

OPERATING COMMENTS
PLANT TECHNICAL
DECEMBER, 1967

2,4-D

Operation of the 2,4-D Unit for the month was much improved over the November results, largely because of changes made then, plus greater Operator familiarity with the Unit. The major operational problem in the Unit was the frequent loss of pumps, primarily due to seal problems. As reported last month, this problem is under study.

Production personnel have been working to reduce the reaction cycle time, with considerable success. New Operating Instructions were issued for the 2,4-D condensation reaction and filtration, incorporating changes made since start-up.

An evaluation of the dryer's performance is currently underway. A test run made late in December confirmed the belief that the unit is satisfactorily meeting specifications. In fact, during this run, the unit was being run at 1.7 times the design rate, with apparently only a slight increase in the residual water above the 0.6% specified. Operation at such a high rate, of course, is not desirable, so an attempt is being made to slow the drying rate. Additional tests are now underway, and the final report on the unit's performance should be issued shortly.

Work orders to correct the improper positioning of the doctor blade on the new flaker were issued, but the work has not as yet been done. In addition, several other changes, including the installation of a new connection to facilitate steaming of the acid line to the flaker, and the relocation of water and air lines near the flaker, will be made before putting it into operation.

Ventilation in this area continues to be a problem. Efforts will be made to temporarily improve the situation, pending installation of a permanent fume control system as discussed in the section on the expansion appropriation.

2,4,5-T

Operation of the "T" Unit continued at the higher rates first achieved late in November. Following the approval of the settling tank appropriation (No. 6760), the vessel was placed on order. Delivery time is uncertain, since we require a plug-free vessel suitable for MCA service to take the place of the vessel slated for use as an MCA chlorinator that was installed as the settling tank late in November. Layout work on the location of lines, pumps, etc., associated with the settling tank, is in progress.

MCA/DCP/ECI

Again, little work was done in these areas. One development that came to our attention is that the Analytical Group at Research is working to develop procedures for the analysis of MCA. We sent them samples that we had checked, along with the procedure being used. Maybe the dual effort on this problem will result in a ~~substantial~~ ^{DS} improvement in these assay procedures.

STEWART - 22 15
3/9/87 8

DS 00001156

MAXUS042264

A brief study was made of the time required to load an ECI truck, following a complaint by one of our customers. Results showed the time to be about one hour, which should be satisfactory. Since the pumping rate was somewhat lower than anticipated, the performance of the pumps will be examined again as time permits.

TCP

Operation of the TCP purification unit during December was not quite as consistent as experienced in November. The average p-dioxin level was 2.8 ppm with some samples as high as 6 ppm and others at 1 ppm or below. The passage of the dioxin generally seems to occur during periods of higher solids passage through the bed --- to minimize this possibility, additional care is being taken to insure that the anisole distillation is complete. Delivery of the permanent carbon tower was delayed. It was received early in January and is awaiting installation.

ESTERS

Some while ago, we received a request from the Government for samples of Butyl-F ester that they might use for establishing specifications for "Orange" and its components. Because of uncertainty over how our material compares with competitive materials, we have made ester samples from Dow and Monsanto acids, as well as our own. These will be compared by standard analytical tests as well as on the chromatograph before acting on the sample request.

During December, we switched from 2-EE alcohol to Amoco Iso-Octyl alcohol when producing Iso-Octyl-D ester for their account. This change was made without any particular problem in the Ester Unit.

DACAMINES

The major effort in this area was directed toward the preparation of a formulation which could be used to make a Dacamine bar. The first samples were judged to be too hard, so diluents were added to soften the mix. Samples of the softer formulations have been sent to R. L. Urbanowski for evaluation regarding hardness and the suitability of the diluents used.

EXPANSION (APPROPRIATION NO. 6739)

Work on the appropriation was largely confined to administrative matters. The major work done was the identification of the individual assets so that unit life and depreciation could be set.

Little work was done on the items remaining to be finished. Now that the TCP carbon tower has been received, it can be installed. The decision on the inclusion of the fume scrubber for the flaker in the appropriation was delayed by the absence of several people from Central Engineering; however, we are proceeding to get additional quotations on such a unit.

MISCELLANEOUS

Additional Ethocleen samples were received from Armour, but none was satisfactory in the Singleshot formulation. Armour is progressing on their iden-

DS 20001157

tification of the composition of Atlas' G-378QA, but they as yet have not sent us a sample of similar material. Additional work on Singleshot is now awaiting receipt of this sample.

Neither the Engineering vacancy nor the openings for the two Lab Technicians have been filled. The shortage of personnel hurts, particularly when measured against the absences, which among the Technical Staff alone totalled four weeks during December. Personnel is continuing to refer Trainees who might fill the Engineering opening. Little progress is being made on the Lab Technician openings, since Personnel's advertising campaign is not getting any significant response.

The following appropriations were closed in December:

No. 6737 - 2,4-D Reactor	- \$ 16,950	Expanded
No. 6739 - 2,4-D and 2,4,5-T Expansion	- \$1,605,231	"
No. 6755 - Acidification Tank Replacement	- \$ 4,978	"

No. 6739 includes about \$55,000 of accrued items.

FGS/mc

1/10/68


F. GORDON STEWARD

DS 00001158

