



# Notes From the Logbook

## Laboratories and Scientific Services



### Designer Drug Problems = Designer Solutions

By Michael M. McCormick, PhD

On March 1, 2011, a Final Order (76 FR 11075) was published in the Federal Register temporarily placing five synthetic cannabinoids (JWH-018, JWH-073, JWH-200, CP-47,497 and cannabicyclohexanol (CP-47,497 C8 homologue)) into Schedule I of the Controlled Substances Act. Shortly thereafter, Operation ChemECO was devised by the Office of Field Operations (OFO) Chicago Field Office. The mission of ChemECO is to target, identify and seize incoming shipments of these five novel schedule I controlled substances. The problem was could the analysis be done in the field with existing equipment, technology and personnel? The solution was Interdisciplinary Teamwork.

Scientists at Laboratories and Scientific Service (LSS) Chicago Field Laboratory quickly went to work gathering necessary data for the operation. In addition to developing libraries of the signature chemical spectra for synthetic cannabinoids, new techniques for field analysis and sampling were developed. Equipment was upgraded and interfaced with computers to bring bench-top capabilities to the front line. Generation of chemical analyses reports was streamlined and reports could be issued on-site to facilitate controlled deliveries.

The first round of ChemECO was deemed successful after one analyst and one technical reviewer were able to screen 128 shipments, 49 of which were seized by CBP. Four of the shipments were connected to controlled deliveries. The bulk of the reports was issued on-site. After this first successful implementation of the new field techniques, minor adaptations were made and other analysts were trained for the field analysis. The Chicago Laboratory has now expanded the scope of ChemECO from the five target synthetic cannabinoids to approximately 20 designer drugs including the latest compounds to be temporarily placed into schedule I (methylone, MDPV and mephedrone).

To date, the Chicago Laboratory has performed Operation ChemECO in various mail facilities and courier hubs. During these operations, over 900 samples were analyzed resulting in more than 260 seizures. Classifications of seized chemicals ranged from Schedule I controlled substances to List I substances, with the majority of samples falling in Schedule I. Clearly, this success can be attributed to interdisciplinary teamwork among CBP offices: the concept of the operation by OFO; the keen targeting skills of import specialists; the dedication of the front line officers; the controlled deliveries executed by ICE agents; and the hard work of the analysts at the Chicago Laboratory.



Ira S. Reese,  
Executive Director  
Laboratories and Scientific

Laboratories and Scientific Services is the scientific and technical arm of Customs and Border Protection (CBP). There have been laboratories in CBP and legacy US Customs Service for over 130 years. The present organization consists of eight field laboratories, a 24/7 Teleforensic Call Center, and an Interdiction Technology Branch, overseen by a Headquarters office located in Washington, D.C. Our vision statement is:

“To provide rapid, quality scientific, forensic and weapons of mass destruction services to our customers.”

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