



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 49TH FIGHTER WING (ACC)
HOLLOMAN AIR FORCE BASE, NEW MEXICO

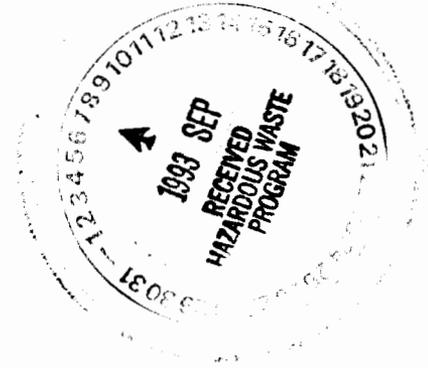
FILE
Blue 93
Holloman

FROM: 49 CES/CEV
550 Tabosa Avenue
Holloman AFB, New Mexico 88330-8458

01 SEP 1993

SUBJ: Wherry Windows Project

TO: New Mexico Environment Department
Hazardous Waste and Radioactive Materials Bureau
Attention: Mr Ed Horst
525 Camino de Los Marquez
Santa Fe, New Mexico 87502



1. A construction project to remove and replace approximately 6,200 windows and doors in our housing area will begin later this year. Late in the design phase for this project, we received a Lead Based Paint (LBP) Awareness letter from our headquarters. The letter was strictly informative; no policies were given at that time. The design was subsequently completed a short time later without addressing the LBP issue. However, we did decide to have 100 paint samples from the window sills and door frames analyzed for lead; all sample results came back positive.

2. The caulking and glazing on all windows and doors contain asbestos. Therefore, all waste material will be treated as Asbestos-Containing Material. The LBP is on interior and exterior walls, window sills and frames, door frames, caulking, and trim. It would be nearly impossible to separate all the LBP from these materials.

3. We have performed some calculations to estimate the expected Toxicity Characteristics Leaching Procedure (TCLP) results for the waste material. The following assumptions were made:

- a. Average window size: 3'-0" x 4'-0".
- b. Total weight of a 3'-0" x 4'-0" window: 30 pounds.
- c. A 1" wide strip of paint around the window perimeter will be disturbed, which equals 1.17 SF.
- d. The dry weight of a gallon of paint equals four pounds. One gallon of paint covers 200 SF. Therefore, the dry unit weight of the applied paint is 4/200, which equals .02 psf.
- e. The total weight of the disturbed paint per window is 1.17 x .02, which equals .023 pounds.
- f. 50% of the lead in the paint will be leached out.

The TCLP limit for lead is 5.0 ppm, or .000005. To find the total weight of lead per window required to exceed this limit, we set up the following equation, where x = pounds of lead in the disturbed paint per window: $x/30 = .000005$. Solving, $x = .00015$ pounds. Using this figure, we determined the lead concentration in the existing LBP that will result in a 5.0 ppm TCLP reading using the following calculation: $[(.00015)/(.023)]/.50 = 13043.0$ ppm.

4. The highest lead concentration in the 100 samples was 2976.0 ppm. This will result in a TCLP reading of 1.1 ppm for the waste, which is below the 5.0 ppm limit. Based on these calculations, we believe a separate disposal of the LBP is not required. However, as mentioned above, all waste material will be treated as Asbestos-Containing Material.

5. This project is currently out for bid. Request your approval of this disposal plan for the subject project as soon as possible.

Howard E. Moffitt
HOWARD E. MOFFITT
Deputy Base Civil Engineer

*Notes: Response via telephone started
this was not accept. practice.
EJM*