SOLICITATION/CONTRACT/ORDER FOR COMMERCIAL ITEMS
OFFER TO COMPLETE BLOCKS 12, 17, 22, 24, & 30

1. REQUEST NUMBER
   REQ-4000-15-0011

2. CONTRACT NO.
   CPSC-D-12-0001

3. AWARD/ EFFECTIVE DATE
   09/28/2015 0017

4. ORDER NUMBER

5. SOLICITATION NUMBER

6. SOLICITATION ISSUE DATE

7. FOR SOLICITATION
   INFORMATION CALL:
   Greg Grayson

8. TELEPHONE NUMBER
   311-534-7725

9. ISSUED BY

10. THIS ACQUISITION IS
    UNRESTRICTED OR
    small business
    women-owned small business
    minority small business
    service-disabled veteran-owned small business
    other
    % FOR:
    women-owned small business
    HUBZone small business
    service-disabled veteran-owned small business
    EZWB
    8(a)
    NAICS: 541690
    SIZE STANDARD: 60

11. DELIVERY FOR FOB DESTINATION UNLESS BLOCK IS MARKED
    SEE SCHEDULE

12. DISCOUNT TERMS
    Net 30

13. DELIVER TO
    CONSUMER PRODUCT SAFETY COMMISSION
    ROCKVILLE CAMPUS
    5 RESEARCH PLACE
    ROCKVILLE MD 20850

14. METHOD OF SOLICITATION
    O RFP

15. ADMINISTERED BY
    CONSUMER PRODUCT SAFETY COMMISSION
    DIV OF PROCUREMENT SERVICES
    4330 EAST WEST HWY
    ROOM 523
    BETHESDA MD 20814

16. PAYMENT WILL BE MADE BY
    CONSUMER PRODUCT SAFETY COMMISSION
    DIV OF PROCUREMENT SERVICES
    4330 EAST WEST HWY
    ROOM 523
    BETHESDA MD 20814

17a. CONTRACTOR/OFFEROR

17b. FACILITY CODE

18. SUBMIT INVOICES TO ADDRESS SHOWN IN BLOCK 18a UNLESS BLOCK BELOW IS CHECKED

19. DUNS NUMBER:

20. SCHEDULE OF SUPPLIES/SERVICES

   21 QUANTITY
   22 UNIT
   23 UNIT PRICE
   24 AMOUNT

25. ACCOUNTING AND APPROPRIATION DATA
    0100A1.5DSE-2015-257270000-EXHRO04000-25210

26. TOTAL AWARD AMOUNT (For Govt. Use Only)
    $157,916.00

27a. SOLICITATION INCORPORATES BY REFERENCE FAR 52.212-1, 52.212-4, FAR 52.212-3, AND 52.212-5 ARE ATTACHED

27b. CONTRACT/PURCHASE ORDER INCORPORATES BY REFERENCE FAR 52.212-4, FAR 52.212-5 IS ATTACHED

28. CONTRACTOR IS REQUIRED TO SIGN THIS DOCUMENT AND RETURN
    COPIES TO ISSUING OFFICE. CONTRACTOR AGREES TO FURNISH AND DELIVER
    ALL ITEMS SET FORTH OR OTHERWISE IDENTIFIED ABOVE AND ON ANY ADDITIONAL
    SHEETS SUBJECT TO THE TERMS AND CONDITIONS SPECIFIED

29. AWARD OF CONTRACT:

30a. SIGNATURE OF OFFEROR/CONTRACTOR

30b. NAME AND TITLE OF SIGNER (Type or print)

30c. DATE SIGNED

31a. UNITED STATES OF AMERICA (SIGNATURE OF CONTRACTING OFFICER)

31b. NAME OF CONTRACTING OFFICER (Type or print)

31c. DATE SIGNED

AUTHORIZED FOR LOCAL REPRODUCTION
PREVIOUS EDITION IS NOT USABLE

STANDARD FORM 1449 (REV. 2/2012)
Preceded by GSA - FAR (48 CFR) 8.212
September 28, 2016. All work shall be in accordance with the attached statement of work and contractor's revised quote dated September 15, 2015.

<table>
<thead>
<tr>
<th>ITEM NO</th>
<th>SCHEDULE OF SUPPLIES/SERVICES</th>
<th>QUANTITY</th>
<th>UNIT</th>
<th>UNIT PRICE</th>
<th>AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>0001</td>
<td>Risk Assessment Services</td>
<td>1</td>
<td>LO</td>
<td>157,916.00</td>
<td>157,916.00</td>
</tr>
</tbody>
</table>

The total amount of award: $157,916.00. The obligation for this award is shown in box 26.
Statement of Work
(Contract# CPSC-D-12-0001 / Task Order 0017) Exposure
Assessment: Potential for the Presence of Phthalates,
and Other Specified Elements in Undyed Manufactured Fibers and their Colorants

1. Description of Services

The contractor shall furnish all necessary personnel, materials, services, and facilities to perform the work set forth below.

The contractor shall conduct research regarding the production of manufactured fibers, including the resultant textiles ("manufactured fibers"), and their colorants, regarding the possibility of the raw materials or finished product containing:

- any of the specified phthalates (Table 1) in concentrations greater than 0.1 percent (1000 ppm), and
- any of the specified elements (Table 2) that are included in the safety standard for toys, ASTM F963-11, Standard Consumer Safety Specification for Toy Safety,\(^1\) in concentrations exceeding specified limits.

<table>
<thead>
<tr>
<th>Phthalate</th>
<th>Chemical Abstracts Service (&quot;CAS&quot;) Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEHP: di-(2-ethylhexyl) phthalate</td>
<td>117-81-7</td>
</tr>
<tr>
<td>DBP: dibutyl phthalate</td>
<td>84-74-2</td>
</tr>
<tr>
<td>BBP: benzyl butyl phthalate</td>
<td>85-68-7</td>
</tr>
<tr>
<td>DINP: diisononyl phthalate</td>
<td>28553-12-0, 68515-48-0</td>
</tr>
<tr>
<td>DIDP: diisodecyl phthalate</td>
<td>26761-40-0, 68515-49-1</td>
</tr>
<tr>
<td>DnOP: di-n-octyl phthalate</td>
<td>117-84-0</td>
</tr>
<tr>
<td>DIBP: diisobutyl phthalate</td>
<td>84-69-5</td>
</tr>
<tr>
<td>DPENP: di-n-pentyl phthalate</td>
<td>131-18-0</td>
</tr>
<tr>
<td>DHEXP di-n-hexyl phthalate</td>
<td>84-75-3</td>
</tr>
<tr>
<td>DCHP dicyclohexyl phthalate</td>
<td>84-61-7</td>
</tr>
</tbody>
</table>

\(^1\) ASTM International, [http://www.astm.org/Standards/F963.htm](http://www.astm.org/Standards/F963.htm)
Table 2
Soluble² Limits, ppm (mg/kg), for Chemical Elements
ASTM F963-11, Standard Consumer Safety Specification for Toy Safety

<table>
<thead>
<tr>
<th>Antimony</th>
<th>Arsenic</th>
<th>Barium</th>
<th>Cadmium</th>
<th>Chromium</th>
<th>Lead</th>
<th>Mercury</th>
<th>Selenium</th>
</tr>
</thead>
<tbody>
<tr>
<td>60</td>
<td>25</td>
<td>1000</td>
<td>75</td>
<td>60</td>
<td>90</td>
<td>60</td>
<td>500</td>
</tr>
</tbody>
</table>

The following manufactured fibers and their colorants shall be investigated:³

- Polyester (Polyethylene terephthalate or “PET”);
- Nylon (aliphatic or semi-aromatic polyamides);
- Natural latex rubber;
- Spandex (polyester-polyurethane copolymer);
- Rayon;
- Acrylic fiber (a synthetic fiber of polyacrylonitrile); and
- Modacrylic (long-chain synthetic polymers composed of less than 85 percent, but at least 35 percent weight acrylonitrile units).

The contractor shall develop information about the materials listed above, and their colorants, and the processes used in the creation of manufactured fibers, including catalysts used in their production. The information shall focus on circumstances where the materials could contain the specified substances (specified phthalates, and/or specified elements) at concentrations greater than the specified concentrations for each substance. The information also should clearly list the concentrations or concentration ranges of the specified phthalates and specified elements when they are found in concentrations below their respective specified limit.

The contractor’s investigation of the specified phthalates and specified elements shall include the following information:

1. A description of the raw materials used worldwide in the production of the materials used to make the specified manufactured fibers and the resultant undyed textiles;
2. A description of the raw materials used worldwide in the production of the colorants used to dye or print the specified manufactured fibers;
3. A description of the manufacturing processes used worldwide to create the specified manufactured fibers and the resultant undyed textiles, and their colorants, including the presence (and concentration information, if available) of any of the listed phthalates or specified elements. If production processes have changed and the likelihood of the specific chemicals being present has significantly decreased over time, the description shall include this history.
4. The potential use of any recycled materials or other additives in the production of the materials used to make the specified manufactured fibers and the resultant undyed textiles;

² For the purposes of this work, the toy safety standard solubility limit for each element shall be treated as a concentration limit; e.g., the limit for antimony in a product or material is 60 ppm (mg/kg) based on the total concentration of antimony in the material.
³ The list is ordered in perceived order of importance, from the Small Business Ombudsman and from the Office of Compliance.
specified manufactured fibers and the resultant undyed textiles, and their colorants, which could contain the specified phthalates, or the specified elements. Concentration limits or ranges of the specified phthalates or elements shall be included, if available.

The research shall detail the material(s) in which one or more of the specified phthalates or specified elements are used, which specified phthalates or specified elements are typically used as component parts, the reasons for including the substance(s), and typical concentration ranges for the substance(s). The contractor shall include information about the specified phthalates or specified elements for the separate raw materials and for the finished manufactured fibers, as appropriate, depending on the available information.

If the specified substances are unlikely to be present in manufactured fibers, the research shall detail the reasons why the substances are not present (e.g., incompatible chemical properties, no identified application for the substance(s) for the material, none of the specified substances are used because of availability and use of alternative chemicals, such as more effective or less expensive substitutes).

The contractor shall prepare a project plan detailing the contractor’s planned activities. The contractor shall meet with the U.S. Consumer Product Safety Commission (“CPSC” or “Commission”) staff by teleconference to discuss the plan prior to the commencement of the research. Any changes to the task list or project schedule shall be immediately communicated to the CPSC project officer by email, with an updated task list and/or project schedule delivered within seven calendar days.

In addition, the contractor shall conduct a progress report meeting at least once per month after the task is awarded with the Contracting Officer’s Representative (COR) and/or designated staff. The project tasks and schedule will be reviewed. Technical issues, questions and other matters may be discussed.

The contractor shall provide electronic copies of the report and a list of all references examined during the research. Copies of references cited shall be made available to the COR in paper or electronic form at the completion of the task.

All documents delivered shall contain the following information:

1. Date;
2. Contract Number;
3. Contractor name; and

2. Contract Type

This is a firm fixed price task order under CPSC-D-12-0001.

3. Background

Manufactured fibers are made from either inorganic products or a mixture of organic products and chemicals. These fabrics are ubiquitous in the production of many children’s products (e.g., toys, stuffed animals, doll clothing, Halloween costumes, play tents, textiles attached to teething rings, puppets). A determination that one or more manufactured fibers do not contain the specified phthalates or specified elements would mean that third party testing of the fiber is not required for certification purposes when
the fiber is used in a children’s product subject to the applicable safety rule. From the perspective of small businesses, the potential quantity of third party testing burden relief offered by determinations for these materials is substantial.

Current CPSC policies and requirements do not provide for any determinations to avoid or minimize third party testing of manufactured fibers. Staff is increasingly seeing testing estimates of thousands of dollars to test plush animals (100 percent polyester; comprised of different colors of polyesters) for heavy elements and phthalates. CPSC staff has knowledge of at least one heavy element, antimony, being used as a catalyst in the production of a synthetic fiber, polyester, but staff lacks the knowledge as to the concentration of that element in finished products. CPSC staff needs this information in order to make better informed, risk-based decisions. Small businesses need this information to potentially reduce third party testing costs.

This SOW proposes to gather information on textiles composed of manufactured fibers in their undyed state and the colorants used with them.

**Phthalates**

Section 108 of the Consumer Product Safety Improvement Act of 2008 ("CPSIA") restricts the presence of six phthalates in children’s toys and child care articles. A children’s toy is a consumer product designed or intended by the manufacturer for a child 12 years of age or younger for use by the child when the child plays. A child care article is a consumer product designed or intended by the manufacturer to facilitate sleep or the feeding of children age 3 and younger, or to help such children with sucking or teething. The six prohibited phthalates cannot be present in children’s toys or child care articles in concentrations above 0.1 percent. The limit applies to DBP, BBP, and DEHP in all children’s toys and child care articles products, and to DnOP, DiNP, and DIDP in mouthable toys, as well as child care articles. Additionally, based on recommendations from CPSC’s Chronic Hazard Advisory Panel, the Commission recently published a proposed rule that would restrict four additional phthalates (DIBP, DPENP, DHEXP, and DCHP). While the Commission also proposed to remove two phthalates (DnOP, DIDP) from the prohibition for use in children’s products, currently, these two substances continue to be prohibited in mouthable toys and child care articles.

**Toy Safety Standard**

If a children’s product is subject to the requirements of ASTM F963-11, Standard Consumer Safety Specification for Toy Safety, paints, surface coatings, and accessible substrate materials are subject to solubility limits for eight elements (antimony, arsenic, barium, cadmium, chromium, lead, mercury, and selenium). The maximum soluble migrated element in paints, surface coatings, and substrates (other than modeling clay) are listed above in Table 2 of this document (Table 1 in ASTM F963-11).

**Commission Action**

Section 14 of the Consumer Product Safety Act ("CPSA") requires third party testing of children’s products to the applicable children’s product safety rules.

The Commission has previously determined that manufactured textiles (dyed and undyed) do not, and will not, contain lead ("Pb") in excess of the concentration limit for lead in children’s products. These

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4 Section 4.3.5.2 of ASTM F963-11.
materials are listed in 16 C.F.R. § 1500.91. Component parts made from these materials are not subject to third party testing for lead for certification purposes.

In a similar manner, it may be possible for the Commission to determine that manufactured fiber textiles do not, and will not, contain any of the specified phthalates at levels that exceed 0.1 percent, and thus do not require third party testing to assure compliance with the respective requirements. Further, it may be possible for the Commission to determine that manufactured fiber textiles do not contain any of the elements specified in ASTM F963-11 in concentrations that exceed the respective solubility limits, and thus do not require third party testing to assure compliance with the solubility requirements of ASTM F963-11. If a material contains an element at a concentration that is no more than its solubility limit, that material will always be compliant with the solubility requirement.

4. Objective

Under this task order, CPSC staff plans to research the worldwide manufacture of manufactured fiber textiles that could be used to construct children’s products, and, specifically, children’s toy and certain child care articles, and the potential for manufactured fiber textiles to contain specified phthalates, or the other specified elements in concentrations above the respective requirements.

The objective of this task order is to acquire data to support Commission determinations regarding required third party testing.

5. Period of Performance

The period of performance shall be from September 29, 2015 through September 28, 2016.

6. Government Furnished Materials

There are no government furnished materials for this task order.

7. Deliverables or Performance

The contractor shall provide the requested information in the form of a written report. The report shall be in the format of a scientific report with full citations and tables, as appropriate. The reviewer shall e-mail the report to the COR as a Microsoft Word file.

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5 The rule is available at: http://www.ecfr.gov. Browse Title 16 - Commercial Practices. Go to part 1500, and section 1500.91.

6 Compliance to the lead content limit of 100 ppm is always required for accessible component parts of children’s products, irrespective of any testing requirements.
8. Delivery Schedule

The contractor shall provide the service or deliverable listed in Table 3 per the delivery or performance listed.

<table>
<thead>
<tr>
<th>Item(s)</th>
<th>Quantity</th>
<th>Delivery or Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Contractor and CPSC Contracting Officer’s Representative (COR) will meet by teleconference to discuss and initiate the contractor’s project plan.</td>
<td>1</td>
<td>Within 14 calendar days of the period of performance start date.</td>
</tr>
<tr>
<td>The Contractor and CPSC COR shall meet by teleconference for status</td>
<td>As appropriate.</td>
<td>At least once per month after project initiation.</td>
</tr>
<tr>
<td>The Contractor shall submit a draft final report to the CPSC COR.</td>
<td>1</td>
<td>Within 250 calendar days after the initial teleconference.</td>
</tr>
<tr>
<td>The CPSC COR will provide written comments on the draft final report to the Contractor.</td>
<td>1</td>
<td>Within 14 calendar days after receipt of the draft final report.</td>
</tr>
<tr>
<td>The Contractor shall submit a final report to the CPSC COR.</td>
<td>The Contractor shall revise the draft final report as appropriate.</td>
<td>Within 30 calendar days after receipt of comments.</td>
</tr>
<tr>
<td>Inspection and Acceptance. The Final report will be reviewed by the CPSC COR.</td>
<td></td>
<td>Within 14 calendar days after receipt of the report.</td>
</tr>
</tbody>
</table>

9. Place of Delivery

The contractor shall submit written materials by email to the COR, Dr. Kristina Hatlelid (khatlelid@cpsc.gov). If needed, the contractor may mail or send written materials by the deadlines to:

Kristina Hatlelid, Ph.D., M.P.H.
U.S. Consumer Product Safety Commission
5 Research Place
Rockville, MD 20850

Technical questions or clarifications about the documents should be directed to Dr. Kristina Hatlelid at 301-987-2558 or khatlelid@cpsc.gov.

10. Inspection and Acceptance

The Draft Final report submitted to the CPSC will be reviewed within 14 days of receipt of the draft final report for any additional questions and/or comments. If returned to the contractor as a result of the
review, the contractor shall address and/or revise their report accordingly and return the final version to the COR within 30 days of receipt. The CPSC COR will then have an additional 14 days to review and accept the Final report.

11. Requirement for CPSC Clearance

The final report is the property of the U.S. Consumer Product Safety Commission. The Contractor shall not publish the final report, present the information at scientific meetings, or in any other way make the findings public in any form without the written permission of the COR. Any publication must be cleared in accordance with master contract clause LC21A Disclosure of Information – Limits on Publication.