

Q-3

DEVELOPMENT OF THE HANDWIPE DISCLOSING METHOD FOR THE PRESENCE OF LEAD

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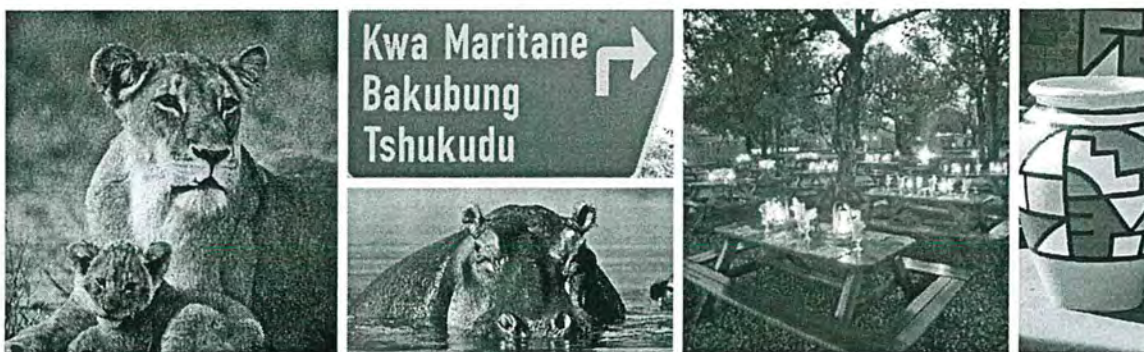
This presentation describes development and application of a novel occupational health tool and method that has the potential for worldwide application as an inexpensive but effective tool for detecting lead on dermal and hard surfaces. Lead (Pb) residues on the hands of workers poses significant health risks since Pb may be ingested during eating, drinking or smoking. Also, Pb-containing dust can contaminate workers' clothes, vehicles, and homes, posing a risk for Pb exposure to young children. A need exists for sensitive, specific and inexpensive on-site screening tests that can detect Pb residues on worker's skin and from surface wipe samples. The U.S. Centers for Disease and Control and Prevention (CDC), National Institute for Occupational Safety and Health (NIOSH) was awarded U.S. Patent No. 6,248, 593 "Handwipe Disclosing Method for the Presence of Lead." Rapid, colorimetric detection of lead on surfaces such as skin, and various inanimate surfaces such as lunch tables, personal protective equipment is possible using this new tool. The colorimetric limit of identification is approximately 20 micrograms per wipe but the method can also be used for quantitative analyses with a limit of detection of 1 microgram. The method was developed by researchers at CDC's National Institute for Occupational Safety and Health (NIOSH). The patent has been licensed and commercialized for worldwide distribution and recently won two U.S. Federal Laboratory Consortium technology transfer awards.

Keywords: lead poisoning, wipe samples, hand wipes, Pb.

IOHA 2005

Pilanesberg National Park, North West Province, South Africa
19 - 23 September 2005

Promoting Occupational Hygiene in Africa and Globally



Conference Programme at a Glance

| Sunday 18 September 2005 | |
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| Kwa Maritane Bush Lodge | |
| 10.00 - 17.00 | Registration |
| Reception and Welcome to International and Local Delegates | |
| 19.00 - 21.00 | Welcome by IOHA Immediate Past President - <i>Ton Spee</i> |
| | Welcome by SAIOH President - <i>Deon van Vuuren</i> |
| | Welcome by MVS President - <i>Harry Smit</i> |
| | Precautions to be taken in the Pilanesberg National Park - Game Ranger |
| | Buffet meal and drinks at the Kwa Maritane Bush Lodge or "Place of the Rock". You are now in the Pilanesberg National Park; an area rich in wildlife and hosting around 365 species of birds. Virtually all the animal species of Southern Africa can be found in the park, including: lions, elephants, white and black rhinos, buffaloes, leopards, zebras, hyenas, giraffes, hippos and crocodiles - Welcome. |

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ABSTRACTS

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