

CDC Licenses Technology To Remove Lead From Skin

By JOSEPH PEREIRA

The Centers for Disease Control and Prevention has licensed its own technology to a cleaning-products manufacturer to make wipes that can protect children, factory workers and the military from lead exposure.

Under terms of the agreement, the federal health-and-safety agency will license **Mk-IX Technologies Corp.**, a closely held concern based in Huntsville, Ala., to manufacture the products. The CDC will receive an undisclosed royalty payment.

"We have this great, award-winning technology, but the government, not having a retail branch, doesn't have the ability to commercialize it," said Eric J. Esswein, a scientist with the CDC's National Institute for Occupational Safety and Health.

Mk-IX will use technology first discovered by a CDC team headed by Dr. Esswein a few years ago while it attempted to help workers at a battery manufacturing factory get rid of the lead from their hands. The team found that washing with soap and water didn't remove the toxic metal from the workers' skin. After some laboratory analysis, they found that soaps at common acidity levels—pH 7s and 8s—weren't able to break up the tiny lead ions that lodged in the deep crevices of the skin. As a result the team invented a less acidic soap and combined it with a chelation technology to draw the lead out from the skins of the workers. Chelation is a chemical process that attracts lead ions.

Licensing terms call for Mk-IX's Hygenall division to make a

line of products especially designed to remove lead dust from human skin. One such product—Hygenall, a hand-washing wipe that comes in a cylindrical container—is aimed at the general consumer market. Hygenall is currently selling it on the Internet for \$6.99 for a 20-wipe container.

Another product, called Field-Scrub, is for soldiers on the battlefield. It comes as a powder that can be moistened with water for use.

Soap and water must still be used to wash away the lead after it is drawn out with a Hygenall handwipe, company officials said.

The consumer markets are many, said Michael McKinnon, Mk-IX's chief executive. They include "mothers of young children, day-care centers, schools and workers in manufacturing environments," he said. "Big-box retailers and pharmacy chains are interested in purchasing the product," he added. The company plans to market Hygenall "as a daily preventative measure." Mr. McKinnon said that lead dust can collect in the home from sources that include painted toys, candy wrappers, china, children's jewelry and leaded crystal glassware.

The CDC-Hygenall partnership comes in the wake of the recall of millions of children's toys. On Feb. 10, a federal law went into effect sharply reducing allowable lead levels in children's products. Government officials say that while the lead levels in children have declined over the past two decades—thanks to the removal of toxic paint from the walls of homes and the deleading of gasoline—recent research indicates lead can hinder children's learning abilities even in relatively low levels.

WSJ - 02/18/09