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C-8 COMMUNICATIONS MEETING

OUTLINE, TALK & CHARTS

C. E. STEINER  
7/31/80

PERSONAL & CONFIDENTIAL

EID079399

ALP002552

INTRODUCTION

- C-8's desirable process qualities
- Short C-8 history in TFE & FEP Manufacture

TOXICITY

- Oral toxicity - slightly toxic
  - Compare to other compounds
- Skin contact - slightly to moderately toxic
- Inhalation toxicity - highly toxic
  - Compare to other compounds
  - Concentrations found in area are lower

INITIAL BLOOD TESTS

- 3M Data
- Our Results

RECOGNIZING EXPECTED OPERATOR QUESTIONS - A transition

- Some disbelieve based on past experience
- Short history of chemicals in industry showing why we are careful

MEDICAL RECORD STUDIES

- No evidence of health problem
- Studies thorough

PROVISIONAL AEL

- AEL committee has set provisional AEL of 0.55 mpb
- Not yet firm AEL
- This very low number is to protect people who work with C-8 every day
- The low provisional AEL and goal to reduce blood fluorine is the reason we are making changes in equipment and procedures.

EQUIPMENT IMPROVEMENTS

- Goal to reduce exposure to solid C-8, airborne C-8 and C-8 solutions
- Ingredients addition hood and stack
- Eliminate Weighing Citric Acid in C-8 hood
- Raising Dryer Air supply Inlets
- Seal Dryer Leaks
- Additional Dryer Windows
- Increase Ventillation During Outages
- Removing C-8 from Dryer Exhausts

## PROTECTIVE EQUIPMENT

### Clothing and Gloves

- Needs to be disposable to prevent secondary contamination.
- An EOD is being prepared to evaluate clothing.
- Different protection levels for 3 exposure classes

### Breathing

- Equipment improvements will reduce airborne C-8 but high C-8 concentrations will still remain in some areas.
- Breathing air will be installed - ultimate solution.
- Comfo II air respirator with GMAH cartridge acceptable.

## TESTING

### Personal Air Samples

- Will Resample.

### Blood Samples

- Blood sampling will be resumed.
- Frequent sampling is not necessary.

### Area Air Samples

- Will continue to define progress.
- Often exceed provisional AEL before improvements.

## SUMMARY

- C-8 is toxic but can be handled safely.
  - People working with C-8 generally accumulate organic fluorine in the blood, and levels generally correlate with job exposure potential.
  - **Although this has caused no health effects continued exposure is not tolerable.**
  - Our basic goals are to reduce exposures to below the provisional AEL, and to reduce organic fluorine levels in blood of exposed workers and prevent accumulation in new workers.
  - This will require equipment changes that are being done.
  - It will also require use of disposable protective clothing and use of breathing air or respirators for certain jobs.
- One other ingredient is needed -- your cooperation in controlling this hazard.