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CPSC IAG# CPSC-I-98-1176
NSWC Project #

INTERAGENCY AGREEMENT Number CPSC-I-98-1176

BETWEEN THE

CONSUMER PRODUCT SAFETY COMMISSION

AND THE

NAVAL SURFACE WARFARE CENTER, CARDEROCK DIVISION

I. Introduction

The Consumer Product Safety Commission (CPSC) and Naval Surface Warfare Center, Carderock Division (NSWC) hereby agree that NSWC shall provide laboratory facilities and services to conduct testing in support of the CPSC's upholstered fabric project in accordance with the terms and conditions set forth under article IV, Statement of Work. The testing will involve testing of various types of upholstery fabric. The samples for testing will undergo a variety of treatments to simulate consumer use. The data obtained from these tests will be used by CPSC staff to assess consumer exposure to fire retardant (FR) chemicals.

II. Subject

X-ray photoelectron Spectroscopy (XPS) analysis of upholstery fabrics for fire retardant (FR) chemicals.

III. Background

CPSC is evaluating the potential of FR chemicals to migrate from the back coating during spot cleaning of upholstered furniture. The purpose of this project is to determine the degree of migration of FR chemicals and use this information to assess consumer exposure.

XPS (x-ray photoelectron spectroscopy is the method of choice for determining surface composition of various materials. The method gives element composition information on the uppermost 5ηm of a sample surface. Although, this technique has not been used to study FR chemicals, theoretically, it should allow a researcher to determine if there is migration of FR chemicals from the back side of a fabric to the upper side of the fabric under simulated consumer use conditions.

IV. Statement of Work

NSWC shall conduct the XPS analysis of upholstery fabric samples provided by the CPSC. NSWC agrees to furnish all necessary personnel, laboratory reagents, supplies, services and facilities to perform the work described below.

1. The study will be carried out by Dr. Robert Brizzolara at the Carderock Division of NSWC in West Bethesda, Maryland.

2. A total of fifteen samples will be analyzed by XPS during this study. The data shall be calculated as amount of FR chemicals found on the known surface area of the fabric. Each sample will receive testing of one (1) analysis point, unless additional analysis points are ordered by the CPSC Project Officer (See Section VII. entitled COST).

3. The FR chemicals of CPSC interest are antimony, pentabromophenylether, tribromophenylether, and phosphorous containing FR chemicals such as proban, and pyrovatex. Elements to be analyzed during this study are Sb, Br, Cl, and P. Atom concentration calculated initially shall be converted into FR chemical concentration as appropriate.

4. NSWC shall determine the limits of detection and limits of quantitation for each element analyzed during this study.

5. CPSC, Chemistry Division, Division of Laboratory Sciences will provide all fabric samples for analysis. The sample size will be 2" x 2" of upholstery fabric. The samples for testing shall be provided to NSWC in a timely fashion.

6. NSWC shall provide copies of the charts, graphs, photographs, and other relevant information obtained during these analyses to CPSC.

7. A draft report shall be prepared and delivered to CPSC within 30 days of receipt of last sample for analysis. The report shall include detailed discussions on methodology, interpretation of data obtained, and conclusions of this study.

8. Because of time and money constraints, CPSC does not anticipate publication of a journal paper from this study.

V. CPSC Project Officer

Bharat Bhooshan, Ph. D.
U.S. Consumer Product Safety Commission
Laboratory Sciences Directorate
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Phone (301) 413-0041
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VI. NSWC Project Officer

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VII. Cost

Based on past experience, NSWC estimates the current cost of testing one point per sample to be $1,059.00 and $318.00 for each additional point tested per sample. Fiscal year 1999 costs will increase by 12.37% over FY-98 costs. If any test requires less time, materials or supplies than estimated, NSWCs invoices will reflect the reduced costs, and conversely, if additional time is required, NSWCs invoices will reflect the increased cost. The amount funded and not to be exceeded is $15,890.00

VIII. Payment:

A. Invoicing for all testing and analysis performed shall be at cost. NSWC shall invoice in reasonable detail, after testing, for all costs incurred.

B. Payment will be made to NSWC by CPSC upon receipt of a proper invoice. Payment will be made via check.

C. The check will be made payable to: Naval Surface Warfare Center, Carderock Division.

D. The check will be mailed to : Commander
Naval Surface Warfare Center
Carderock Division, Code 3126
9500 MacArthur Blvd.
West Bethesda, MD. 20817-5700.

IX. Accounting and Appropriation Data:

Billing for all agreed-to-costs shall be chargeable to the following CPSC accounting and

appropriation data: 98 2 491 21498 25.28 .

The amount funded and not to be exceeded is $15,890.00.

X. Period of Agreement:

The period of this agreement shall be from date of execution through 11/30/98.

XI. Authorities:

Pursuant to the authority of 31 U.S.C. 1535, and Section 27(g) of the Consumer Product Safety Commission Act, as amended, 15 U.S.C. 2076(g); the Naval Surface Warfare Center, Carderock Division and the Consumer Product Safety Commission hereby agree that NSWC will provide laboratory testing and analysis services to complete X-ray photoelectron Spectroscopy (XPS) analysis of upholstery fabrics for fire retardant (FR) chemicals.

XII. Disagreements:

In the event that CPSC and NSWC have a disagreement arising under this interagency agreement, the parties shall cooperatively seek to resolve the disagreement by themselves. If the disagreement cannot be resolved between them, the parties agree to seek the assistance of a third party in resolving the disagreement.

XIII. FASA Compliance:

As the servicing agency, NSWC agrees to act in full compliance with Section 1074 of the Federal Acquisition Streamlining Act (FASA)of 1994 entitled ECONOMY ACT PURCHASES.

APPROVED and ACCEPTED by:

Naval Surface Warfare Center, Carderock Div.	Consumer Product Safety Commission
By: SEP 30 1998	By: 9/30/98
Name: [illegible]	Name: ROBERT J. FROST CONTRACTING OFFICER

Title:_____ Title:_____

Date:_____ Date:_____

ROBERT J. FROST
CONTRACTING OFFICER