AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE	PAGE OF PAGES
	1 / 2

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. (If applicable)
005	08/22/2014	PR-ORD-14-02526	

6. ISSUED BY CODE CPOD

CPOD
US Environmental Protection Agency
26 West Martin Luther King Drive
Mail Code: NWD
Cincinnati OH 45268

7. ADMINISTERED BY (If other than Item 6) CODE

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)

BATTELLE MEMORIAL INSTITUTE
505 KING AVE
COLUMBUS OH 432012693

CODE (b)(4) FACILITY CODE

(x) 9A. AMENDMENT OF SOLICITATION NO.

9B. DATED (SEE ITEM 11)

x 10A. MODIFICATION OF CONTRACT/ORDER NO. EP-C-11-038 0015

10B. DATED (SEE ITEM 13) 08/22/2013

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☐ is not extended.
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required) Net Increase: $20,000.00
See Schedule

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	
	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
X	D. OTHER (Specify type of modification and authority) Limitation of Funds Notice

E. IMPORTANT: Contractor ☒ is not, ☐ is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

Tax ID Number: (b)(4)
DUNS Number:
The purpose of this modification is to obligate funding to the task order.
TOPO: William Hagel
LIST OF CHANGES:

Reason for Modification : Funding Only Action

Obligated Amount for this Modification: $20,000.00

Incremental Funded Amount changed
Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)	
		Camille W. Davis	
15B. CONTRACTOR/OFFEROR (Signature of person authorized to sign)	15C. DATE SIGNED	16B. Camille W. Davis ELECTRONIC SIGNATURE	16C. DATE SIGNED 08/22/2014

NSN 7540-01-152-8070
Previous edition unusable

STANDARD FORM 30 (REV. 10-83)
Prescribed by GSA
FAR (48 CFR) 53.243

NAME OF OFFEROR OR CONTRACTOR
BATTELLE MEMORIAL INSTITUTE

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	From: $285,000.00 To: $305,000.00 NEW ACCOUNTING CODE ADDED: Account code: 14-TR2B-04R0C61-303DD2-2505-0461C001-C002-1404RE40 11-001 Beginning FiscalYear 14 Ending Fiscal Year Fund (Appropriation) TR2B Budget Organization 04R0C61 Program (PRC) 303DD2 Budget (BOC) 2505 Job # (Site/Project) 0461C001 Cost Organization C002 DCN-LineID 1404RE4011-001 Quantity: 0 Amount: $20,000.00 Cost: (b)(4) Fee: $ total: $20,000.00 Delivery Location Code: CPOD CPOD US Environmental Protection Agency 26 West Martin Luther King Drive Mail Code: NWD Cincinnati OH 45268 USA Payment: RTP Finance Center US Environmental Protection Agency RTP-Finance Center Mail Drop D143-02 109 TW Alexander Drive Durham NC 27711 FOB: Destination Period of Performance: 08/28/2013 to 08/28/2014				

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE

PAGE 1 OF PAGES 3

2. AMENDMENT/MODIFICATION NO.
004

3. EFFECTIVE DATE
See Block 16C

4. REQUISITION/PURCHASE REQ. NO.

5. PROJECT NO. *(If applicable)*

6. ISSUED BY CODE CPOD

CPOD
US Environmental Protection Agency
26 West Martin Luther King Drive
Mail Code: NWD
Cincinnati OH 45268

7. ADMINISTERED BY *(If other than Item 6)* CODE

8. NAME AND ADDRESS OF CONTRACTOR *(No., street, county, State and ZIP Code)*

BATTELLE MEMORIAL INSTITUTE
505 KING AVE
COLUMBUS OH 432012693

CODE (b)(4) FACILITY CODE

(x) 9A. AMENDMENT OF SOLICITATION NO.

9B. DATED *(SEE ITEM 11)*

X 10A. MODIFICATION OF CONTRACT/ORDER NO.
EP-C-11-038
0015

10B. DATED *(SEE ITEM 13)*
08/22/2013

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☐ is not extended.
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. *FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER.* If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA *(If required)*
See Schedule

Net Decrease: -$75,000.00

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	
	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: *(Specify authority)* THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES *(such as changes in paying office, appropriation date, etc.)* SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
X	D. OTHER *(Specify type of modification and authority)* Limitation of Funds Notice

E. IMPORTANT: Contractor ☒ is not, ☐ is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION *(Organized by UCF section headings, including solicitation/contract subject matter where feasible.)*

Tax ID Number: (b)(4)
DUNS Number:

The purpose of this modification is to de-obligate funding no longer needed for this task order.

TOPO: William Hagel

LIST OF CHANGES:

Reason for Modification : Funding Only Action

Obligated Amount for this Modification: -$75,000.00

Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER *(Type or print)*

16A. NAME AND TITLE OF CONTRACTING OFFICER *(Type or print)*
Camille W. Davis

15B. CONTRACTOR/OFFEROR

(Signature of person authorized to sign)

15C. DATE SIGNED

16B. Camille W. Davis ELECTRONIC SIGNATURE

16C. DATE SIGNED
06/18/2014

NSN 7540-01-152-8070
Previous edition unusable

STANDARD FORM 30 (REV. 10-83)
Prescribed by GSA
FAR (48 CFR) 53.243

NAME OF OFFEROR OR CONTRACTOR
BATTELLE MEMORIAL INSTITUTE

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	Incremental Funded Amount changed From: $360,000.00 To: $285,000.00 CHANGES FOR LINE ITEM NUMBER: 1 Obligated Amount for this modification: -$75,000.00 Incremental Funded Amount changed from $360,000.00 to $285,000.00 CHANGES FOR ACCOUNTING CODE: 13-14-C-261A000-201FK7-2532-26A5C-14261AC432-001 Account code changed from 13-14-C-261A000-201FK7-2532--26A5C-14261AC432-001 to 13-14-C-261A000-201FK7-2532-26A5C-14261AC432-001 Amount changed from $60,800.00 to $0.00 Cost: ($(b)(4)) Fee: ($) Total: ($60,800.00) CHANGES FOR ACCOUNTING CODE: 13-14-C-261A000-401FK9-2532-26A5C-14261AC432-002 Account code changed from 13-14-C-261A000-401FK9-2532--26A5C-14261AC432-002 to 13-14-C-261A000-401FK9-2532-26A5C-14261AC432-002 Amount changed from $39,200.00 to $25,000.00 Orig. Amt. De-ob Amt. New Total Cost: $(b)(4) Fee: Total: $39,200.00 - $14,200.00 = $25,000.00 The Total Revised Incremental Task Order funding is as follows: De-ob Amt Rev. Fund Tot. Cost: $(b)(4) Fee: $ Total: $360,000.00 - $75,000.00 = $285,000.00 Delivery Location Code: CPOD CPOD US Environmental Protection Agency 26 West Martin Luther King Drive Continued ...				

NAME OF OFFEROR OR CONTRACTOR
BATTELLE MEMORIAL INSTITUTE

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	Mail Code: NWD Cincinnati OH 45268 USA Payment: RTP Finance Center US Environmental Protection Agency RTP-Finance Center Mail Drop D143-02 109 TW Alexander Drive Durham NC 27711 FOB: Destination Period of Performance: 08/28/2013 to 08/28/2014				

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE

PAGE 1 OF PAGES 3

2. AMENDMENT/MODIFICATION NO.: 003

3. EFFECTIVE DATE: 04/22/2014

4. REQUISITION/PURCHASE REQ. NO.: PR-ORD-14-01009

5. PROJECT NO. *(If applicable)*

6. ISSUED BY CODE: CPOD

CPOD
US Environmental Protection Agency
26 West Martin Luther King Drive
Mail Code: NWD
Cincinnati OH 45268

7. ADMINISTERED BY *(If other than Item 6)* CODE

8. NAME AND ADDRESS OF CONTRACTOR *(No., street, county, State and ZIP Code)*

BATTELLE MEMORIAL INSTITUTE
505 KING AVE
COLUMBUS OH 432012693

CODE (b)(4) FACILITY CODE

(x) 9A. AMENDMENT OF SOLICITATION NO.

9B. DATED *(SEE ITEM 11)*

X 10A. MODIFICATION OF CONTRACT/ORDER NO. EP-C-11-038 0015

10B. DATED *(SEE ITEM 13)* 08/22/2013

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☐ is not extended.
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA *(If required)*
See Schedule

Net Increase: $130,000.00

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE

A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: *(Specify authority)* THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.

B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES *(such as changes in paying office, appropriation date, etc.)* SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).

C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:

X D. OTHER *(Specify type of modification and authority)*
Limitation of Funds Notice

E. IMPORTANT: Contractor ☒ is not, ☐ is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION *(Organized by UCF section headings, including solicitation/contract subject matter where feasible.)*

Tax ID Number: (b)(4)
DUNS Number:
The purpose of this modification is to add incremental funding.
TOPO: William Hagel
LIST OF CHANGES:

Reason for Modification : Funding Only Action

Obligated Amount for this Modification: $130,000.00

Incremental Funded Amount changed:
Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER *(Type or print)*

16A. NAME AND TITLE OF CONTRACTING OFFICER *(Type or print)*
Camille W. Davis

15B. CONTRACTOR/OFFEROR
(Signature of person authorized to sign)

15C. DATE SIGNED

16B. Camille W. Davis ELECTRONIC SIGNATURE

16C. DATE SIGNED 04/22/2014

NAME OF OFFEROR OR CONTRACTOR
BATTELLE MEMORIAL INSTITUTE

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	From: $230,000.00 To: $360,000.00 CHANGES FOR LINE ITEM NUMBER: 1 Obligated Amount for this modification: $130,000.00 Incremental Funded Amount changed from $230,000.00 to $360,000.00 NEW ACCOUNTING CODE ADDED: Account code: 14-TR2B-04R0C61-303DD2-2505-0461CO01-C002-1404RE40 05-001 Beginning FiscalYear 14 Ending Fiscal Year Fund (Appropriation) TR2B Budget Organization 04R0C61 Program (PRC) 303DD2 Budget (BOC) 2505 Job # (Site/Project) 0461CO01 Cost Organization C002 DCN-LineID 1404RE4005-001 Quantity: 0 Amount: $130,000.00 The break-out for this Incremental funding is as follows: Cost: $(b)(4) Fee: $ Total: $130,000.00 The total Incrementally funded amount for the Task Order is as follows: Cost: (b)(4) Fee: $ Total: $360,000.00 Delivery Location Code: CPOD CPOD US Environmental Protection Agency 26 West Martin Luther King Drive Mail Code: NWD Cincinnati OH 45268 USA Continued ...				

CONTINUATION SHEET	REFERENCE NO. OF DOCUMENT BEING CONTINUED	PAGE	OF
	EP-C-11-038/0015/003	3	3

NAME OF OFFEROR OR CONTRACTOR
BATTELLE MEMORIAL INSTITUTE

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	Payment: RTP Finance Center US Environmental Protection Agency RTP-Finance Center Mail Drop D143-02 109 TW Alexander Drive Durham NC 27711 FOB: Destination Period of Performance: 08/28/2013 to 08/28/2014				

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE

PAGE 1 OF 3 PAGES

2. AMENDMENT/MODIFICATION NO.: 002

3. EFFECTIVE DATE: 02/14/2014

4. REQUISITION/PURCHASE REQ. NO.: PR-ORD-14-00821

5. PROJECT NO. (If applicable):

6. ISSUED BY CODE: CPOD

CPOD
US Environmental Protection Agency
26 West Martin Luther King Drive
Mail Code: NWD
Cincinnati OH 45268

7. ADMINISTERED BY (If other than Item 6) CODE:

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)

BATTELLE MEMORIAL INSTITUTE
505 KING AVE
COLUMBUS OH 432012693

CODE (b)(4) FACILITY CODE

(x) 9A. AMENDMENT OF SOLICITATION NO.

9B. DATED (SEE ITEM 11)

x 10A. MODIFICATION OF CONTRACT/ORDER NO. EP-C-11-038 0015

10B. DATED (SEE ITEM 13) 08/22/2013

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☐ is not extended.
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)
See Schedule

Net Increase: $100,000.00

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	
	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
X	D. OTHER (Specify type of modification and authority) Limitation of Funds Notice

E. IMPORTANT: Contractor ☒ is not, ☐ is required to sign this document and return 0 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

Tax ID Number: (b)(4)
DUNS Number:
The purpose of this modification is to add incremental funding.
TOPO: William Hagel
LIST OF CHANGES:

Reason for Modification : Funding Only Action

Obligated Amount for this Modification: $100,000.00

Incremental Funded Amount changed
Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)

16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print): Camille W. Davis

15B. CONTRACTOR/OFFEROR
(Signature of person authorized to sign)

15C. DATE SIGNED

16B. Camille W. Davis ELECTRONIC SIGNATURE

16C. DATE SIGNED: 02/14/2014

NAME OF OFFEROR OR CONTRACTOR
BATTELLE MEMORIAL INSTITUTE

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	From: $130,000.00 To: $230,000.00 NEW ACCOUNTING CODE ADDED: Account code: 13-14-C-261A000-201FK7-2532--26A5C-14261AC432-001 Beginning FiscalYear 13 Ending Fiscal Year 14 Fund (Appropriation) C Budget Organization 261A000 Program (PRC) 201FK7 Budget (BOC) 2532 Job # (Site/Project) Cost Organization 26A5C DCN-LineID 14261AC432-001 Quantity: 0 Amount: $60,800.00 Cost: $(b)(4) Fee: Total: $60,800.00 *Note: Funds in the a mount of $(b)(4) are added to the (b)(4) fee to correct the Incremental fee amount when the Task Order was awarded (Fee should have been $(b)(4), not $(b)(4)). NEW ACCOUNTING CODE ADDED: Account code: 13-14-C-261A000-401FK9-2532--26A5C-14261AC432-002 Beginning FiscalYear 13 Ending Fiscal Year 14 Fund (Appropriation) C Budget Organization 261A000 Program (PRC) 401FK9 Budget (BOC) 2532 Job # (Site/Project) Cost Organization 26A5C DCN-LineID 14261AC432-002 Quantity: 0 Amount: $39,200.00 Cost: $(b)(4) Fee: $ Total: $39,200.00 Total Revised Incremental Task Order Funding: Cost: $(b)(4) Fee: $ Total: $230,000.00 Continued ...				

NAME OF OFFEROR OR CONTRACTOR
BATTELLE MEMORIAL INSTITUTE

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	Delivery Location Code: CPOD CPOD US Environmental Protection Agency 26 West Martin Luther King Drive Mail Code: NWD Cincinnati OH 45268 USA Payment: RTP Finance Center US Environmental Protection Agency RTP-Finance Center Mail Drop D143-02 109 TW Alexander Drive Durham NC 27711 FOB: Destination Period of Performance: 08/28/2013 to 08/28/2014				

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE

PAGE 1 OF PAGES 2

2. AMENDMENT/MODIFICATION NO.: 001

3. EFFECTIVE DATE: See Block 16C

4. REQUISITION/PURCHASE REQ. NO.: PR-ORD-13-02614

5. PROJECT NO. *(If applicable)*

6. ISSUED BY CODE: CPOD

CPOD
US Environmental Protection Agency
26 West Martin Luther King Drive
Mail Code: NWD
Cincinnati OH 45268

7. ADMINISTERED BY *(If other than Item 6)* CODE

8. NAME AND ADDRESS OF CONTRACTOR *(No., street, county, State and ZIP Code)*

BATTELLE MEMORIAL INSTITUTE
505 KING AVE
COLUMBUS OH 432012693

CODE (b)(4) FACILITY CODE

(x) 9A. AMENDMENT OF SOLICITATION NO.

9B. DATED *(SEE ITEM 11)*

x 10A. MODIFICATION OF CONTRACT/ORDER NO. EP-C-11-038 0015

10B. DATED *(SEE ITEM 13)* 08/22/2013

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☐ is not extended.
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA *(If required)* Net Increase: $15,000.00
See Schedule

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	
	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: *(Specify authority)* THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES *(such as changes in paying office, appropriation date, etc.)* SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
X	D. OTHER *(Specify type of modification and authority)* Limitation of Funds Notice

E. IMPORTANT: Contractor ☒ is not, ☐ is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION *(Organized by UCF section headings, including solicitation/contract subject matter where feasible.)*

Tax ID Number: (b)(4)
DUNS Number:
The purpose of this modification is to add incremental funding.
TOPO: William Hagel
LIST OF CHANGES:

Reason for Modification : Funding Only Action

Obligated Amount for this Modification: $15,000.00

Incremental Funded Amount changed
Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER *(Type or print)*

16A. NAME AND TITLE OF CONTRACTING OFFICER *(Type or print)*
Camille W. Davis

15B. CONTRACTOR/OFFEROR
(Signature of person authorized to sign)

15C. DATE SIGNED

16B. UNITED STATES OF AMERICA
(Signature of Contracting Officer)

16C. DATE SIGNED

NAME OF OFFEROR OR CONTRACTOR
BATTELLE MEMORIAL INSTITUTE

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	From: $115,000.00 To: $130,000.00 CHANGES FOR LINE ITEM NUMBER: 1 Obligated Amount for this modification: $15,000.00 Incremental Funded Amount changed from $115,000.00 to $130,000.00 NEW ACCOUNTING CODE ADDED: Account code: 13-14-C-26U2000-301FK8XPV-2532--26A6A-1326U2E818-0 01 Beginning FiscalYear 13 Ending Fiscal Year 14 Fund (Appropriation) C Budget Organization 26U2000 Program (PRC) 301FK8XPV Budget (BOC) 2532 Job # (Site/Project) Cost Organization 26A6A DCN-LineID 1326U2E818-001 Quantity: 0 Amount: $15,000.00 Delivery Location Code: CPOD CPOD US Environmental Protection Agency 26 West Martin Luther King Drive Mail Code: NWD Cincinnati OH 45268 USA Payment: RTP Finance Center US Environmental Protection Agency RTP-Finance Center Mail Drop D143-02 109 TW Alexander Drive Durham NC 27711 FOB: Destination Period of Performance: 08/28/2013 to 08/28/2014				

ORDER FOR SUPPLIES OR SERVICES

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

1. DATE OF ORDER: 08/22/2013

2. CONTRACT NO. (If any): EP-C-11-038

3. ORDER NO.: 0015

4. REQUISITION/REFERENCE NO.: See Schedule

5. ISSUING OFFICE (Address correspondence to):
CPOD
US Environmental Protection Agency
26 West Martin Luther King Drive
Mail Code: NWD
Cincinnati OH 45268

6. SHIP TO:
a. NAME OF CONSIGNEE: CPOD
b. STREET ADDRESS: US Environmental Protection Agency
26 West Martin Luther King Drive
Mail Code: NWD
c. CITY: Cincinnati
d. STATE: OH
e. ZIP CODE: 45268

7. TO:
a. NAME OF CONTRACTOR: BATTELLE MEMORIAL INSTITUTE
b. COMPANY NAME:
c. STREET ADDRESS: 505 KING AVE
d. CITY: COLUMBUS
e. STATE: OH
f. ZIP CODE: 432012693

f. SHIP VIA:

8. TYPE OF ORDER
☐ a. PURCHASE
REFERENCE YOUR:
Please furnish the following on the terms and conditions specified on both sides of this order and on the attached sheet, if any, including delivery as indicated.

☒ b. DELIVERY
Except for billing instructions on the reverse, this delivery order is subject to instructions contained on this side only of this form and is issued subject to the terms and conditions of the above-numbered contract.

9. ACCOUNTING AND APPROPRIATION DATA: See Schedule

10. REQUISITIONING OFFICE: CPOD

11. BUSINESS CLASSIFICATION (Check appropriate box(es))
☐ a. SMALL ☒ b. OTHER THAN SMALL ☐ c. DISADVANTAGED ☐ d. WOMEN-OWNED ☐ e. HUBZone
☐ f. SERVICE-DISABLED VETERAN-OWNED ☐ g. WOMEN-OWNED SMALL BUSINESS (WOSB) ELIGIBLE UNDER THE WOSB PROGRAM ☐ h. EDWOSB

12. F.O.B. POINT: Destination

13. PLACE OF
a. INSPECTION: Destination
b. ACCEPTANCE: Destination

14. GOVERNMENT B/L NO.:

15. DELIVER TO F.O.B. POINT ON OR BEFORE (Date):

16. DISCOUNT TERMS:

17. SCHEDULE (See reverse for Rejections)

ITEM NO. (a)	SUPPLIES OR SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	Tax ID Number: (b)(4) DUNS Number: Technical Support for the Site Characterization and Monitoring Technical Support Center (SCMTSC) TOPO: William Hagel Continued ...					

18. SHIPPING POINT:

19. GROSS SHIPPING WEIGHT:

20. INVOICE NO.:

17(h) TOTAL (Cont. pages): $115,000.00

21. MAIL INVOICE TO:
a. NAME: RTP Finance Center
b. STREET ADDRESS (or P.O. Box): US Environmental Protection Agency
RTP-Finance Center
Mail Drop D143-02
109 TW Alexander Drive
c. CITY: Durham
d. STATE: NC
e. ZIP CODE: 27711

SEE BILLING INSTRUCTIONS ON REVERSE

17(i) GRAND TOTAL: $362,498.00

22. UNITED STATES OF AMERICA BY (Signature):

23. NAME (Typed): Camille W. Davis
TITLE: CONTRACTING/ORDERING OFFICER

ORDER FOR SUPPLIES OR SERVICES
SCHEDULE - CONTINUATION

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

DATE OF ORDER	CONTRACT NO.	ORDER NO.
08/22/2013	EP-C-11-038	0015

ITEM NO. (a)	SUPPLIES/SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	Admin Office: CPOD US Environmental Protection Agency 26 West Martin Luther King Drive Mail Code: NWD Cincinnati OH 45268 Period of Performance: 08/28/2013 to 08/28/2014					
0001	Technical support for SCM-TSC Line Item #289 Requisition No: PR-ORD-13-01994, PR-ORD-13-02304, PR-ORD-13-02501 Accounting Info: 13--T-72BA-303DD2-2505-HQ00BM00--1372B J5015-001 BFY: 13 Fund: T Budget Org: 72BA Program (PRC): 303DD2 Budget (BOC): 2505 Job #: HQ00BM00 DCN - Line ID: 1372BJ5015-001 Funding Flag: Partial Funded: $25,000.00 Accounting Info: 13--T-72DP-303DD2-2505-HQ00BM00--1372D P5015-001 BFY: 13 Fund: T Budget Org: 72DP Program (PRC): 303DD2 Budget (BOC): 2505 Job #: HQ00BM00 DCN - Line ID: 1372DP5015-001 Funding Flag: Partial Funded: $20,000.00 Accounting Info: 12-13-C-261E000-201FK7-2532--26A6F-132 61EC329-001 BFY: 12 EFY: 13 Fund: C Budget Org: 261E000 Program (PRC): 201FK7 Budget (BOC): 2532 Cost: 26A6F DCN - Line ID: 13261EC329-001 Funding Flag: Partial Funded: $70,000.00 The obligated amount of award: $115,000.00. The total for this award is shown in box 17(i).				115,000.00	

TOTAL CARRIED FORWARD TO 1ST PAGE (ITEM 17(H)) ▷ $115,000.00

PERFORMANCE WORK STATEMENT
STREAMS II
Task Order 0015, Battelle EP-C-11-038

TITLE: Technical Support for the Site Characterization and Monitoring Technical Support Center (SCMTSC)

Task Order Manager (TOM)	**Alternate Task Order Manager (ATOM)**
Name: William Hagel	Name: Felicia Barnett
Office: ORD/OSP	Office: ORD/OSP
1650 Arch Street, 3HS40	61 Forsyth Street
Philadelphia, PA 19103	Atlanta, GA 30303
Phone: (215) 814-3053	Phone: (404) 562-8659
Fax: (215) 814-3015	Fax: (404) 562-8788
Email: Hagel.Bill@epa.gov	Email: Barnett.Felicia@epa.gov

PERIOD OF PERFORMANCE: August 28, 2013 through August 28, 2014

BACKGROUND AND OBJECTIVES

The Office of Solid Waste and Emergency Response (OSWER), Regional Superfund Offices, and the Office of Research and Development (ORD) established the Superfund Technical Support Project (TSP) to provide technology-based assistance to EPA's Regional Remedial Project Managers (RPMs) and On-Scene Coordinators (OSCs) through ORD laboratories. The Project consists of a network of Regional Forums and a number of specialized Technical Support Centers (TSC).

The Site Characterization and Monitoring Technical Support Center (SCMTSC) is managed by the Superfund and Technology Liaison Program (STL) of the Office of Science Policy (OSP). The objectives of the SCMTSC are to:

1. Facilitate the use and implementation of state-of-the-science research products developed by EPA and other Federal research laboratories for regional EPA personnel to characterize and monitor hazardous constituent waste sites;

2. Ensure coordination and consistency in the application of contaminant characterization technologies;

3. Provide high technology state-of-the-science information, products and services to Waste Program Project Managers;

4. Facilitate the evaluation and application of innovative characterization and monitoring technologies and techniques at waste sites;

5. Technical support through expert review of scientific documents related to hazardous site investigations and characterization.

SCOPE OF WORK

EPA addresses contamination of water, soil, and air at Superfund, Federal Facilities, Brownfield, and RCRA sites. The contractor will identify, investigate, research, and evaluate innovative technologies and processes and provide technical expertise to ensure that the planning of hazardous waste site characterizations and assessments uses sound science and that analytical sampling and monitoring methods and quality control requirements are the most effective for achieving the project objectives. The technical expertise and innovative technologies will include but not be limited to: 1) technologies for on-site measurements of inorganic and organic contaminants by field-portable X-ray fluorescence (FPXRF), ion mobility spectrometry, GCMS and geophysics; 2) providing special (non-routine) laboratory analysis; 3) designing valid sampling and monitoring approaches for determining the levels and geographical extent of site contaminants; 4) modeling contaminant(s) movement and disposition/deposition for remediation and risk assessment purposes; 5) providing or evaluating special (non-routine) contaminant identification (examples: Tentatively Identified Compounds (TICs), contaminant isomers, fingerprinting); and 6) providing evaluations of non-EPA developed work plans, sampling and analysis plans, quality assurance project plans, and other documents.

The following tasks may be performed, depending on the specific site characterization requirements. As all the resources provided by the EPA are site-specific cost recoverable, the SCMTSC Director will identify the site and the specific characterization objectives.

1. Develop and assess sampling and/or monitoring strategies. Each sampling/monitoring strategy may be unique due to the individual characteristics of the site(s) and to the particular site objective for characterization or remediation objective(s). The recommendations and rationale of each strategy shall be thoroughly documented. Apply appropriate procedures to address site characterization requirements. This may involve contaminant or ground water modeling to determine the geographical boundaries of contaminants.

2. Execute a project Quality Assurance/Quality Control *(QA/QC)* Plan. The *QA/QC* criteria must be specific to each site's characterization requirements (definitions in Appendix B).

3. Implement field and laboratory contaminant measurement methods to identify contaminants, determine concentrations, and assess the applicability of remedial technologies.

4. Implement laboratory and on-site state-of-the-science measurement technologies that are cost and time-effective.

5. Evaluate reports, models, and work plans, sampling/monitoring protocols, and analytical protocols and approaches.

6. Implement quick-response on-site field measurements, laboratory analyses, or monitoring design evaluations/optimizations to meet time-critical monitoring and emergency response objectives. Field measurement methods may include FPXRF, Geophysics, and selected analytical field methods. Laboratory analysis may include, but are not limited to, Volatile Organic Analysis (VOAs), semi-volatiles, inorganics,

and radiochemistry.

7. Provide technical support to regions or the SCMTSC Director at EPA meetings pertaining to documentation, validity and authenticity of data, innovative measurement technologies, analytical methods, and sampling or monitoring design approaches.

8. Develop issue papers that provide state-of-the-science guidance in areas that impact site characterization, technologies.

9. Provide report(s) that document the application and performance of contaminant characterization technologies applied at waste site(s).

10. Provide reliable and accurate information pertaining to innovative site characterization and remediation technologies.

11. Assist EPA regions and STL personnel in implementing site characterization technologies at waste sites.

Whenever practical, projects shall adhere to the National Geospatial Data Policy (NGDP), which establishes principles, responsibilities, and requirements for collecting and managing geospatial data used by Federal environmental programs and projects within the jurisdiction of the U.S. Environmental Protection Agency (EPA). This Policy also establishes the requirement of collecting and managing geospatial metadata describing the Agency's geospatial assets to underscore EPA's commitment to data sharing, promoting secondary data use, and supporting the National Spatial Data Infrastructure (NSDI).

Projects using "secondary geospatial data," that is, data that is a final output from another project or source, must be reviewed for FGDC compliance prior to use.

DELIVERABLES

Deliverables are associated with specific Technical Directive Documents (TDDs) (refer to section on Technical Directives and Task Management below). Typical deliverables may include but are not limited to:

1. Financial status and progress reports;

2. Site or task-specific quality assurance/quality management plans;

3. Technical reports that may be subject to EPA peer review procedures; and

4. Brief summary reports at the conclusion of each project.

Technical Directives (TDs) and Task Management:

This task order (TO) will consist of a number of technical directives (TDs). The contractor will be notified electronically by the Task Order Manager (TOM) when technical support is required through the issuance of a TD. A TD presents the entire scope of work to be performed by the contractor for an

individual project. TDs are comprised of up to three (3) Technical Directive Forms (TDFs). These forms are used to request, manage, and deliver specific units of work within the scope of this Performance Work Statement.

Each TD assignment will be formatted in a manner similar to the example forms shown in Appendix A. On these forms, the TOM will provide the contractor with the overall objectives, schedules, deliverables and other information necessary to conduct the TD. The forms will also specify any details needed by the contractor to conduct the specific TD.

Prior to preparing a technical proposal in response to a TD, the contractor shall determine whether they would have any conflict of interest (COI) in conducting the work. The contractor shall notify the TOM if they have a conflict of interest and the nature of the conflict. Should COI be identified in response to a TD, the contractor shall take no further action unless authorized by the Contracting Officer (CO). A report detailing the issues of the conflict of interest shall be sent to the CO, with electronic copies to the EPA Project Officer (PO) and TOM.

Under this technical support TO, individual Technical Directives (TDs) will be issued by the EPA TOM. The TOM shall electronically send the TD to the contractor's Project Manager as defined in the technical proposal for this TO, with copies going to the EPA CO and PO. The contractor shall develop a technical proposal (including a cost estimate) within five (5) working days and submit it electronically to the TOM with copies to the CO and PO. The cost estimate in the work plan shall be cost plus fixed fee and will provide an estimate of the labor hours, other direct costs and indirect costs to complete the work. The total of the TDs shall not exceed the available funding for the task order. The TOM shall notify the contractor's Project Manager (and EPA PO and CO) electronically when the technical proposal is approved. Work on the TD shall not begin until the technical proposal is approved. If the scheduled work appears that it will exceed the approved technical proposal budget or schedule, a TD modification shall be sent to the TOM for approval. Upon TD modification approval, (with copies to the CO and PO), the contractor may continue working to the limits in the technical proposal. The contractor shall not perform any work that is not described in a TD. Under no circumstances can the TO funding be exceeded without a task order modification by the Contracting Officer. Each part of the TD process is described below:

TDF 1 – Technical Directive Assignment This form is issued by the TOM and describes what is expected to be accomplished. It includes the specific work to be performed by the contractor, the required deliverable(s)/products, and any special instructions, schedules, and delivery or acceptance criteria.

TDF 2 – Technical Proposal This form is generated by the contractor in response to TDF1 and includes information such as the following: a technical proposal that includes a brief discussion of the contractor's understanding of what is required; a detailed description of how the work is to be performed; the deliverable(s) that will be developed; implementation methods when appropriate; any special technologies or procedures to be employed; an estimate of the start and completion dates; a cost estimate (skill level(s), number of personnel to be assigned, labor hours for each person, materials/equipment, travel, subcontracts, or information/documentation, etc.); and any assumptions employed in making the proposal. The EPA must accept this proposal before the contractor may begin work.

TDF 3 - Modification This form can be initiated by either the EPA or the contractor. Whenever items change in TDF1 or TDF2, a TDF3 must be generated to describe the

change. The following are examples of items that might change and require a TDF3: description/scope of work; deliverable(s); schedule; resources required. If work is not to be completed as originally agreed upon and a new completion date is required and/or additional hours are required, the TDF3 must include an explanation as to why the extension or additional resources are necessary. If the TDF1 is modified, then the TDF2 must be modified, and both modifications can be put on the same TDF3, clearly indicating which input is from the EPA and which is from the contractor. The TDF3 must be approved by EPA before the modification is implemented.

Appendix A

Technical Directive Form #1
TECHINCAL DIRECTIVE EXAMPLE

Task Order Number: 0008
Technical Directive Number: 00

Title of Technical Directive: XX Chemical

Regional Requestor Name/Phone #: Project Manager, manager.project@epa.gov, Region X, 202-555-0000

Site Name: XX Chemical; EPA ID# STDD000000000

Description of Work: Review of Site Investigation Plan

Background:

The XX Chemical Site consists of a 20-acre parcel of land located in Anywhere, USA. From the early 1930s until the mid-1980s, the chemical plant at the Site functioned as a blender of pesticides and fertilizers. Raw pesticides manufactured at other locations were blended with inert materials to produce commercial-grade products using air and hammer mills and wetting agents. Production ended in the 1980s.

Waste materials from the manufacturing processes, including waste generated during the cleaning of the processing equipment, were disposed in an on-site depression. Contaminants found in Site soil, ground water, surface water, and/or sediment, as well as in the tissue of fish caught downstream of the Site, include arsenic, lead, benzene, aldrin, chlordane, DDD, DDE, DDT, dieldrin, and methoxychlor.

Scope of Work:

The contractor shall review and evaluate the merits of the Sampling Plan A.

Quality Assurance Requirements:

All work shall be performed in accordance with the existing Contractor Quality Management Plan (QMP). Additional data quality objectives (DQOs) specific to the site and existing site QA documents shall be provided by Regional personnel, if needed. It is assumed that all data provided by the Region have been reviewed and meet the QA criteria in the site QAPP.

Deliverables and Acceptance Criteria:

Letter Report due one (1) month after contractor receives Site Investigation Report. Acceptance shall be determined by 100% review by the TOM and the Regional client.

Conflict of Interest:

The contractor shall determine if any potential or actual personal or corporate (COI) exists with the site that is the subject of this Technical Directive. The contractor shall report results of this certification / assessment in the technical proposal (Technical Directive Form #2) and, if appropriate, the steps taken to mitigate the COI. If the contractor determines that there is the potential for COI issues at this site, no work shall be initiated until the issue has been fully resolved or mitigated.

_____ _____

Name Date

Task Order Manager

APPENDIX B

NERL QA Requirements and Definitions

EPA's Quality System Website: http://www.epa.gov/quality/

EPA's Requirements and Guidance Documents:
http://www.epa.gov/quality/qa_docs.html

In accordance with EPA Order 5360.1 A2, conformance to ANSI/ASQC E4 must be demonstrated by submitting the quality documentation described herein. All quality documentation shall be submitted to the Government for review. The Government will review and return the quality documentation, with comments, and indicate approval or disapproval. If the quality documentation is not approved, it must be revised to address all comments and shall be resubmitted to the Government for approval. Work involving environmental data collection, generation, use, or reporting shall not commence until the Government has approved the quality documentation. The QAPP shall be submitted to the Government at least thirty (30) days prior to the beginning of any environmental data gathering or generation activity in order to allow sufficient time for review and revisions to be completed. After the Government has approved the quality documentation, the Contractor shall also implement it as written and approved by the Government.

Definitions:

Environmental Data - These are any measurements or information that describe environmental processes, location, or conditions; ecological or health effects and consequences; or the performance of environmental technology. For EPA, environmental data include information collected directly from measurements, produced from software and models, and compiled from other sources such as data bases or the literature.

Quality Assurance (QA) - Quality assurance is a system of management activities to ensure that a process, item, or service is of the type and quality needed by the customer. It deals with setting policy and running an administrative system of management controls that cover planning, implementation, and review of data collection activities and the use of data in decision making. Quality assurance is just one part of a quality system.

Quality Assurance Project Plan (QAPP) - A QAPP is a document that describes the necessary quality assurance, quality control, and other technical activities that must be implemented to ensure that the results of the work performed will satisfy the stated performance criteria. A QAPP documents project-specific information.

Quality Control (QC) - Quality control is a technical function that includes all the scientific precautions, such as calibrations and duplications that are needed to acquire data of known and adequate quality.

Quality Management Plan (QMP) - A QMP is a document that describes an organization's/program's quality system in terms of the organizational structure, policy and procedures, functional responsibilities of management and staff, lines of authority, and required interfaces for those planning, implementing, documenting, and assessing all activities conducted. A QMP documents the overall organization/program, and is primarily applicable to multi-year, multi-project efforts. An organization's/program's QMP shall address all elements listed in the EPA/240/B-01/002.

Quality System - A quality system is the means by which an organization manages its quality aspects in a systematic, organized manner and provides a framework for planning, implementing, and assessing work performed by an organization and for carrying out required quality assurance and quality control activities.

R-2 - EPA Requirements for Quality Management Plans (EPA/240/B-01/002) March, 2001, http://www.epa.gov/quality/qs-docs/r2-final.pdf

R-5 - EPA Requirements for QA Project Plans (EPA/240/B-01/003) March, 2001 http://www.epa.gov/quality/qs-docs/r5-final.pdf

Substantive Change - Substantive change is any change in an activity that may alter the quality of data being used, generated, or gathered.

NERL's Quality System Specifications:

(1) A description of the organization's Quality System (QS) and information regarding how the QS is documented, communicated and implemented;

(2) An organizational chart showing the position of the QA function;

(3) Delineation of the authority and responsibilities of the QA function;

(4) The background and experience of the QA personnel who will be assigned to the project; and

(5) the organization's general approach for accomplishing the QA specifications in the SOW.

Category Level Designations (determines the level of QA required):

Category I Project - applicable to studies performed to generate data used for enforcement activities, litigation, or research project involving human subjects. The QAPP shall address all elements listed in R-5.

Category II Project - applicable to studies performed to generate data used in support of the development of environmental regulations or standards. The QAPP shall address all elements listed in R-5.

Category III Project - applicable to projects involving applied research or technology evaluations. The QAPP shall address the applicable sections of R-5, as outlined in the NERL QAPP requirements for the specific project type (see below).

Category IV Project - applicable to projects involving basic research or preliminary data gathering activities. The QAPP shall address the applicable sections of R-5, as outlined in the NERL QAPP requirements for the specific project type (see below).

Guidance for QAPPs by Project Type (described in more detail on subsequent pages):

These outlines of NERL QAPP Requirements for various project types, from Appendix B of the NERL QMP (except where otherwise noted), are condensed from typically applicable sections of R-5 (EPA Requirements for QA Project Plans) and are intended to serve as a starting point when preparing a QAPP. These lists and their format may not fit every research scenario, and QAPPs must conform to applicable sections of R-5 in a way that fully describes the research plan and appropriate QA and QC measures to ensure that the data are of adequate quality and quantity to fit their intended purpose.

Applied Research Project - pertains to a study performed to generate data to demonstrate the performance of accepted processes or technologies under defined conditions. These studies are often pilot- or field-scale. Additional guidance is given in "QAPP Requirements for Applied Research Projects".

Basic Research Project - pertains to a study performed to generate data used to evaluate unproven theories, processes, or technologies. These studies are often bench-scale. Additional guidance is given in "QAPP Requirements for Basic Research Projects".

Design, Construction, and/or Operation of Environmental Technology Project - pertains to engineering projects involving environmental technologies, an all inclusive term used to describe pollution control devices and systems, waste treatment processes and storage facilities, and site remediation technologies and their components that may be utilized to remove pollutants or contaminants from or prevent them from entering the environment. Comprehensive guidance can be found in the EPA Quality System document "Guidance on Quality Assurance for Environmental Technology Design, Construction, and Operation" G-11, at http://www.epa.gov/quality/qs-docs/g11-final-05.pdf.

Method Development Project - pertains to situations where there is no existing standard method, or a standard method needs to be significantly modified for a specific application. Additional guidance is given in "QAPP Requirements for

Method Development Projects".

Model Development Project - includes all types of mathematical models including static, dynamic, deterministic, stochastic, mechanistic, empirical, etc. Comprehensive guidance is provided in the EPA Quality System document "Guidance for Quality Assurance Project Plans for Modeling" G-5M, http://www.epa.gov/quality/qs-docs/g5m-final.pdf. Abbreviated guidance is provided in "QAPP Requirements for Research Model Development and Application Projects".

Sampling and Analysis Project - pertains to the collection and analysis of samples with no objectives other than to provide characterization or monitoring information. Additional guidance is given in "QAPP Requirements for Sampling and Analysis Projects".

Secondary Data Project - pertains to environmental data collected from other sources, by or for EPA, that are used for purposes other than those originally intended. Sources may include: literature, industry surveys, compilations from computerized databases and information systems, and computerized or mathematical models of environmental processes. Additional guidance is given in "QAPP Requirements for Secondary Data Projects".

Software Development Project - pertains to projects dealing with software development or data management and includes all types of software/hardware systems development, data base design and maintenance, and data validation and verification systems. Additional guidance is given in "QAPP Requirements for Software and Data Management Projects" http://www.epa.gov/ORD/NRMRL/qa/pdf/softwaredev.pdf.

Projects Generating or Using GIS/Remote Sensing Data - GIS can embrace many disciplines. One may need to consider the other area-specific elements in their QA plan. Comprehensive guidance can be found in the EPA Quality System document "Guidance for Geospatial Data Quality Assurance Project Plans" QA/G5G http://www.epa.gov/quality/qa_docs.html. As a minimum requirement, the grantee must address the following elements in the QA Project Plan:

1. Positional Accuracy	the deviation of a mapped object from its true ground position.
2. Attribute Accuracy	the accuracy of the variables describing a map feature
3. Logical Consistency	the logical relations among data elements
4. Resolution Accuracy	the smallest discernible unit or object represented in the GIS
5. Completeness of:	
a. Coverage	proportion of data available for the area of interest
b. Classification	assessment of how well the chosen classification is able to represent the data
6. Time	whether the data is up-to-date enough of its intended use

7. Lineage — the history of the data set, including its sources and processing steps.

Projects that Involve Information Management (IM)

Proper management of data using computer hardware and software must be addressed. Computer hardware/software configurations shall be installed, tested, used, maintained, controlled and documented to meet the requirements of the intended use. Some QA/QC elements described below ensure that the integrity of data is maintained and that the processing and assessment activities are valid, reproducible, and defensible:

1. Data Input
2. Data Transfers
3. Software lineage
4. Hardware Environment
5. Comprehensive Testing
6. Records Archiving

Projects that Involve Surveys (Questionnaire Forms):

The following QA Considerations should be addressed in preparing survey forms: Items in the form should be

Relevant to what the project is trying to measure
Concise
Unambiguous
Single-thought oriented (only one question/item)

The data from the forms should be processed using systems that comply with the IM QA consideration (stated above).

ATTACHMENT #1
TO THE PERFORMANCE WORK STATEMENT (PWS)

QA Requirements and Definitions

EPA's Quality System Website: http://www.epa.gov/quality/

EPA's Requirements and Guidance Documents: http://www.epa.gov/quality/qa_docs.html

In accordance with EPA Order 5360.1 A2, conformance to ANSI/ASQC E4 must be demonstrated by submitting the quality documentation described herein. All quality documentation shall be submitted to the Government for review. The Government will review and return the quality documentation, with comments, and indicate approval or disapproval. If the quality documentation is not approved, it must be revised to address all comments and shall be resubmitted to the Government for approval. Work involving environmental data collection, generation, use, or reporting shall not commence until the Government has approved the quality documentation. The QAPP shall be submitted to the Government at least thirty (30) days prior to the beginning of any environmental data gathering or generation activity in order to allow sufficient time for review and revisions to be completed. After the Government has approved the quality documentation, the Contractor shall also implement it as written and approved by the Government.

Definitions:

Environmental Data - These are any measurements or information that describe environmental processes, location, or conditions; ecological or health effects and consequences; or the performance of environmental technology. For EPA, environmental data include information collected directly from measurements, produced from software and models, and compiled from other sources such as data bases or the literature.

Quality Assurance (QA) - Quality assurance is a system of management activities to ensure that a process, item, or service is of the type and quality needed by the customer. It deals with setting policy and running an administrative system of management controls that cover planning, implementation, and review of data collection activities and the use of data in decision making. Quality assurance is just one part of a quality system.

Quality Assurance Project Plan (QAPP) - A QAPP is a document that describes the necessary quality assurance, quality control, and other technical activities that must be implemented to ensure that the results of the work performed will satisfy the stated performance criteria. A QAPP documents project-specific information.

Quality Control (QC) - Quality control is a technical function that includes all the scientific precautions, such as calibrations and duplications, that are needed to acquire data of known and adequate quality.

Quality Management Plan (QMP) - A QMP is a document that describes an organization's/program's quality system in terms of the organizational structure, policy and procedures, functional responsibilities of management and staff, lines of authority, and required interfaces for those planning, implementing, documenting, and assessing all activities conducted. A QMP documents the overall organization/program, and is primarily applicable to multi-year, multi-project efforts.

Quality System - A quality system is the means by which an organization manages its quality aspects in a systematic, organized manner and provides a framework for planning, implementing, and assessing work performed by an organization and for carrying out required quality assurance and quality control activities.

R-2 - EPA Requirements for Quality Management Plans (EPA/240/B-01/002) March, 2001, http://www.epa.gov/quality/qs-docs/r2-final.pdf

R-5 - EPA Requirements for QA Project Plans (EPA/240/B-01/003) March, 2001 http://www.epa.gov/quality/qs-docs/r5-final.pdf

Substantive Change - Substantive change is any change in an activity that may alter the quality of data being used, generated, or gathered.

Quality System Specifications:

(1) a description of the organization's Quality System (QS) and information regarding how this QS is documented, communicated and implemented;

(2) an organizational chart showing the position of the QA function;

(3) delineation of the authority and responsibilities of the QA function;

(4) the background and experience of the QA personnel who will be assigned to the project; and

(5) the organization's general approach for accomplishing the QA specifications in the PWS.

Category Level Designations (determines the level of QA required):

__ **Category I Project** - applicable to studies performed to generate data used for enforcement activities, litigation, or research project involving human subjects. The QAPP shall address all elements listed in R-5.

__ **Category II Project** - applicable to studies performed to generate data used in support of the development of environmental regulations or standards. The QAPP shall address all elements listed in R-5.

__ **Category III Project** - applicable to projects involving applied research or technology evaluations. The QAPP shall address the applicable sections of R-5, as outlined in the QAPP requirements for the specific project type (see below).

__ **Category IV Project** - applicable to projects involving basic research or preliminary data gathering activities. The QAPP shall address the applicable sections of R-5, as outlined in the QAPP requirements for the specific project type (see below).

Guidance for QAPPs by Project Type (described in more detail on subsequent pages):

These outlines of QAPP Requirements for various project types are condensed from typically applicable sections of R-5 (EPA Requirements for QA Project Plans) and are intended to serve as a starting point when preparing a QAPP. These lists and their format may not fit every research scenario, and QAPPs must conform to applicable sections of R-5 in a way that fully describes the research plan and appropriate QA and QC measures to ensure that the data are of adequate quality and quantity to fit their intended purpose.

__ **Applied Research Project** - pertains to a study performed to generate data to demonstrate the performance of accepted processes or technologies under defined conditions. These studies are often pilot- or field-scale. Additional guidance is given in "QAPP Requirements for Applied Research Projects".

__ **Basic Research Project** - pertains to a study performed to generate data used to evaluate unproven theories, processes, or technologies. These studies are often bench-scale. Additional guidance is given in "QAPP Requirements for Basic Research Projects".

__ **Design, Construction, and/or Operation of Environmental Technology Project** - pertains to engineering projects involving environmental technologies, an all inclusive term used to describe pollution control devices and systems, waste treatment processes and storage facilities, and site remediation technologies and their components that may be utilized to remove pollutants or contaminants from or prevent them from entering the environment. Comprehensive guidance can be found in the EPA Quality System document "Guidance on Quality Assurance for Environmental Technology Design, Construction, and Operation" G-11, at http://www.epa.gov/quality/qs-docs/g11-final-05.pdf.

__ **Method Development Project** - pertains to situations where there is no existing standard method, or a standard method needs to be significantly modified for a specific application. Additional guidance is given in "QAPP Requirements for Method Development Projects" .

__ **Model Development Project** - includes all types of mathematical models including static, dynamic, deterministic, stochastic, mechanistic, empirical, etc. Comprehensive guidance is provided in the EPA Quality System document "Guidance for Quality Assurance Project Plans for Modeling" G-5M, http://www.epa.gov/quality/qs-docs/g5m-final.pdf. Abbreviated guidance is provided in "QAPP Requirements for Research Model Development and Application Projects".

__ **Sampling and Analysis Project** - pertains to the collection and analysis of samples with no objectives other than to provide characterization or monitoring information. Additional guidance is given in "QAPP Requirements for Sampling and Analysis Projects".

__ **Secondary Data Project** - pertains to environmental data collected from other sources, by or for EPA, that are used for purposes other than those originally intended. Sources may include: literature, industry surveys, compilations from computerized databases and information systems, and computerized or mathematical models of environmental processes. Additional guidance is given in "QAPP Requirements for Secondary Data Projects".

__ **Software Development Project** - pertains to projects dealing with software development or data management and includes all types of software/hardware systems development, data base design and maintenance, and data validation and verification systems. Additional guidance is given in "QAPP Requirements for Software and Data Management Projects".

QUALITY ASSURANCE SURVEILLANCE PLAN
STREAMS II
Task Order 0015, Battelle EP-C-11-038

TITLE: For the Technical Support for Site Characterization and Monitoring Technical Support Center

TOM: William Hagel

Performance Objective (Task)	Performance Standard (PS)	Surveillance Plan (SP)	Contractor Incentive (CI)	✓ or X
Task 1: Facilitate the use and implementation of state-of-the-science research products developed by EPA and other Federal research laboratories for regional EPA personnel to characterize and monitor hazardous constituents waste sites	Contractor provides information on innovative technologies where applicable for site specific projects	TOM will document whether quality of deliverable is at an acceptable level.	TOM will address compliance in PPE	X
Task 2: Ensure coordination and consistency in the application of contaminant characterization technologies	Contractor provides review of characterization technologies as needed and comments on use.	TOM will document whether receipt of deliverable is timely. TOM will document whether quality of deliverable is at an acceptable level.	TOM will address compliance in PPE	X
Task 3: Provide high technology state-of-the-science information, products and services to Waste Program Project Managers.	Contractor provides full and complete documentation of reviews within 90 days of request	TOM will document whether receipt of deliverable is timely. TOM will document whether quality of deliverable is at an acceptable level.	TOM will address compliance in PPE	X
Task 4: Facilitate the evaluation and application of innovative characterization and monitoring technologies and techniques at waste sites	Contractor provides full and complete evaluation and documentation of reviews.	TOM will document whether receipt of deliverable is timely. TOM will document whether quality of deliverable is at an acceptable level.	TOM will address compliance in PPE	X

Task 5: Technical support through expert review of scientific documents related to hazardous site investigations and characterization	Contractor provides expertise and full reviews of EPA provided documents.	TOM will document whether receipt of deliverable is timely. TOM will document whether quality of deliverable is at an acceptable level.	TOM will address compliance in PPE	X