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From: RickuDana@aol.com

Sent: Saturday, November 29, 2003 2:46 PM

To: NIOSH Docket Office

Subject: Comments: Site Profile-- Blockson Chemical, Joliet, Illinois

Uranium was extracted from phosphoric acid by Blockson Chemical in Joliet, Illinois.
The Blockson Chemical Site Profile (released October 10, 2003) improperly excludes radon exposures from the manufacture of phosphoric acid as part of the uranium extraction process at this Atomic Weapons Employer facility.

Recovery of Uranium from Phosphate Ores, by EM Stoltz, Proceedings of the Second United Nations International Conference on the Peaceful Uses of Atomic Energy, September 1-13, 1958, identifies the specific process Blockson researched, patented, constructed and eventually placed into operations on August 15, 1952. AEC was assigned the patent by Blockson, since AEC funded the research. Blockson used a sodium hydrosulfite reduction process to extract uranium from phosphoric acid. The uranium extraction plant had a capacity of 1500 tons of phosphate daily.

Phosphoric acid was used as a feedstock for a number of phosphate products in addition to uranium, such as phosphate fertilizer and detergents. The legal and policy question that confronts NIOSH is whether the radon emitting processes involved in making phosphoric acid should be included in the site profile/dose reconstructions, or only the radiation exposures from the extraction process. We note that AEC funded uranium purchases on a per unit basis, which included the costs of raw materials including the phosphoric acid feedstock. Thus, the phosphoric acid production was not economically segregated from the other steps in uranium extraction.

EEOICPA defines an "Atomic Weapons Employer" (AWE) facility as:

"a facility owned by an atomic weapons employer that is or was used to process or produce, for use by the United States, material that emitted radiation and was used in the process of an atomic weapons, excluding uranium mining and milling."

Clearly, the phosphoric acid production step is in a facility that was owned by the AWE, and was processing material that was subsequently processed for use in the AEC weapons program. The law does not legally confine "facility" to simply the building where a specific process is going on.

What is DOE's position? The covered work is confined to Building 55 (where the AEC funded hydrosulfite extraction process was located), and it so published this in a July 2003 Federal Register notice. DOE offered no supporting information to justify this narrowing of coverage in the Federal Register notice, and certainly failed to account for exposures tied to production in other areas of the plant.

The Site Profile at page 11 under the heading for radon exposures is the notation: "Reserved". No justification was provided. As a matter of policy, excluding radon exposures is not a "claimant friendly" assumption, and as a matter of law is at odds with the dose reconstruction rule and the definition of "facility". This decision will have an adverse precedential effect on all of the similar phosphate-uranium extraction facilities.

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