AIRROC Education Panel Summaries (March 12, 2014) – Summarized by Michael H. Goldstein, Mound Cotton Wollan & Greengrass

Lead Paint (Part 1): The Epidemiology and the Litigation

Benjamin Blume, a Partner at Carroll McNulty & Kull moderated this panel consisting of Patrick Connor, President of CONNOR, and J. Marks Moore III, Principal at Semmes, which examined the medicine, research, and litigation trends of lead poisoning and the sources of lead in the environment.

Patrick Connor, a specialist in lead based paint inspections and appraisals, provided a regulatory and field perspective and began by explaining the nature of lead based paint ("LBP") and LBP hazards. Originally LBP had many uses and applications. LBP was banned in 1978 when the CDC found that LBP was a health danger, and lowered the acceptable levels of LBP, recognizing that there is a LBP problem. The main problem is now found in pre-1978 construction.

The main health issues relates to children and deciding whether to test them for blood lead levels (or "BLLs"). According to Connor, all children should be screened by their pediatrician who then can make the decision if blood testing should be conducted. The federal government has mandated blood testing and 10-60% of children get tested.

Connor advised that federal regulations define LBP as follows:

- **Lead-Based Paint – Since 1948**

Means paint or other surface coatings that contain lead equal to or in excess of 1.0 milligrams per square centimeter or more than 0.5 percent by weight.

Actual state standards may be lower

- **Lead-Based Paint Hazard – Since Jan 2001**

Lead-based paint hazard means any condition that causes exposure to lead from lead-contaminated dust, lead-contaminated soil, or lead-contaminated paint that is deteriorated or present in accessible surfaces, friction surfaces, or impact surfaces that would result in adverse human health effects as identified by the Administrator pursuant to TSCA Section 403.

- **Lead-based Paint Hazards – 40CFR Part 745.65**
- Paint-lead – does not adversely affect health on its own
- Dust-lead
- Soil-lead

Connor also noted that in 1992 Congress, in the Housing and Community Development Act, found that intact lead-based paint is not a health hazard.

LBP hazards are defined as paint lead, which does not adversely affect health on its own, dust lead, and soil lead, which are well-defined in the federal regulations.

LBP hazards are detected by LBP inspections which are done by surface by surface investigation to determine the presence of LBP and the provision of a report explaining the results of the investigation. HUD documented methodologies are found in federal regulations. Performance characteristic sheets ("PCS") must be used in reporting and testing or all testing is invalid. Connor advised:

- **PCS is a requirement**

“Only devices with a posted PCS may be used for lead paint inspections. If you use a X-Ray Fluorescence Machine **(“**XRF”) without a current PCS, or do not follow the requirements of the PCS, the work will be considered invalid, and not an inspection of paint testing, as applicable, and the work will have to be re-done.” (p.7-5, #4).”

- **Use HUD Guidelines or XRF Operator’s Manual – whichever is most stringent**

“In addition to the manufacturer’s recommended warm up and quality control procedures, the XRF operator should take the quality control readings recommended below, unless these are less stringent than the manufacturer’s instructions.”

- **Show where HUD Chap. 7 indicates LBP Inspection is not to be used for childhood lead poisoning investigation**

“The protocol described here is not intended for investigating housing units where children with elevated blood lead levels are currently residing. Such a protocol can be found in chapter 16 or from the State or local health department; the most stringent investigation protocol should be uses.” (p.7-9, “2. Limitation of this Inspection Protocol”)
Connor then provided the results of a national survey of lead and allergens in housing which show that possibly 87% of houses built before 1940 have LBP. He then explained how LBP hazards are detected.

- **Risk Assessment –** means (1) an on-site investigation to determine the existence, nature, severity, and location of LBP hazards, and (2) the provision of a report by the individual or the firm conducting the risk assessment, explaining the results of the investigation and options for reducing LBP hazards.

- **Certified Risk Assessor –** any individual who has been trained by an accredited training program, as defined by this section, and certified by EPA pursuant to §745.226 to conduct risk assessments. A risk assessor also samples for the presence of lead in dust and soil for the purposes of abatement clearance testing.

Connor further explained how investigations are conducted of houses where children with elevated blood lead level. HUD guidelines, chapter 16, deal with this issue and prescribe review of any assessments, an interview of the child's family, and a full risk assessment by following HUD chapter 5, augmented by chapter 16, because the lead hazard may not be the only source of danger to the child.
Connor pointed out that the petrochemical industry also has contributed to the lead poisoning problem. LBP is not predictive of the effect on a child's blood lead level. Peeling paint does not mean elevated blood lead level. In fact the evidence points the other way. Dust lead has more connection to elevated blood lead levels in children. Testing at entries to each house and of individual rooms is more predictive of elevated blood lead levels. The dust lead is originating outside houses, not from paint inside the houses. Dust may come from deteriorated LBP or the soil outside the home or from air-borne, lead which settles around the perimeter of the house.
The key references in evaluating LBP hazards in housing are:

- **U.S. Department of Housing and Urban Development – Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing (2012)**
- Chapter 5
- Chapter 7
- Chapter 16

- **U.S. Environmental Protection Agency**
- 40 C.F.R. Part 745

- **Performance Characteristic Sheet (PCS)**
- **XRF Device User's Manual**
- **Studies/References**
- "Study of HUD's Risk Assessment Methodology in Three U.S. Communities" prepared for HUD by The National Center for Healthy Housing, January 24, 2003 revised June 30, 2006
- National Study of Lead and Allergens in Housing (NSLAH)
- American Healthy Homes Survey

Finally, Connor re-emphasized the need to know your standards as evaluator, manager or defender.

J. Marks Moore, an experienced defense attorney, addressed the defense of lead poisoning claims. His presentation was broken down into three sections: (1) What is lead poisoning; (2) Plaintiff's case; and (3) Defendant's Case.

- **What is Lead Poisoning:**
- Toxic Element (Pb)
- Exposure to Lead from Some Source
- Children are particularly susceptible
- Lead Gets into Blood
- Lead Concentrates in Nervous System – Brain
- Lead Poisoning Can Lead to Developmental Problems for Children, Neuropsychological Deficits, Loss of IQ, Encephalopathy, Death

Lead based paint does not necessarily mean there is LBP hazard and poisoning. The key factor is determining the location of the actual exposure. Children crawl on floors and on the ground outdoors and also put their hands in their mouths.

- **The Plaintiff's Case**

Causes of action may be based on statute as in Maryland under Maryland Consumer Protection Act. The typical elements of the plaintiff's case include, elevated blood lead levels in the child, defective paint at child's residence, residency studies from a medical doctor, proof of defective paint at the property. No evidence of lead at the subject property is needed and LBP alone does not mean LBP hazard.

Causation requires showing that lead is a substantial factor in the child's health condition. A doctor must testify but in Maryland courts the testifying doctor is usually not an environmental expert, and not a risk assessor of LBP hazards. Judges usually allow such medical testimony

and circumstantial evidence can be enough. Proof of damages will consist of evidence of the child's learning deficits, loss of earnings and an economist who testifies to lost wages.

- **The Defendant's Case**

Defendant's case will include examination of plaintiff's chart of BLLs and examination and investigation of all residences and visitation properties. It is critical to determine the sources of the plaintiff's exposure to lead and obtain evidence of LBP/defective LBP Hazard, and determine where is the lead in the house or other property at issue. The defendant may need to survey the neighborhood around the house and see if other factors like traffic patterns or factories might be sources of the lead exposure.

The defendant's approach to causation focuses on the plaintiff's testifying doctor in order to attack his qualifications and methodology. To attack damages, defendant must call a neuropsychologist, question the parents' IQ, ask if the child was born prematurely, ask if there is an alcoholic mother or drug use during pregnancy, a chaotic home, second hand smoke, and question the parents' education.