CENTRAL INTELLIGENCE AGENCY

INFORMATION REPORT

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1. 1954 Research Assignments

(a) The State Secretariat for Chemistry (Chief Administration Heavy Chemistry, Department for Technology and Reconstruction, Goldberg) instructed the factory in July to submit a draft study (Studienentwürfe) by 15 August 1953 for the following 1954 research assignments:

(1.) Caustic alkali
(2.) Iron powder
(3.) Alumina
(4.) Chloromagnesium, anhydrous - magnesium chlorides
(5.) Rare earths
(6.) Oxalic acid
(7.) Aluminum and magnesium alloys
(8.) Metallic titanium
(9.) Tar cracking
(10.) Fluorine-containing vinyl chloride mixed polymerisates
(11.) Processing of the products of tar cracking.

1,000 DM (East) each was allocated to cover expenses incurred in preparing the study proposals for items 1, 7, 9, IO, and 11.

(b) The scientists concerned with these tasks are Dr. Gebhard, Frl. Dr. Guenther Ch.Ing. Henneberger, Dr. Holst, Dr. Kunzel-Mehner and Dr. Seliger. 25X1

2. 1953 Research Assignments Cancelled

The following research assignments have been cancelled:

a. Fluorine
b. F3 - 20. Trichlorostyrol. No work whatsoever had been carried out on this task.

25 YEAR RE-REVIEW

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c. V3 - 10. Carbon tetrachloride.
d. V3 - 05. "Wirbelschichtverfahren"

3. Movements of Scientists and Others

Dipl. Chem. Frl Urbanek of Dr. Hennig's department left the department in July or August 1953.

Frl. Dr. Guenther of the Central Laboratory left in September to go to [redacted] University. 25X1

Dipl. Chem. Menzer joined the Central Laboratory from Leipzig on 1 September.

Dipl. Chem. Toerpel joined the Central Laboratory on 1 September 1953.

Dr. Kadach transferred to the pentachlorophenol and hexachlorcyclohexane plant from the carbon tetrachloride and chloral plant on 1 August. His former responsibilities have been added to those of Dr. Kaltenborn.

Dr. Erhard, head of the Office for Technical Control, has resigned his post as second secretary of the SED group.

Schwarz, first secretary of the SED group, has transferred to the Leuna factory to replace Jonas (formerly also at Bitterfeld) who has been fired. His successor will probably be Bothur, until then third secretary of the SED group.

4. Fluorine polymerisation

Dr. Schumann has succeeded in producing a white powder consisting of 90 percent CH_2CHCl and ten percent CH_2CClF, and a yellowish block of polymerisator CH_2CClF.

5. Zirconium dioxide

(a) One of the 1953 research tasks of the EKB was the development of a process for the production of zirconium dioxide and the production of sufficient quantities of this chemical to satisfy the needs of the DDR wireless valve industry. The factory proposed to build for this purpose a chlorination kiln similar to that designed recently for the treatment of ilmenite. It was proposed to use as raw material stocks of zirconium-containing sand stored in Berlin.

(b) Wolf of the Coordinating Office visited Bitterfeld in this connection on 9 July 1953. He said:

(1.) The matter was very urgent. Deputy-Premier Rau had granted a special bonus for the rapid solution of the problem.

(2.) Werk HF, Oberschoeneweide, still required about 500 kg per year of zirconium dioxide.

(3.) Boitzenburger Plattenwerke also required ca. 4 tons per year of zirconium oxide for glazing special wall tiles.

(4.) The radio valve industry also required 500-1000 kg per year for zirconium metal in ductile form. The EK Bitterfeld would probably be requested to work on this as well.

(5.) About 15 tons of zirconium sand were available free of charge in Berlin. This quantity came from war stocks, previously erroneously believed to be Monazite sand. 75 tons of the original 90 tons had already been used by the ceramics industry.

(6.) A large scale operation was being mounted to recover zirconium-containing sand from the Baltic coast. Wet concentration will be done in Nuenchritz and magnetic separation in Magdeburg.

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(c) [redacted] there are some 35,000 to 40,000 tons of easily exploitable sands on the shores of East Germany. There are probably further quantities under the dunes and below the low-water mark. The sands occur all along the Baltic coast, except on the islands of Ruegen and Hiddensee. The Warnemuende and Usedom areas are especially rich. [redacted] the sands consist of about 950-1000 tons of zirconium (possibly zirconium silicate is meant), 10,500-12,000 tons of titanium sand (mainly ilmenite, but some rutile), and 12,500-13,000 tons of garnet. 25X1 25X1

(d) The sand in question occurs as a thin layer on the beach. Its thickness and location varies with every tide and it is therefore difficult to collect. At present, the sand is hand-loaded onto trucks at a cost of 1000 DM(East) per ton. It was hoped to reduce this figure to 100 DM per ton of preliminary concentration at the sea coast. 50,000 DM investment money was to be made available to the VEB Ostsee Schurfe for this purpose.

(e) Some sand was also available from borings made near Freienwalde. This sand was to be tested by Greiz-Doelau and also passed to Magdeburg for concentration experiments.

(f) As soon as the large chlorination kiln was ready, the EKB was to undertake chlorination of "old" concentrates provided by Kali-Chemie. This work was to be interrupted only very briefly for test runs with the Magdeburg concentrates. The State Secretariat for Chemistry was to report by the end of September on the qualities required by the various customers, and the Coordinating Office was to decide on the allocation of any zirconium dioxide collected.

(g) The Schwerin branch of the Geological Commission was to receive the following 1953 research assignment: Location of possible fossil heavy mineral sand deposits in the coastal area with the aid of geophysical methods.

(h) A request for assistance from the USSR in obtaining zirconium dioxide and metallic zirconium from heavy mineral sand was signed by Secretary of State Dr. Winkler on 19 August 1953.

(i) The EKB was to make all preparations for the operation of a plant for the production of metallic zirconium as of 1 January 1954. The responsible official of the State Secretariat was to submit weekly progress reports to the State Secretary and monthly reports to the Coordinating Office.

(j) The following personalities are connected with the program:

Dipl. Ing. Hegenbarth	Staatssekretariat fuer Chemie, Haupt-Abteilung Technologie und Rekonstruktion.
Korn) Wolf)	Koordinierungs- und Kontrollstelle fuer Industrie und Verkehr.
Dr. Wehner) Dr. Gebhard)	VEB Elektrochemisches Kombinat Bitterfeld.
Dr. Kaiser	VEB Schwefelsaeure- und Aetznatronwerk, Nuenchritz.
Dr. Steinmann	Schwermaschinenbau Ernst Thalmann (formerly Krupp-Gruson), Magdeburg.
???	VEB Chemiewerk, Greiz-Doelau.
Dr. Heck	Aussenstelle Schwerin der Geologischen Kommission.
Langberg) Guese (geologist))	VEB Ostsee-Schuerfe, Rostock.
Warnke	Rat des Bezirkes Rostock.
Dr. Kolp	Seehydrographischer Dienst, Warnemuende.[1]

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6. Works meeting held on 9 September 1953

Dr. Heyder made the following statements among others during the course of his speech summarizing the work of the factory in the period ending 30 June 1953:

Production in the quarter amounted to 102,300,000 DME or 103.8 percent of the planned figure.

Electric power was insufficient. One shop of the aluminum works had had to be closed down. Production of chlorate, graphite and caustic potash had been affected.

Production stopped on the instructions of the State Secretariat included potash, toothpaste and "Bino" soup cubes.

Purest aluminum. 2,000 kWh more power was used during the period in the shop.

Profit was made on the sale of potassium chlorate, sodium chlorate, potassium bichromate, carbon tetrachloride, "Duplexan" and plastic pressed components.

Loss was incurred on the sale of potassium permanganate (103), yellow phosphorus (33), red phosphorus (33), hydrochloric acid (89), lime (10), tellurium dioxide (102), "Tisil" (6), chloride of lime (25), rubies (29), ferrotitanium (66), ferrochrome (149), ferrotungsten (310), ferromolybdenum (65), magnesium products (14), tungstic acid (93), benzoic acid (142), tricresylphosphate (75), polyvinylchloride (53), aluminum (3000), purest aluminum (30). (Figures in 1000 DME.)

Shortages of PVC, sulphuric acid, coal briquettes, phenol.

Ilmenite available was not of sufficiently good quality.

Chlorine. 2,000 tons (5.7 percent) were surplus to requirements, and had to be allowed to go to waste.

Oxalic acid. The plant was old and inefficient. No V2A steel was available for renewal.

Nitrogen plant. Insufficient platinum-rhodium gauze catalysts. The less efficient cobalt catalysts had to be used in one-third of the plant. Production could be raised from the present 92 percent to 96 percent if this were rectified. The condenser capacity was also 12 percent too small.

Alumina from Lauter was not of the required purity.

Ferrotungsten production had been reduced by 50 percent because of a lack of orders. No raw materials were available for the ferromolybdenum plant. A fatal accident had occurred in the ferrochrome plant.

Werk Zscherndorf had been taken over by the factory. Plastic articles would be manufactured there. The plant had an annual capacity of 10,000,000 DME.

Power Station. Turbine No. 10, which was sent away for repairs, had not been returned. Instructions had been received that the works would be required to supply 20 MW more to the public grid: 10.5 MW would be released by reduction of consumption in the factory, the remainder by reorganization and rationalization.

Storage space was proving too small because of irregularity in dispatch.

1953 investments had been cut from 49 to 27 million DME. The projects affected were ferrotungsten, ferrovanadium, inorganic department cooling tower, garage, generator gas pipe line between Werk Sued and Werk Nord, hexachlorcyclohexane, methylene chloride, aluminum works 2 (1 shop would be ready in January 1954, the rest had been cancelled), magnesium. Only 11,000,000 DME had actually been used in the first half-year because of shortage of materials.

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Accident rate

Period	Total No.	incl. serious	fatal	occupational diseases
1952	1100	7	2	7
January-June 1953	406	6	2	0

Research and development

Fifty-one tasks in all were being carried out. Shortage of personnel had affected the program which included:

Alumina pilot experimental plant in Werk Nord. 27,000,000 DME.

Lead-bearing metal for the railways.

Special iron powder half-scale plant in Werk Nord. To be ready in the third quarter 1953.

Tar-cracking experimental plant to handle 200 kg tar/hour. Object is to win vinylchloride.

Hexachlorcyclohexane plant. Cancelled again.

Pentachlorphenol half-scale plant is already in operation.

PVC. A very pure transparent foil christened "Ekalon" had been produced.

Personnel.

One hundred and eighty-nine persons had signed individual contracts with the factory. Five hundred thirty-three had joined the pension plan, and a further 71 were under consideration.

1. [redacted] Comment. The priority given this project and the scale on which it is being carried out appear unjustified, if the zirconium is required only by the tube factories and the tile plant. 25X1

[redacted] Comment. [redacted] the rare (inert) gas referred to is a neon-helium mixture and the price should be changed to read 12.75 DM per liter. 25X1 25X1