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rim Eduar, Governor 🕟 John R. Lumpkin, M.D., M.P.H., Director

22 Ketile River Drive . Glen Carbon, Illinois 62034-2801

March 4, 1998

Environmental Toxicology #083239501

Pete Sorensen, Project Manager IEPA, Bureau of Land Remedial Project Management Section 1021 North Grand Avenue East Springfield, IL 62794-9276

Dear Pete:

Enclosed are the letters with sample results from the three residences near the Old American Zinc site in Fairmont City, Illinois. I have also included a copy of the soil sample location map for the yards. If you have questions, please contact me at the Illinois Department of Public Health, 22 Kettle River Drive, Glen Carbon, Illinois 62034, telephone (618) 656-6680.

Sincerely,

David R. Webb

Environmental Toxicologist

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cc: Division of Environmental Health Edwardsville Region

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Air monitoring data is also being collected in the vicinity of your home. The findings of the air monitoring will be sent to you upon completion of data analysis.

If you have any questions regarding this letter or need additional information, please contact me at the Edwardsville Regional Office located at #22 Kettle River Drive, Glen Carbon, Illinois 62034, telephone 618-656-6680, (TTY 1-800-547-0466 for hearing impaired use only).

Sincerely,

David R. Webb

Environmental Toxicologist

## Attachments

cc: Division of Environmental Health . Edwardsville Office

Jim Henry, IEPA



22 Kettle River Drive . Glen Carbon, Illinois 62034-2801

November 22, 1996

Environmental Toxicology Case # 83239501H



Dear Mr. and Mrs.

On July 2, 1996 I collected one soil sample, two high volume surface dust samples, and four dust wipe samples from your residence. In addition, a well water sample and three soil samples were collected from your residence on July 9, 1996. The results of these analyses are summarized in the attached table.

The water sample from your well was taken at the spigot on the outside front of the garage This sample was analyzed for inorganic compounds (lead, cadmium, arsenic, zinc), nicrates and total coliform. No inorganic compounds or coliform bacteria were found in the sample. The quantitative nitrate concentration was 1.3 mg/l, which is well below the standard, 10 mg/l nitrates in drinking water. The quantitative concentration of nitrites in the well water was less than 0.1 parts per million (ppm) which is well below the maximum contaminant level. Based on these analyses the water is satisfactory for drinking.

Two high volume surface samples were taken from carpeted areas in your home. The first was taken from a 35 ft<sup>2</sup> area in the living room and the second was taken from a 9.8 ft<sup>2</sup> area in the upstairs bedroom. Lead was detected in both samples, but was much higher in the upstairs bedroom with a concentration of  $34.4 \text{ mg/ft}^2$ . The concentration of lead, cadmium, arsenic, zinc in the carpet dust would not be expected to cause adverse health effects.

Three of the four dust wipe samples were taken from the floors of the front entry, kitchen, and dining room. These three floor dust wipe samples did not contain detectable levels of lead, cadmium, or arsenic. Zinc concentrations in these three samples were not detected above a level of concern. The fourth dust wipe was taken from the front edge of a ceiling fan blade in the dining room. The front edge of the blade had a heavy accumulation of dust, presumably from compaction while the fan was running.

High volume air sampling began April 3, 1996 and a 24 hour sample was collected every sixth day for six months. Analyses of the earliest high volume air samples have been completed. The sample results will be reviewed and a report sent to you after all the analyses are complete. Both high volume air samplers will remain at their current locations until it is determined that no addition air samples need to be collected. These high volume air samplers are presently available to collect 24 hour episode samples.

If an episode sample is run please contact me at the number listed below or Jim Henry at IEPA, so that we can collect the sample and ship it to the lab. If you have any questions or comments regarding the soil, dust, or water samples taken at your residence, please contact me at the Edwardsville Regional Office located at #22 Kettle River Drive, Glen Carbon, Illinois 62034, telephone 618-656-6680, (TTY 1-800-547-0466 for hearing impaired use only).

> Sincerely, 3 R WI

David R. Webb

Environmental Toxicologist

Division of Environmental Health Edwardsville Region

Jim Henry, IEPA, Collinsville



22 Kettle River Drive . Glen Carbon, Illinois 62034-2301

November 22, 1996

Environmental Toxicology #83239501H

Dear Mr. and Mrs.

On July 2, 1996 I collected two dust wipes, one high volume surface dust sample, and one soil sample from your residence. These samples were analyzed for lead, cadmium, arsenic, and zinc. The results of these samples are summarized in the attached table.

Zinc was detected in both the dust wipes, however the concentrations would not be expected to cause adverse health effects. Lead was detected in the sample taken from the back door landing, however the concentration is below a level of concern. Neither cadmium nor arsenic were detected in either dust wipe sample.

The high volume surface dust sample was collected from the master bedroom carpet. Lead, cadmium, arsenic, and zinc were detected in the samples. No adverse health effects would be expected from any of the compounds detected in the dust sample.

The soil sample was collected from the northeast section of your property to avoid possible inorganic contaminants which may be associated with your lawn mower repair business and also to avoid areas that had been filled with soil brought in from a different location. Lead, cadmium, arsenic, and zinc were detected in the soil. The levels of lead, arsenic, and zinc in soil would not be expected to cause adverse health effects. Cadmium was detected at a level that may be of concern for children who are exposed to the soil on a regular basis over a long period of time or for individuals who consume garden vegetables grown in this soil. children play in your yard the following precautions should be taken: 1) cover soil with vegetation or another barrier such as asphalt, mulch, rock or fill soil 2) have children play in areas where ground cover (for example: grass) is present, and 3) children should wash hands and face before eating, and 4) discourage children from putting objects (fingers, toys, dirt, etc.) into their mouth.

