, no profitable yield has been obtained during the last four years. Recently, however, coal has been discovered which holds promise of more useful exploitation. The new coal was analyzed as being anthracite with little gas content. Because of its lack of gas, the coal cannot be used as a solid fuel. Other uses are to be determined.

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4. Work on the processing of lignite is to be continued in 1953, particularly on

a) mechanical processing
b) chemical processing with chloric acid and subsequent smothering (Dämpfen) under pressure with hydrogen, according to the Fleissner process
c) a small test installation for the removal of salts and ashes from lignite. The trial started to operate 3 May 1952 in the Bruckdorf briquet factory near Halle. The installation is to serve as the model for a large plant capable of processing 4,000 tons of lignite daily.

5. Laboratory research on the removal of sulphur from lignite, which started in 1951 and is continued in 1952, will be carried on and expanded in 1953. A test installation is to be established at Bergakademie Freiberg which will be able to handle ten tons of lignite daily.

6. The briquet pilot plant (Brikettversuchsfabrik) established by ZAFT in Bitterfeld is to be made available for the following research projects:

a) Testing of lignite of all sorts for its potentiality in briquet manufacture (Brikettierbarkeit).
b) Tests for the briquet potential of lignites from Poland, Hungary, and Bulgaria.
c) Investigation of characteristic data on the processing of lignite into briquets. The project is to be undertaken in cooperation with Bergakademie Freiberg. Qualities which will be closely watched include granulation, pressure, tar content, ash content, structure, and solidity.
d) The development of a new type of pipe dryer (Röhrentrockner).
e) Improvement in methods of production of fine-grained and finest-grained briquets with the help of string presses (Strangpressen). Fine-grained briquets, with a pressure resistance of about 140 kilograms per square centimeter, are to be used by DR railroads in order to release hard coal for other uses. Finest-grained briquets, with a pressure resistance of more than 200 kilograms per square centimeter, are to be used in the Lauchhammer coke plant.

7. Research will also be conducted in 1952 on optimum conditions for making lignite into briquets (Bestimmung optimaler Brikettierungseigenschaften) which are to be further used for distillation or gasification. Samples from all briquet factories are to be distilled and gasified to find out whether manufacture of the briquets has to be changed in order to obtain better distillation and gasification results.

8. The results of the operations of the Lauchhammer plant will be investigated scientifically. Furthermore, in connection with Lauchhammer production of hard lignite coke,

a) experiments in progress at a trial coke plant in the Siegmar-Schönau gas works will be continued and expanded in 1953. These experiments concern the manufacture of coke according to the "Spülgas"[1] method; this process allows processing of 200 to 250 tons of lignite daily per oven. The trials are being conducted with the intention of eventually substituting the "Spülgas" method for the Lauchhammer process calling for fire-proof furnaces. The Lauchhammer method permits production of only 80 tons of coke per day per block of ovens.
b) research now being carried on concerning industrial use of liquid by-products from the production of lignite coke is also to be continued and expanded in 1953.

9. The Hirschfelde installation (Druckvergasungsanlage) is to be used to test gasification of lignite from the Egeln region near Magdeburg; Egeln lignite has a high ash and salt content.

10. Experiments currently being made on the purification of industrial waste water will likewise be continued and expanded in 1953. These waters are

a) those from coke plants, and distillation and gasification installations from which phenols and fatty acids are to be extracted and
b) mine waters from which iron compound residues are to be drawn.

11. Work will be continued on the use of iron compounds obtained from mine run-off water. Possible use of the compounds as gas purifying matter (Gasreinigungsmasse, Luxsche Masse, Raseneisenerz) and for pigmentation is to be investigated.

12. Experiments made in the United States on the gasification of lignite dust under oxygen pressure will be further elaborated in the DDR.

13. Work continuing research done by Prof. (fnu) Terres of Karlsruhe Technical University, will be elaborated in 1953. The experiments concern structural changes in peat.

25X1 1. [redacted] **Comment. Gas circulation.**