Anniston, Ala.

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Aroclor Adsorbers
CEA 1430/1800

R. P. Stevens

Several comments on your 2-20-68 letter to John MacPherson which I feel are necessary. Regarding safety in the scale up of column adsorbers for Aroclors other than Aroclor 1242, we have treated the other Aroclors on the laboratory column (results reported in Anniston PR&D Report 370-322, #22). The scale up characteristics for 1242 were outlined in Report 370-322, #19, and followed up in Report 370-322, #21. The reason I recommended 68 ETU was to give a 36% capacity increase for future need. John's 43 units is exactly what I used in the pilot unit and most probably has some safety factor. If this is what Production wants, I have no squabble. The only logical reason for cutting down on the ETU is an excessive pressure drop for the higher number.

As for this idea of changing Aroclor on the present column from one to the other (example, from 1242 to 1254), this is a poor idea and should be dropped. First, changing the bed is not difficult -- the cost is $150 for adsorbent plus a small amount of labor. To switch from one material to another without changing the bed would require at least 3 volume changes in the bed. The actual fluid volume of the bed is 245 gallons which, with the purge, would require 735 gallons (3 x 245), or represent a dollar cost of $607 (based on $0.84/gallon cost) for the contaminated Aroclor. Yes, this material possibly could be rechlorinated to some other higher Aroclor but the technology must be developed. Frankly, the odds aren't worth the risks. If we are going to pursue this idea at all it must be done in the laboratory.

The "in line" analyzer is still in the development stage. We should have the final design operating by 4-1-68. We still have some difficulties regarding mechanical seals but I hope to have these solved shortly. I have attached a breakdown on the "in line" instrument costs. If you could give me a charge number, or advise me how many units we need, I shall have the components delivered and assembled with the unit ready to go on stream when you need it. This applies to WSK, Anniston, and any other locations which you plan to install these units. The other reason is, if I can order these in bulk I can get a better price and delivery on the items.

I believe this concludes my comments. You and I are in agreement that we have sufficient data available if we use it. By way of this letter, if someone will include the estimated costs of the in line units in the appropriation I will see that they are assembled. Please advise me how many units we need and the charge.

J. G. Bryant

/dp
Att.

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