

SUMMARY OF THE MAGNESIUM INDUSTRY FILE

19th January, 1935 - Sir Herbert Gepp to Senator McLachlan

Suggested certain developmental work be outlined.
Comments on proposals put up by Australian Magnesium Company.

1. Dr. Kurth has proved high grade magnesium metal can be produced from Tasmanian (Smithton) dolomite on lines indicated in report on Magnesium Industry by Gepp, Stilwell and Nye.
2. World consumption and production is increasing.
3. Present price £170 per ton. Estimated cost in Tasmania £100 on minimum production 1000 tons annually - price not likely to fall below £130.
4. Markets for disposal of a large quantity of metallic magnesium unknown.
5. Of the opinion that the first stage of the suggested programme be carried out by Kurth, or at least under his direct supervision. Doubtful whether the £800 - £1000 sufficient, as not persuaded the production of pure magnesium oxide by ignition of magnesium sulphate is economically practicable on a large scale.
6. With regard to the second stage with estimated expenditure of not less than £6,470.
Comments: (1) Believes any early estimate must be doubled or trebled for inevitable contingencies.
(2) Opposed on general principles to carrying out experimental work in such a direction when all the knowledge and experience required is available in the world provided an agreement with existing manufacturers can be made.
7. Even the first stage should be carried out in conjunction with a British firm.

Recommends:

- (1) Australian Magnesium Company be asked to submit detailed memorandum for consideration and study.
- (2) Question of financial and other co-operation be

22nd October, 1935 - Australian Magnesium Company's Estimate Submitted.

Required £5,000 grant for further research.

Plant to produce 3 tons of metallic Magnesium per day from 27 tons dolomite.

Electric power required - 5,000 h.p.

Men employed - 100 directly and 50 indirectly.

Estimated cost per ton - £95 (Aust.)

London price - £140 (Stg.)

Estimated capital - £300,000

Minister for Mines in Melbourne waited on Senator McLachlan

British Magnesium Corporation sending expert W.S. Robinson to Australia, who will visit Tasmania.

4th November, 1935 - Senator McLachlan to Minister for Mines

Todhunter of Imperial Chemical Industries Ltd. suggests 5 ton parcel of Smithton dolomite be sent to the British Magnesium Corporation for experimental purposes. Arrangements were made for this to be done.

12th November, 1935 - C.H. Grant to Minister for Mines

Useless approaching Robinson because British Magnesium Corporation have refused to co-operate (letter 24th October 1935).

26th November, 1935 - Senator McLachlan to Minister for Mines

Not disposed to support application for grant of £5,000.

British Magnesium Company have already carried out extensive experiments. Local Company may only duplicate or alternatively experiment in wrong direction.

Awaiting results of work on 5 ton parcel.

24th February, 1936 - C.H. Grant to Minister for Mines

After conference with Robinson, British Magnesium Corporation cannot give financial assistance but willing to give technical aid.

They have not met with any success, therefore, information of little value.

Australian Magnesium Company claim to be as far advanced as British Magnesium Corporation.

Enclosed copy of letter to Prime Minister with regard to getting quota in England for, say, 750 tons per annum for 10 years.

Points out Electrolytic Zinc Company established under similar conditions.

24th June, 1937 - C.H. Grant to Minister for Mines.

Agent General and Sen. C.W. Grant met Directors of British Magnesium Corporation in London last month. British Magnesium Corporation definitely antagonistic to establishment Magnesium industry here.

Two main objections:

- (1) Electric power cheaper in England from coal than in Tasmania from water power. McLean thinks this extremely unlikely and must add exchange 25½% before comparisons can be made. Possibly a saving of £10 a ton on power alone.
- (2) Electrolytic process turned down by Germans in favour of Distillation process.

From private and reliable information learn Germans are now erecting Electrolytic process

plant in Lancashire, therefore, hardly place reliance on their other statements. Present consumption of magnesium metal is 30,000 - 35,000 tons, and is increasing.

10th July, 1936 - Senator McLachlan to C. H. Grant.

Report by Sir Herbert Gepp.

Much, if not all, of the information which your proposed investigations would reveal is already available in Britain, Germany and North America, therefore, Commonwealth subsidy not justified.

£5,000 quite inadequate - at least £25,000 to carry investigations to point where even a semi-commercial unit would be justified.

Suggests conference.

11th November, 1936 - Result of Conference

Commonwealth Government not able to make decision before January or February, 1937 - awaiting Sir David Rivett's return from World Science Congress.

March, 1937 - C. H. Grant to Premier

Advanced several stages further.

Strong financial syndicate on mainland has commissioned Sir John Butters to investigate our proposals with view to flotation of a new Company.

Gesture from Commonwealth Government needed to help inauguration of proposed scheme.

250 people directly employed.

Heard on good authority another Company contemplates establishing industry based upon imported materials.
