Human Smoking Behavior Study Laboratory Visit Data Collection Overview and Instructions

Specimen Collection (Biomarkers of exposure with long half lives)

[Analyses conducted by the Division of Laboratory Science, NCHS, Centers for Disease Control and Prevention]

At Visit 1 and Visit 2, urine and saliva samples will be collected from participants upon their arrival at the clinic and stored for later determination of levels of biomarkers of exposure with long half lives (carcinogens, nicotine metabolites, heavy metals).

At Visit 2, the participant will also provide all cigarette butts accumulated since the Visit 1 (approximately 30 hours before the Visit 2). The cigarette butts will be analyzed for solanesol levels, and as a check for compliance. The participant will also turn in the Smoking Diary Form.

<u>Laboratory Measurements (Biomarkers of acute exposure, and Behavioral Measurements)</u> [Measurements conducted on-site in Battelle's Human Exposure Assessment Laboratory]

Biomarkers of acute exposure, expired air carbon monoxide boost (the difference between CO levels before and after smoking a cigarette), and markers of cardiovascular reactivity (blood pressure, heart rate change quickly in response to smoking and must be measured in a clinic environment.

Participants will be asked to don a vest that measures inhalation and heart rate through sensors imbedded in the vest.

Participants will provide a pack of their own brand of cigarettes at their first appointment. Smoking behavior will be measured by having the subject smoke one of his/her own cigarettes through a holder connected to a CreSS® puff analyzer, Smoking sessions will be video taped.

Public reporting burden of this collection of information is estimated to average one hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to CDC/ATSDR Reports Clearance Officer; 1600 Clifton Road NE, MS D-74, Atlanta, Georgia 30333; ATTN: PRA (0920-0736)