March 31, 1970

TO J. L. Corder

SUBJECT: RECOMMENDATIONS OF TASK FORCE ON PLANT DUMP

TO J. L. Corder

Members: M. B. Mullally, Chairman
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I. PROBLEM

A serious problem exists at the present time with the Monsanto dump. The two main areas of concern are: (1) water leakage from the P.C.B. dump, and (2) lack of security throughout the dump area. These two areas create hazards in the areas of water pollution and liability problems.

September 12, 1971, all open dumps in the State of Alabama will be converted to land-fill operations. This law applies to municipalities, but it also applies to any private dump operation which might pose a water pollution problem or health hazard. In light of the attention P.C.R. has received, it is highly probable that the Monsanto (P.C.B.) dump area could be classified as a serious water pollution source. For this reason it is imperative that this operation be converted to a land-fill type so as to minimize the chances for water pollution as well as for the aesthetic value to the plant, since the proposed highway 202 expansion will be very close to the dump area.

II. RECOMMENDATIONS

For purposes of simplicity these recommendations are being split into two categories: (1) immediate changes in operations, and (2) long range changes.

A. IMMEDIATE ACTIONS

1. Eliminate P.C.B. Drainage from Present Dump Site

To accomplish this it is recommended that extensive changes be made in the present dump area. The old drums lying on the banks of the dump must be moved to the bottom of the hole. Sufficient dirt should be hauled in to provide at least 2 ft. of cover over...
these drums and it should be compacted in such a way that it will provide a good footing for establishing individual cells within the larger hole which can be operated as a land-fill. It is recommended that this dirt be obtained from the vicinity of the present dump and be excavated in a manner to provide a trench for future land-fill operation.

2. Provide Security around Dumping Site

A fence with the proper markings should be provided around the area presently being used. The attached drawing shows the area which should be fenced.

3. Repair Incinerator

The teepee incinerator located at the dump should be repaired and put into operation. The regular operation of this unit will decrease the volume of material which must be placed into the land-fill. State of Alabama law also states that open burning of wastes be halted by September 12, 1971. This unit should be repaired so that it is operable and operated as per the recommendations of the manufacturer.

4. Provide Periodic Cover of the Waste

The waste material in the dump should be covered on a regular schedule. A minimum of once per week is recommended. The waste material should be covered in accordance with good operating procedures. The periodic covering of waste and dividing the remainder of the hole into cells will allow drainage of the dump site and eliminate the large lakes which are presently a problem. Economics will probably necessitate contracting the job of covering the waste material, but this job should be controlled by some Monsanto representative.

5. Develop a Pump Management System

The entire dump and solid waste disposal system should be made a responsibility for one person and this person should have the resources with which to control the operation. There should be an operating manual procedure developed for the dump operation. This manual should include such topics as the proper methods for preparing waste material, a definite schedule for collecting the wastes, as well as the development of an inventory system for the waste and the development of a plot plan so that accurate records can be kept on what and where these wastes are buried.

The above mentioned things are suggested only as a guideline for the development of the system and many details have been omitted which should be included in the operating instructions.
A. Long Range Operations

Preparing for a land-fill operation should begin now when obtaining the dirt for eliminating the immediate problem with the dump site. This dirt should be moved from the mountain around the dump site and it should be moved in such a manner that preparation of a trench is begun.

1. Land-Fill Operation

A land-fill operation is an orderly manner for disposing of solid waste material in such a way that it does not create a threat to health, a public nuisance or pose any water pollution problems. Safeguards should also be taken to make certain that underground water is not contaminated. The material should be covered on a regular basis to a minimum of 18" and material should not be placed closer than 24" below ground level. The land-fill should be seeded with grass and trees after filling so that erosion will not uncover the material which has been buried.

The Task Force recommendations for future land-fill operations are as follows:

a) Dig a trench (along the contour of the mountain) of sufficient size to handle the plant's solid waste for a period of one year minimum (est. 14,000 yds.³ per year based on 1970 drum usage). This trench should be sloped such that it is drained at one end. Width should be such that equipment will have sufficient space to maneuver in it (i.e., 8-10' wide). The depth should be from 8-10' so that at least 6' can be used after periodic covering and allowing for 2' of top cover.

b) Covering of material should be accomplished a minimum of once per week.

c) Waste should be segregated and the paper, wood, fiber, plastics, etc. burned. Only still bottoms and non-burnable material should be buried.

d) Decontaminated drums and sealed drums of sample bottles from the Parachion process, as well as decontaminated equipment, could also be buried with the other plant wastes, thus eliminating the need for a separate toxic dump.

e) Run-off water from the trenches should be sampled a minimum of once per week (more often in rainy weather) to make certain that no material is being lost from the fill.

f) The person responsible for the land-fill operation should inspect this area regularly to make certain that the area is being well kept.

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g) After the trench has been filled with waste it should be covered, compacted and planted with grass and trees to prevent erosion as well as improve the appearance of the area.

h) Establish system of test wells for monitoring of ground water for contamination.

7. Security

The original fence should be extended to encompass sufficient new area at any time which it is required. In other words, the active part of the dump should always be inside a fenced and secure area. Workers should be provided on used up trenches so that this location can be easily determined.

3. Alternate Methods of Disposal

Alternate methods of disposing of still bottoms and other plant wastes should be evaluated, since the method of burying in a drum is quite expensive as well as space consuming in the land-fill. (In 1970, approximately $38,000 was spent for drums.) The task force recommends that other methods certainly be looked at for the future (i.e., bulk, hauling, pumping, improved yield, new product development).

III. COSTS

These costs are based on estimates of the 1970 waste volume.

A. Immediate Costs

1. Cost of converting the present dump into a semi-land-fill operation $31,000.

2. Cost of operating this land-fill until hole is depleted - $10,000/yr.

3. Cost of fence for securing present site and for sufficient area for five (5) years in future, $35,000.

4. Clean-up area - $2,000.

B. Long Range Costs (Based on 1970 Volume)

1. Operating costs per year (excluding drum cost) - $10,000.

M. B. Mullally
Task Force Chairman