

October 9, 1946

Mr G. P. Sawyer, Vice Pres.,
Cerro de Pasco Copper Corp.,
40 Wall Street, New York City 5

Dear Mr Sawyer:

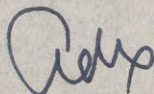
LEAD CHLORIDE

Referring to my memorandum of Sep. 13th, I have looked up my early notes on the Ganelin process but find that it dealt with the reactions in a chloride solvent of lead-zinc sulphides, not chlorides, therefore having no bearing on our problem.

But, if you want to reduce metals inventories as a hedge against metal prices quickly, why not displace the lead directly with cathode zinc and waste the zinc chloride as is already being done in a small way in the indium recovery work, and for which very little equipment would be required?

I find quite a bit has been published on the recovery and marketing of zinc chloride from the de-zincing of lead in the Parkes process but you are not now in a position to develop this with the problem of shipping containers, etc. You would waste about one pound of zinc for three pounds of lead recovered as the zinc chloride could not well be stored but the cash balance is well in your favor. Some bismuth would be recovered also.

Very truly yours,



Memorandum
to
Mr. Sawyer

A-88

September 13, 1946

Lead Chloride

Mr. Smith computes that we have removed at least 2,000,000 lbs of lead from the bismuth bullion we have refined over the last 10 years and this should be on hand as a lead chloride sludge. This has never been reclaimed because of the inadvisability of introducing chlorides with their notorious volatility into the smelting cycle.

Now that lead is at a very high price, the retreatment of this sludge is inviting. Mr. Smith and I see three obvious methods of attack: Electrolyzing to produce lead and chlorine; sulphatizing to produce lead sulphate (which can be smelted) and hydrochloric acid; adding metallic zinc to the molten double chloride of lead and sodium to produce lead and zinc chloride (which has a market outside of Peru).

Oroya can perhaps suggest other methods (I believe experiments were conducted on electrolysis), but schemes should be drawn up for financial possibilities. I have had some large scale experience with the last-named method and when I return to Bel Air will send on some information.

Lawrence Addicks

LA/vp

Memorandum
to
Mr. Sawyer

A-86

September 13, 1946

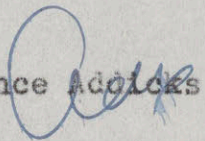
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