

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF WEST VIRGINIA

UNITED STATES OF AMERICA,

Plaintiff,

v.

BAYER CROPSCIENCE LP,

Defendant.

Civ. No. _____

CONSENT DECREE

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Plaintiff United States of America, on behalf of the United States Environmental Protection Agency (“EPA”), has filed a complaint in this action concurrently with this Consent Decree, alleging that Defendant violated section 112(r) of the Clean Air Act, 42 U.S.C. § 7412(r), in connection with a runaway chemical reaction at its pesticide manufacturing facility located in Institute, West Virginia on August 28, 2008 that led to an explosion that killed two people.

The Complaint alleges that Defendant failed to comply with section 112(r)(7) of the Clean Air Act, 42 U.S.C. § 7412(r)(7), and with its regulations, the Chemical Accident Prevention Provisions at 40 C.F.R. part 68. The Complaint further alleges that Defendant failed to fulfill its general duty of care under section 112(r)(1) of the Clean Air Act, 42 U.S.C. § 7412(r)(1).

Defendant does not admit any liability to the United States arising out of the transactions or occurrences alleged in the Complaint.

The Parties recognize, and the Court by entering this Consent Decree finds, that this Consent Decree has been negotiated by the Parties in good faith and will avoid litigation between the Parties and that this Consent Decree is fair, reasonable, and in the public interest.

NOW, THEREFORE, before the taking of any testimony, without the adjudication or admission of any issue of fact or law except as provided in Section I, and with the consent of the Parties, IT IS HEREBY ADJUDGED, ORDERED, AND DECREED as follows:

I. JURISDICTION AND VENUE

1. This Court has jurisdiction over the subject matter of this action, pursuant to 28 U.S.C. §§ 1331, 1345, and 1355, and section 113(b) of the Clean Air Act, 42 U.S.C. § 7413(b), and over the Parties. Venue is proper in this judicial district pursuant to section 113(b) of the

Clean Air Act, 42 U.S.C. § 7413(b), and 28 U.S.C. §§ 1391(b), 1391(c) and 1395(a), because Defendant is located, and a substantial part of the events or omissions giving rise to the claim occurred, in this judicial district. For purposes of this Decree, or any action to enforce this Decree, Defendant consents to the Court's jurisdiction over this Decree and any such action and over Defendant and consents to venue in this judicial district.

2. For purposes of this Consent Decree, Defendant agrees that the Complaint states claims upon which relief may be granted pursuant to section 113(b) of the Clean Air Act, 42 U.S.C. § 7413(b).

II. APPLICABILITY

3. The obligations of this Consent Decree apply to and are binding upon the United States, and upon Defendant and any successors, assigns, or other entities or persons otherwise bound by law.

4. As of the date that BCS neither owns or operates a CAA 112(r) Process at a BCS Facility or an Enhanced FSA Facility, BCS need not comply with performance obligations under Paragraphs 11–14 with respect to that CAA 112(r) Process. No transfer of ownership or operation of any BCS Process at Institute, any BCS Facility, or any Enhanced FSA Facility, whether in compliance with the procedures of this Paragraph or otherwise, will relieve Defendant of its obligation to ensure that all other terms of the Decree, including all Supplemental Environmental Projects, are implemented. At least 30 days prior to the transfer of any BCS Process at Institute, any BCS Facility, or any Enhanced FSA Facility, Defendant shall provide written notice of the prospective transfer and a copy of the proposed written transfer agreement to the United States in accordance with Section XV of this Consent Decree (Notices). At least 30

days prior to the transfer of any BCS Process at Institute, Defendant shall also provide a copy of this Consent Decree to the proposed transferee.

5. Defendant shall provide a copy of this Consent Decree to: (i) all officers, employees, and agents whose duties might reasonably include compliance with any provision of this Decree; and (ii) any contractor retained to perform work required under this Consent Decree.

6. In any action to enforce this Consent Decree, Defendant shall not raise as a defense the failure by any of its officers, directors, employees, agents, or contractors to take any actions necessary to comply with the provisions of this Consent Decree.

III. DEFINITIONS

7. Terms used in this Consent Decree that are defined in the Act or in regulations promulgated pursuant to the Act have the meanings assigned to them in the Act or such regulations, unless otherwise provided in this Decree. Whenever the terms set forth below are used in this Consent Decree, the following definitions apply:

- a. “All” or “any” means “any and all”;
- b. “BCS” means Bayer CropScience LP;
- c. “BCS Facility” means each facility listed in Appendix A and any facilities located in the United States built or purchased by BCS after the Effective Date of this Consent Decree until the Decree is terminated pursuant to Section XIX (Termination), and subject to the jurisdiction of the Process Safety Management of Highly Hazardous Chemicals Standard (“PSM Standard”), 29 C.F.R. § 1910.119, or the Chemical Accident Prevention Provisions, 40 C.F.R. part 68;
- d. “BCS Processes at Institute” means the Larvin unit and the No. 2 Powerhouse, insofar as these processes are owned or operated by BCS, as well as any process

unit that BCS acquires or starts up at the Institute Plant after signature of this Consent Decree by BCS;

e. “CAA 112(r) Process” means any process that is regulated under Section 112(r) of the Clean Air Act, 42 U.S.C. § 7412(r);

f. “Complaint” means the complaint filed by the United States in this action;

g. “Consent Decree” or “Decree” means this Decree and all appendices attached hereto (listed in Section XXIV);

h. “Day” means a calendar day unless expressly stated to be a business day. In computing any period of time under this Consent Decree, where the last day would fall on a Saturday, Sunday, or federal holiday, the period shall run until the close of business of the next business day;

i. “Defendant” means Bayer CropScience LP;

j. “Deliverable” means a plan, report, or other item that Defendant submits to the EPA pursuant to this Decree;

k. “Digital Control System” or “DCS” means any electronic control system that records or controls data;

l. “Enhanced FSA Facilities” means each of the following facilities:

- i. The BCS Processes at Institute;
- ii. BCS’s facility at 8400 Hawthorne Road, Kansas City, Missouri;
- iii. BCS’s facility at 1740 Whitehall Road, Muskegon, Michigan;
- iv. BCS’s facility in 1500 East Delano Avenue, Littlefield, Texas;
- v. BCS’s facility in 103 Erskine Street, Lubbock, Texas; and

vi. All facilities built or purchased by BCS after the Effective Date of this Consent Decree until the Decree is terminated pursuant to Section XIX (Termination) that are required to prepare a Risk Management Plan pursuant to section 112(r) of the Clean Air Act, 42 U.S.C. § 7412(r), and its regulations at 40 C.F.R. part 68;

m. “Enhanced FSA Procedures” is defined in Paragraph 12.

n. “EPA” means the United States Environmental Protection Agency and any of its successor departments or agencies;

o. “Effective Date” is defined in Section XVI;

p. “Facilitated Self-Assessment” or “FSA” means a “compliance audit” that complies with the regulatory requirements of 40 C.F.R. § 68.79 and 29 C.F.R. § 1910.119(o);

q. “Institute Plant” means the industrial park located on approximately 400 acres along the Kanawha River and having the address West Virginia Rte. 25, Institute, WV 25112, including any portions of such property operated by other entities. To avoid any confusion, the purpose of this definition is the demarcation of real property;

r. “Month,” when computing any period of time under this Consent Decree, means the period between and including a date in the starting month (e.g., January 12) and the day before that date in the next calendar month (e.g., February 11);

s. “Paragraph” means a portion of this Decree identified by an Arabic numeral;

t. “Parties” means the United States and Defendant;

u. “Section” means a portion of this Decree identified by a Roman numeral;

v. “SEP” means a supplemental environmental project;

- w. “Stages of Operation” means any condition under which a process is operated and may include startups, normal operations, temporary operations, emergency shutdown, normal shutdowns, and startups following turnarounds or emergency shutdowns;
- x. “Standard Operating Procedures” or “SOPs” shall have the same meaning as Operating Procedures referenced in 29 CFR 1910.119(f) and 40 C.F.R. § 68.69;
- y. “State” means the State of West Virginia;
- z. “United States” means the United States of America, acting on behalf of the EPA; and
- aa. “Year,” when computing any period of time under this Consent Decree, means the period between and including a date in the starting month (e.g., January 2, 2000) and the day before that date in the next calendar year (e.g., January 1, 2001).

IV. CIVIL PENALTY

8. Within 30 Days after the Effective Date of this Consent Decree, Defendant shall pay the sum of \$975,000 as a civil penalty.

9. Defendant shall pay the civil penalty due by FedWire Electronic Funds Transfer (“EFT”) to the U.S. Department of Justice in accordance with written instructions to be provided to Defendant, following entry of the Consent Decree, by the Financial Litigation Unit of the U.S. Attorney’s Office for the Southern District of West Virginia. At the time of payment, Defendant shall send a copy of the EFT authorization form and the EFT transaction record, together with a transmittal letter that states that the payment is for the civil penalty owed pursuant to the Consent Decree in *United States v. Bayer CropScience LP* and references the civil action number and DOJ case number 90-5-2-1-10802, to the United States in accordance with Section XV of this Decree (Notices); by email to acctsreceivable.CINWD@epa.gov; and by first class mail to:

EPA Cincinnati Finance Office
26 Martin Luther King Drive
Cincinnati, Ohio 45268

10. Defendant shall not deduct any penalties paid under this Decree pursuant to this Section or Section IX (Stipulated Penalties) in calculating its federal income tax.

V. COMPLIANCE REQUIREMENTS

11. Standard Operating Procedures. Within three years from the Effective Date of this Consent Decree, Defendant shall ensure that the Standard Operating Procedures (“SOPs”), including without limitation those required under 40 C.F.R. § 68.52, for each of the BCS Facilities are consistent in format, and to the extent processes at different BCS Facilities are similar, consistent in content as set forth in Appendix A and according to the schedule set forth in Appendix A. On the first anniversary of the Effective Date of this Consent Decree, and annually thereafter, Defendant shall submit annual reports to the EPA detailing the status of its compliance with the schedule set forth in Appendix A (“SOP Status Reports”). The requirements of this Paragraph shall terminate on the sixth anniversary of the Effective Date of the Consent Decree.

12. Enhanced Facilitated Self-Assessment Procedures. On or before six months from the Effective Date of this Consent Decree, Defendant shall submit to the EPA for review and approval in accordance with Section VI, written procedures for conducting enhanced facilitated self-assessments (“Enhanced FSA Procedures”). The Enhanced FSA Procedures shall meet all regulatory requirements for compliance audits under 29 C.F.R. § 1910.119(o) and 40 C.F.R. § 68.79, shall be consistent with relevant industry standards, and shall also include, at a minimum, the following measures:

- a. A definition of “representative” for each procedure below;

- b. Procedures for interviewing a representative sample of operators of the relevant processes to ensure:
 - i. that written, approved SOPs are in place for normal and abnormal operations; such SOPs may include other BCS-approved documents including without limitation checklists, operating logs, and other work instructions (i.e., more detailed written instructions pertaining to a portion of an operating procedure);
 - ii. that ad hoc documents other than written, approved SOPs are not used; and
 - iii. that operators understand the importance of implementing the SOPs and fully adhere to those SOPs, with particular attention to SOPs for sampling and bypasses;
- c. Procedures for conducting field observations of process control rooms to ensure that unapproved or ad hoc materials are not used;
- d. Procedures for conducting spot-checks of a representative set of sampling results to ensure timely adherence to sampling protocols in the SOPs;
- e. Procedures for reviewing a representative set of bypasses of safety and operational interlocks reflected in operating logs and/or records in a DCS, including:
 - i. the reasons for such bypasses;
 - ii. whether implementing bypasses complied with SOPs;
 - iii. whether approvals required by such SOPs or management of change (“MOC”) were obtained prior to implementing the bypasses; and
 - iv. the potential risk posed by the bypasses and

v. whether recommendations for better design or corrective action for non-compliance should be taken to prevent such bypasses;

f. Procedures for designing reports from the DCS that will test compliance with SOPs identified as safety-critical by BCS;

g. Procedures for spot-checking the data stored by the DCS to evaluate adherence to safety-critical steps identified in SOPs at all Stages of Operation that existed since the last FSA or Enhanced FSA;

h. Procedures for conducting field observations based on representative sampling to determine:

i. if the safety-related features described in the SOPs—including, without limitation trips, interlocks, alarms, secondary containment, relief devices, lower explosive limit or toxic gas detectors, fire protection system, explosion vent panels, explosion suppression systems, flame arresters, emergency isolation valves, ventilation systems, and uninterruptable power supplies—are installed and operational;

ii. if the process is operating within the operating limits specified in the SOPs; and

iii. that the operating limits are within the equipment design limits specified in the process safety information (*i.e.*, observe process parameters on the DCS screen or in historical trends and verify that the readings are within the operating limits specified in the SOPs).

13. Enhanced Facilitated Self-Assessments. Commencing on the date that Defendant receives written notification that the EPA has approved BCS's Enhanced FSA Procedures and continuing until this Consent Decree is terminated pursuant to Section XIX (Termination),

Defendant shall conduct all facilitated self-assessments at the Enhanced FSA Facilities in accordance with regulatory requirements for compliance audits under 29 C.F.R. § 1910.119(o) and 40 C.F.R. § 68.79 and the EPA-approved Enhanced FSA Procedures. By the first anniversary of the date EPA approves the Enhanced FSA Procedures, and continuing until this Consent Decree is terminated pursuant to Section XIX (Termination), Defendant shall implement the Enhanced FSA Procedures at all of the Enhanced FSA Facilities (“Enhanced FSA Certifications”). Defendant shall certify its implementation of the Enhanced FSA Procedures in the next report due pursuant to Paragraph 35 and annually thereafter until this Consent Decree is terminated pursuant to Section XIX (Termination).

14. RMP Procedures at the BCS Processes at Institute. Commencing on the Effective Date of this Consent Decree and continuing until this Consent Decree is terminated pursuant to Section XIX (Termination) or a particular BCS Process at Institute is no longer owned or operated by BCS, BCS shall perform and document the following tasks with respect to the BCS Processes at Institute regardless of whether Defendant is required to prepare and implement a risk management plan under 40 C.F.R. part 68 or a PSM program under 29 C.F.R. § 1910.119:

a. Perform process hazard analyses or revalidations of process hazard analyses, in accordance with regulatory requirements set forth in 40 C.F.R. § 68.67 and 29 C.F.R. § 1910.119(e);

b. Develop SOPs, annually certify SOPs, train employees to implement SOPs and provide refresher training in SOPs, in accordance with regulatory requirements set forth in 40 C.F.R. §§ 68.69 and 68.71 and 29 C.F.R. § 1910.119(f) and (g); and

c. Implement management of change and pre-startup safety review programs and procedures in accordance with regulatory requirements set forth in 40 C.F.R. §§ 68.75 and 68.77 and 29 C.F.R. § 1910.119(i) and (l).

15. Emergency Response Exercise. No later than 180 days after the Effective Date of this Consent Decree, Defendant shall design and conduct an emergency response exercise simulating the release of an extremely hazardous substance into the air, in order to evaluate the performance of Defendant in implementing its emergency response plan in conjunction with local and state emergency responders. The exercise must consist of a realistic emergency release scenario in which all local and state emergency response organizations identified in Appendix P are invited and given a reasonable opportunity to participate. Within 120 days following the completion of the exercise or 30 days of the Effective Date, whichever is later, Defendant shall: (i) submit to the EPA, to BCS facilities other than the Institute Plant, and to the owner of the Institute Plant a written report detailing the findings and recommendations of the exercise (the “Emergency Response Exercise Report”); (ii) enter any findings or and recommendations applicable to the BCS Processes at the Institute Plant in the Bayer Action Tracking System for the BCS Processes at the Institute Plant; and (iii) request a meeting with the owner of the Institute Plant to review the findings and recommendation. Within one year of the exercise or 30 days of the Effective Date, whichever is later, Defendant shall deliver a presentation on the findings and recommendations of the exercise at its semi-annual conference on quality, safety, health, and environment. For two years following completion of the exercise, Defendant shall include in each semi-annual report prepared pursuant to Paragraph 35 the status of any findings and recommendations entered into the Bayer Action Tracking System and a description of any changes known to BCS to address the findings and recommendations.

16. Certifications. Defendant shall maintain registrations under the RC 14001 (Responsible Care) or equivalent (*i.e.*, ISO 14001) and OHSAS 18001 (Occupational Health and Safety Management) management systems with respect to all environmental aspects of activities, products, and services at the Institute Plant that are owned or operated by Defendant at least until this Consent Decree is terminated. If Defendant obtains new or renewed certifications of those registrations, Defendant shall submit copies of the certifications in the next report due pursuant to Paragraph 35.

17. Other than as provided in Paragraph 4, nothing in this Section shall require BCS to impose any requirements or prohibitions upon any other tenant of the Institute Plant, or upon the operator of any process or equipment other than the BCS Processes at Institute.

VI. REVIEW OF DELIVERABLES

18. After reviewing any Deliverable, the EPA shall respond in writing and:

- a. approve the Deliverable;
- b. approve the Deliverable upon specified conditions;
- c. approve part of the Deliverable that the EPA determines is technically severable and disapprove the remainder; or
- d. disapprove the Deliverable.

19. If the EPA approves a Deliverable pursuant to Paragraph 18.a, Defendant shall take all actions required by the Deliverable in accordance with its approved terms.

20. If the EPA conditionally approves a Deliverable or approves a Deliverable only in part pursuant to Paragraph 18.b or .c, Defendant shall, upon written direction from the EPA, take all actions required by the approved Deliverable or portions of the Deliverable, subject to

Defendant's right to dispute only the conditions or the decision to disapprove portions, under Section XI of this Decree (Dispute Resolution).

21. Resubmission of Deliverables.

a. If the EPA disapproves a Deliverable in whole or in part pursuant to Paragraph 18.c or .d, Defendant shall, within 45 Days or such other time period to which the Parties agree in writing, correct all deficiencies and resubmit the Deliverable, or disapproved portion thereof, for approval in accordance with Paragraphs 18–20 of this Section. If the EPA approves a resubmitted Deliverable in whole or in part, Defendant shall proceed in accordance with the preceding Paragraph.

b. Any stipulated penalties applicable to the original Deliverable, as provided in Section IX of this Decree, will accrue during the 45-Day period specified in the preceding subparagraph, but will not be payable unless: (i) Defendant fails to resubmit the Deliverable within the 45-Day time period; (ii) the EPA disapproves the resubmitted Deliverable in whole or in part; or (iii) the original Deliverable was so deficient as to constitute a material breach of Defendant's obligations under this Decree.

c. If the EPA disapproves a resubmitted Deliverable or portion thereof in whole or in part, the EPA may again require Defendant to correct any deficiencies, in accordance with the preceding Paragraphs, or may itself correct any deficiencies, subject to Defendant's right to invoke Dispute Resolution and the right of the EPA to seek stipulated penalties as provided in the preceding Paragraphs.

22. Permits. Where any compliance obligation under this Consent Decree requires Defendant to obtain a federal, state, or local permit or approval, Defendant shall submit timely and complete applications and take all other actions necessary under the applicable regulatory

process to obtain all such permits or approvals. If Defendant has submitted timely and substantially complete applications and has taken all other actions necessary under the applicable regulatory process to obtain all such permits or approvals, Defendant may seek relief under the provisions of Section X of this Consent Decree (Force Majeure) for any delay in the performance of any such obligation resulting from a failure to obtain, or a delay in obtaining, any permit or approval required to fulfill such obligation.

VII. SUPPLEMENTAL ENVIRONMENTAL PROJECTS

23. Defendant shall implement the following Supplemental Environmental Projects (“SEPs”), as more fully described in Appendices B through O, in accordance with all provisions of Appendices B through O of this Consent Decree, including the schedules set forth therein.

a. The West Sump Expansion SEP (Appendix B) will provide additional storage capacity to prevent untreated process wastewater from overflowing into the Kanawha River during heavy rain events, fire-fighting emergencies, and process upsets.

b. The Mobile Communications SEP (Appendix C) will improve emergency communications within Kanawha County, West Virginia and Kansas City, Missouri, and ensure that emergency communications mobile applications are marketed to, and targeted for, vulnerable populations to increase awareness of the mass notification system.

c. The Police Equipment SEP (Appendix D) will improve the ability of: (i) the Nitro City Police Department to respond to emergencies with improved communications and traffic control equipment, and (ii) the St. Albans Police Department to respond to emergencies with improved communications equipment.

d. The School Cleanout and Equipment SEP (Appendix E) will survey the nature and extent of chemicals, including extremely hazardous substances, present in designated

high schools; remove hazardous chemicals; properly dispose of the chemicals in accordance with applicable federal, state and local solid and hazardous waste regulations; and improve the safe management of chemicals remaining on school grounds with appropriate equipment

e. The Emergency Equipment SEPs (Appendices F through M) will enhance the ability and capacity of emergency responders to address releases and respond to chemical emergencies in Kanawha County by providing emergency equipment to the Charleston Fire Department, the Dunbar Fire Department, the Institute Volunteer Fire Department, the Jefferson Volunteer Fire Department, the Nitro Fire Department, the St. Albans Fire Department, the South Charleston Fire Department, and the Tyler Mountain Fire Department.

f. The Emergency Responders Training SEP (Appendix N) will improve the capability of emergency responders to address chemical emergencies at industrial facilities in the Kanawha County area by providing industrial firefighting training to emergency responders meeting designated criteria.

g. The Shelter-in-Place Training SEP (Appendix O) will improve the ability of local schools to protect students in the event of chemical releases or other emergencies by providing shelter-in-place training at certain schools.

24. Defendant is responsible for the satisfactory completion of the SEPs in accordance with the requirements of this Decree. For a SEP, the term “satisfactory completion” means documented expenditures amounting to at least ninety percent (90%) of the estimated costs of the SEP and achievement of the purpose of the SEP, as described in the relevant Appendices. Defendant may employ or work with contractors, consultants and other entities in planning and implementing the SEPs, but Defendant shall be liable for satisfactory completion of the SEPs.

25. With regard to each SEP, Defendant, by signing this Consent Decree before it is lodged with the Court, certifies the truth and accuracy of each of the following:

a. That, to the best knowledge of Defendant, all estimated cost information provided to the EPA in connection with the EPA's approval of the SEP is complete and accurate, and that Defendant in good faith estimates that the collective cost to implement these SEPs is \$4,230,813, consisting of the following:

- i. West Sump Expansion SEP: \$3,100,000;
- ii. Mobile Communications SEP: \$195,000;
- iii. Police Equipment SEP: total of \$46,570, for the following

recipients, in the following amounts:

- (1) Nitro City Police Department: \$32,170;
- (2) St. Albans Police Department: \$14,400;
- iv. School Cleanout and Equipment SEP: \$161,795;
- v. Emergency Equipment SEPs: total of \$366,534, for the following

recipients, in the following amounts:

- (1) Charleston Fire Department: \$13,715;
- (2) Dunbar Fire Department: \$16,580;
- (3) Institute Volunteer Fire Department: \$66,818;
- (4) Jefferson Volunteer Fire Department: \$13,025;
- (5) Nitro Fire Department: \$46,600;
- (6) St. Albans Fire Department: \$100,003;
- (7) South Charleston Fire Department: \$99,793; and
- (8) Tyler Mountain Fire Department: \$10,000;

- vi. Emergency Responders Training SEP: \$253,120;
- vii. Shelter-in-Place Training SEP: \$107,800.

b. that, as of the date of signing this Decree, Defendant is not required to perform or develop the SEP by any federal, state, or local law or regulation and is not required to perform or develop the SEP by agreement, grant, or as injunctive relief awarded in any other action in any forum;

c. that the SEP is not a project that Defendant was planning or intending to construct, perform, or implement other than in settlement of the claims resolved in this Decree;

d. that Defendant has not received and will not receive credit for the SEP in any other enforcement action;

e. that Defendant will not receive any reimbursement for any portion of the SEP from any other person; and

f. that the recipient of each SEP does not have an open federal financial assistance transaction with the EPA or any other federal agency that is funding or could fund the same activity as the SEP.

26. If Defendant discovers at any time after it has signed this Decree that any of the information described in Paragraph 25 is inaccurate, Defendant shall notify the United States in writing within seven Days of the Day when it becomes aware of the inaccuracy in accordance with Section XV (Notices).

27. SEP Completion Reports. For each SEP, Defendant shall submit a SEP Completion Report to the United States in accordance with Section XV of this Consent Decree (Notices). Defendant shall include any SEP Completion Reports in the next report due pursuant

to Paragraph 35 after the date set for completion of the SEP. The SEP Completion Report must contain the following information:

- a. a detailed description of the SEP as implemented;
- b. documentary evidence that the SEP has been completed, including but not limited to, photographs, vendor receipts or invoices, or correspondence with SEP recipients;
- c. a description of any problems encountered in completing the SEP and the solutions thereto;
- d. an itemized list of all eligible SEP costs expended;
- e. certification that the SEP has been fully implemented pursuant to the provisions of this Decree; and
- f. a description of the environmental and public health benefits resulting from implementation of the SEP (with a quantification of the benefits and pollutant reductions, if feasible).

28. The EPA may request Defendant to provide information in addition to that described in the preceding Paragraph, in order to evaluate each SEP Completion Report.

29. After receiving each SEP Completion Report, the EPA shall notify Defendant whether Defendant has satisfactorily completed the SEP.

30. Defendant may invoke Dispute Resolution under Section XI of this Decree regarding the EPA's determination of (i) whether Defendant has satisfactorily performed the SEP; and (ii) the amount of eligible SEP costs. No other disputes arising under this Section are subject to Dispute Resolution.

31. Defendant shall ensure that each Deliverable that Defendant must submit under this Section is signed by an official with knowledge of the SEP and by an official of Defendant in accordance the certification language set forth in Paragraph 37.

32. If Defendant makes any public statement making reference to any SEP under this Decree, Defendant shall include the following language, in any oral statement: “This project was undertaken in connection with the settlement of a federal judicial Clean Air Act enforcement action,” and in any written statement, in 12-point type: “This project was undertaken in connection with the settlement of an enforcement action, *United States v. Bayer CropScience LP*, taken on behalf of the U.S. Environmental Protection Agency to enforce the federal Clean Air Act.”

33. For federal income tax purposes, Defendant shall not capitalize or deduct any costs or expenditures incurred in performing any SEP.

34. Defendant shall not accept any payment of any kind from any other person towards the costs of performing any SEP.

VIII. REPORTING REQUIREMENTS

35. On or before January 30 and July 30 of each calendar year after lodging of this Consent Decree, until termination of this Decree pursuant to Section XIX, Defendant shall submit a report for the previous six-month period that addresses, at a minimum: (i) the status of updating SOPs pursuant to Paragraph 11; (ii) the performance of Enhanced FSA Procedures pursuant to Paragraph 13; (iii) the performance of RMP Procedures pursuant to Paragraph 14, including the identity of the BCS Processes at Institute for which RMP and PSM procedures were followed; (iv) the status of any findings, recommendations, or and changes applicable to the Institute Plant as described in Paragraph 15; (v) the maintenance and renewal of certifications

pursuant to Paragraph 16; and (vi) the completion of SEPs, if any. Each report shall include, in addition to the information required by other Paragraphs of this Consent Decree for specific reports:

- a. the status of any construction or compliance measures;
- b. the completion of milestones;
- c. problems encountered or anticipated, together with implemented or proposed solutions;
- d. the status of permit applications;
- e. the status of operation and maintenance;
- f. a copy of reports to state agencies; and
- g. a discussion of Defendant's progress in satisfying its obligations in

connection with the SEPs under Section VII of this Decree including, at a minimum:

- i. a narrative description of activities undertaken;
- ii. status of any construction or compliance measures; including the completion of any milestones in schedules set forth in Appendices B through O;
- iii. a summary of costs incurred since the previous report; and
- iv. problems encountered or anticipated, together with implemented or

proposed solutions.

36. Defendant shall submit all reports to the persons designated in Section XV of this Consent Decree (Notices).

37. Defendant shall ensure that each report submitted under this Section, including any SEP completion report, is signed by an official of Defendant and includes the following certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

This certification requirement does not apply to emergency or similar notifications where compliance would be impractical.

38. The reporting requirements of this Consent Decree do not relieve Defendant of any reporting obligations required by the Clean Air Act or implementing regulations, or by any other federal, state, or local law, regulation, permit, or other requirement.

39. Any information provided pursuant to this Consent Decree may be used by the United States in any proceeding to enforce the provisions of this Consent Decree and as otherwise permitted by law.

IX. STIPULATED PENALTIES

40. Defendant shall be liable for stipulated penalties to the United States for violations of this Consent Decree as specified below, unless excused under Section X (Force Majeure). A violation includes failing to perform any obligation required by the terms of this Decree, including any schedule approved under this Decree, according to all applicable requirements of this Decree and within the specified time schedules established by or approved under this Decree.

41. Late Payment of Civil Penalty. If Defendant fails to pay the civil penalty required to be paid under Section IV of this Decree (Civil Penalty) when due, Defendant shall pay a stipulated penalty of \$1,500 per Day for each Day that the payment is late.

42. Compliance Milestones. The following stipulated penalties will accrue per violation per Day for each violation of the requirements identified in Section V:

<u>Period of Noncompliance</u>	<u>Penalty per Day per Violation</u>
1 st through 14 th Days	\$500
15 th through 30 th Days	\$750
31 st Day and beyond	\$2,000

43. Reporting Requirements. The following stipulated penalties will accrue per violation per Day for each violation of the reporting requirements of Section VIII of this Consent Decree:

<u>Period of Noncompliance</u>	<u>Penalty per Day per Violation</u>
1 st through 14 th Days	\$500
15 th through 30 th Days	\$750
31 st Day and beyond	\$1,500

44. SEP Compliance. If Defendant fails to satisfactorily complete a SEP by the deadline set forth in its applicable Appendix, Defendant shall pay stipulated penalties for each day for which it fails to satisfactorily complete the SEP, as follows:

<u>Period of Noncompliance</u>	<u>Penalty per Day per Violation</u>
1 st through 14 th Days	\$500
15 th through 30 th Days	\$750
31 st Day and beyond	\$2,000

45. Except as provided in Paragraph 44, above, stipulated penalties under this Section begin to accrue on the Day after performance is due or on the Day a violation occurs, whichever is applicable, and continue to accrue until performance is satisfactorily completed or until the violation ceases. Stipulated penalties will accrue simultaneously for separate violations of this Consent Decree.

46. Defendant shall pay any stipulated penalty within 30 Days of receiving the United States' written demand, subject to the Dispute Resolution provisions of this Consent Decree.

47. The United States may in the unreviewable exercise of its discretion, reduce or waive stipulated penalties otherwise due under this Consent Decree.

48. Stipulated penalties continue to accrue as provided in Paragraph 45, during any Dispute Resolution, but need not be paid until the following:

a. If the dispute is resolved by agreement, or by a decision of the United States that is not appealed to the Court, Defendant shall pay accrued penalties determined to be owing, together with interest, to the United States within 30 Days of the effective date of the agreement or the receipt of United States' decision or order.

b. If the dispute is appealed to the Court and the United States prevails in whole or in part, Defendant shall pay all accrued penalties that the Court determines that Defendant owes, together with interest, within 60 Days of receiving the Court's decision or order, except as provided in subparagraph c, below.

c. If either Party appeals the District Court's decision, Defendant shall pay all accrued penalties that the court determines that Defendant owes, together with interest, within 15 Days of receiving the final appellate court decision.

49. Defendant shall pay stipulated penalties owing to the United States in the manner set forth and with the confirmation notices required by Paragraph 9, except that the transmittal letter must state that the payment is for stipulated penalties and must state for which violation(s) the penalties are being paid.

50. If Defendant fails to pay stipulated penalties according to the terms of this Consent Decree, Defendant shall be liable for interest on such penalties, as provided for in 28 U.S.C. § 1961, accruing as of the date payment became due. Nothing in this Paragraph will be

construed to limit the United States from seeking any remedy otherwise provided by law for Defendant's failure to pay any stipulated penalties.

51. Subject to the provisions of Section XIII of this Consent Decree (Effect of Settlement/Reservation of Rights), the stipulated penalties provided for in this Consent Decree are in addition to any other rights, remedies, or sanctions available to the United States for Defendant's violation of this Consent Decree or applicable law. Where a violation of this Consent Decree is also a violation of section 112(r) of the Clean Air Act, or its implementing regulations, Defendant will be allowed a credit, for any stipulated penalties paid, against any statutory penalties imposed for such violation.

X. FORCE MAJEURE

52. "Force majeure," for purposes of this Consent Decree, means any event arising from causes beyond the control of Defendant, of any entity controlled by Defendant, or of Defendant's contractors, that delays or prevents the performance of any obligation under this Consent Decree despite Defendant's best efforts to fulfill the obligation. The requirement that Defendant exercise "best efforts to fulfill the obligation" includes using best efforts to anticipate any potential force majeure event and best efforts to address the effects of any such event (a) as it is occurring and (b) after it has occurred to prevent or minimize any resulting delay to the greatest extent possible. "Force Majeure" does not include Defendant's financial inability to perform any obligation under this Consent Decree.

53. If any event occurs or has occurred that may delay the performance of any obligation under this Consent Decree, whether or not caused by a force majeure event, Defendant shall provide notice orally or by electronic or facsimile transmission to the EPA within 72 hours of when Defendant first reasonably believed that the event might cause a delay. Within seven

days thereafter, Defendant shall, provide in writing to the EPA an explanation and description of the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay; Defendant's rationale for attributing such delay to a force majeure event if it intends to assert such a claim; and a statement as to whether, in the opinion of Defendant, such event may cause or contribute to an endangerment to public health, welfare or the environment. Defendant shall include with any notice all available documentation supporting the claim that the delay was attributable to a force majeure. Failure to comply with the above requirements will preclude Defendant from asserting any claim of force majeure for that event for the period of time of such failure to comply, and for any additional delay caused by such failure. Defendant shall be deemed to know of any circumstance of which Defendant, any entity controlled by Defendant, or Defendant's contractors knew or should have known.

54. If the EPA agrees that the delay or anticipated delay is attributable to a force majeure event, the time for performance of the obligations under this Consent Decree that are affected by the force majeure event will be extended by the EPA for such time as is necessary to complete those obligations. An extension of the time for performance of the obligations affected by the force majeure event will not, by itself, extend the time for performance of any other obligation. The EPA will notify Defendant in writing of the length of the extension, if any, for performance of the obligations affected by the force majeure event.

55. If the EPA does not agree that the delay or anticipated delay has been or will be caused by a force majeure event, the EPA will notify Defendant in writing of its decision.

56. If Defendant elects to invoke the Dispute Resolution procedures set forth in Section XI (Dispute Resolution), it shall do so no later than 30 days after receipt of the EPA's notice. In any such proceeding, Defendant shall have the burden of demonstrating by a preponderance of the evidence that the delay or anticipated delay has been or will be caused by a force majeure event, that the duration of the delay or the extension sought was or will be warranted under the circumstances, that best efforts were exercised to avoid and mitigate the effects of the delay, and that Defendant complied with the requirements of Paragraphs 52 and 53, above. If Defendant carries this burden, the delay at issue will be deemed not to be a violation by Defendant of the affected obligation of this Consent Decree identified to the EPA and the Court.

XI. DISPUTE RESOLUTION

57. Unless otherwise expressly provided for in this Consent Decree, the dispute resolution procedures of this Section are the exclusive mechanism to resolve disputes arising under or with respect to this Consent Decree. Defendant's failure to seek resolution of a dispute under this Section will preclude Defendant from raising any such issue as a defense to an action by the United States to enforce any obligation of Defendant arising under this Decree. This Section does not affect Defendant's ability to defend against other enforcement actions based on facts and circumstances not specifically alleged in the Complaint, pursuant to the Clean Air Act or OSHA's PSM Standard.

58. Informal Dispute Resolution. Any dispute subject to Dispute Resolution under this Consent Decree must first be the subject of informal negotiations. The dispute will be considered to have arisen when Defendant sends the United States a written Notice of Dispute. Such Notice of Dispute must state clearly the matter in dispute. The period of informal negotiations may not exceed 20 Days from the date the dispute arises, unless that period is modified by

written agreement. If the Parties cannot resolve a dispute by informal negotiations, then the position advanced by the United States shall be considered binding unless, within 30 Days after the conclusion of the informal negotiation period, Defendant invokes formal dispute resolution procedures as set forth below.

59. Formal Dispute Resolution. Defendant shall invoke formal dispute resolution procedures, within the time period provided in the preceding Paragraph, by serving on the United States a written Statement of Position regarding the matter in dispute. The Statement of Position must include, but need not be limited to, any factual data, analysis, or opinion supporting Defendant's position and any supporting documentation relied upon by Defendant.

60. The United States shall serve its Statement of Position within 45 Days of receipt of Defendant's Statement of Position. The United States' Statement of Position must include, but need not be limited to, any factual data, analysis, or opinion supporting that position and any supporting documentation relied upon by the United States. The United States' Statement of Position will be binding on Defendant, unless Defendant files a motion for judicial review of the dispute in accordance with the following Paragraph.

61. Defendant may seek judicial review of the dispute by filing with the Court and serving on the United States, in accordance with Section XV of this Consent Decree (Notices), a motion requesting judicial resolution of the dispute. The motion must be filed within 30 Days of receipt of the United States' Statement of Position pursuant to the preceding Paragraph. The motion must contain a written statement of Defendant's position on the matter in dispute, including any supporting factual data, analysis, opinion, or documentation, and must set forth the relief requested and any schedule within which the dispute must be resolved for orderly implementation of the Consent Decree.

62. The United States shall respond to Defendant's motion within the time period allowed by the Local Rules of this Court. Defendant may file a reply memorandum, to the extent permitted by the Local Rules.

63. Standard of Review. Except as otherwise provided in this Consent Decree, in any dispute brought under Paragraph 59, Defendant shall bear the burden of proof, and each Party reserves the right to argue what the appropriate standard of proof and standard of review should be under the applicable principles of law.

64. The invocation of Dispute Resolution procedures under this Section will not, by itself, extend, postpone, or affect in any way any obligation of Defendant under this Consent Decree, unless and until final resolution of the dispute so provides. Stipulated penalties with respect to the disputed matter continue to accrue from the first Day of noncompliance, but payment will be stayed pending resolution of the dispute as provided in Paragraph 48. If Defendant does not prevail on the disputed issue, stipulated penalties will be assessed and paid as provided in Section IX (Stipulated Penalties).

XII. INFORMATION COLLECTION AND RETENTION

65. The United States and its representatives, including attorneys, contractors, and consultants, are entitled to enter into any facility covered by this Consent Decree, at all reasonable times, upon presentation of credentials to:

- a. monitor the progress of activities required under this Consent Decree;
- b. verify any data or information submitted to the United States in accordance with the terms of this Consent Decree;
- c. obtain samples and, upon request, splits of any samples taken by Defendant or its representatives, contractors, or consultants;

- d. obtain documentary evidence, including photographs and similar data; and
- e. assess Defendant's compliance with this Consent Decree.

66. Upon request, Defendant shall provide the EPA or its authorized representatives splits of any samples taken by Defendant. Upon request, the EPA shall provide Defendant splits of any samples taken by the EPA.

67. Until five years after the termination of this Consent Decree, Defendant shall retain, and shall instruct its contractors and agents to preserve, all non-identical copies of all documents, records, or other information (including documents, records, or other information in electronic form) in its or its contractors' or agents' possession or control, or that come into its or its contractors' or agents' possession or control, and that relate in any manner to Defendant's performance of its obligations under this Consent Decree, including without limitation any documents, records, or other information used to prepare any reports required by this Consent Decree. This information-retention requirement applies regardless of any contrary corporate or institutional policies or procedures. At any time during this information-retention period, upon request by the United States, Defendant shall provide copies of any documents, records, or other information required to be maintained under this Paragraph.

68. At the conclusion of the information-retention period provided in the preceding Paragraph, Defendant shall notify the United States at least 60 Days prior to the destruction of any documents, records, or other information subject to the requirements of the preceding Paragraph and, upon request by the United States, Defendant shall deliver any such documents, records, or other information to the EPA. Defendant may assert that certain documents, records, or other information requested pursuant to Paragraphs 67 or 68 is privileged under the attorney-client privilege or any other privilege recognized by federal law. If Defendant asserts such a

privilege, it shall provide the following: (1) the title of the document, record, or information; (2) the date of the document, record, or information; (3) the name and title of each author of the document, record, or information; (4) the name and title of each addressee and recipient; (5) a description of the subject of the document, record, or information; and (6) the privilege asserted by Defendant. However, Defendant shall not withhold, on grounds of privilege, any documents, records, or other information created or generated pursuant to the requirements of this Consent Decree.

69. Defendant may also assert that information required to be provided under this Section is protected as Confidential Business Information (“CBI”) under 40 C.F.R. part 2. As to any information that Defendant seeks to protect as CBI, Defendant shall follow the procedures set forth in 40 C.F.R. part 2.

70. This Consent Decree in no way limits or affects any right of entry and inspection, or any right to obtain information, held by the United States pursuant to applicable federal laws, regulations, or permits, nor does it limit or affect any duty or obligation of Defendant to maintain documents, records, or other information imposed by applicable federal or state laws, regulations, or permits.

XIII. EFFECT OF SETTLEMENT/RESERVATION OF RIGHTS

71. This Consent Decree resolves the civil claims of the United States for the violations alleged in the Complaint filed in this action through the date of lodging this Decree.

72. The United States reserves all legal and equitable remedies available to enforce the provisions of this Consent Decree, except as expressly stated in Paragraph 71. This Consent Decree does not limit the rights of the United States to obtain penalties or injunctive relief under the Act or implementing regulations, or under other federal laws, regulations, or permit

conditions, except as expressly specified in Paragraph 71. The United States further reserves all legal and equitable remedies to address any imminent and substantial endangerment to the public health or welfare or the environment arising at, or posed by, any BCS Facility, whether related to the violations addressed in this Consent Decree or otherwise.

73. In any subsequent administrative or judicial proceeding initiated by the United States for injunctive relief, civil penalties, other appropriate relief relating to any BCS Facility or Defendant's violations, Defendant shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim preclusion, claim-splitting, or other defenses based upon any contention that the claims raised by the United States in the subsequent proceeding were or should have been brought in the instant case, except with respect to claims that have been specifically resolved pursuant to Paragraph 71 of this Section.

74. This Consent Decree is not a permit, or a modification of any permit, under any federal, State, or local laws or regulations. Defendant is responsible for achieving and maintaining complete compliance with all applicable federal, State, and local laws, regulations, and permits; and Defendant's compliance with this Consent Decree is not a defense to any action commenced pursuant to any such laws, regulations, or permits, except as set forth herein. The United States does not, by its consent to the entry of this Consent Decree, warrant or aver in any manner that Defendant's compliance with any aspect of this Consent Decree will result in compliance with provisions of the Clean Air Act, 42 U.S.C. §§ 7401–7671q, or with any other provisions of federal, State, or local laws, regulations, or permits.

75. This Consent Decree does not limit or affect the rights of Defendant or of the United States against any third parties, not party to this Consent Decree, nor does it limit the

rights of third parties, not party to this Consent Decree, against Defendant, except as otherwise provided by law.

76. This Consent Decree does not create rights in, or grant any cause of action to, any third party not party to this Consent Decree.

XIV. COSTS

77. The Parties shall bear their own costs of this action, including attorneys' fees, except that the United States, upon application to the court, is entitled to collect the costs (including attorneys' fees) incurred in any action necessary to collect any portion of the civil penalty or any stipulated penalties due but not paid by Defendant. The attorneys' fees recoverable under this Paragraph do not include costs incurred during dispute resolution under Section XI.

XV. NOTICES

78. Unless otherwise specified in this Consent Decree, whenever notifications, submissions, or communications are required by this Consent Decree, they must be made in writing and addressed as follows:

To the United States:

Chief, Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
P.O. Box 7611, Ben Franklin Station
Washington, D.C. 20044-7611
Re: DOJ No. 90-5-2-1-10802

To the EPA:

Associate Director
Office of Enforcement
Hazardous Sites Cleanup Division
U.S. EPA Region 3 (3HS61)
1650 Arch Street
Philadelphia, PA 19103-2029

And

Cynthia T. Weiss, Esq.
Office of Regional Counsel
U.S. EPA Region 3 (3RC42)
1650 Arch Street
Philadelphia, PA 19103-2029

To Defendant:

Linda Feuss
General Counsel
Bayer CropScience LP
2 TW Alexander Drive
Research Triangle Park, NC

and

Chintan K. Amin
Sr. Counsel
Bayer Corporation
100 Bayer Road
Pittsburgh, PA 15241

79. Notifications of Delay. Whenever notifications to the EPA are required pursuant to Paragraph 53 of this Consent Decree, such notifications or communications are required by this Consent Decree, they must be made in writing and addressed as follows:

Joan Armstrong
Associate Director
Office of Enforcement
Hazardous Site Cleanup Division
U.S. EPA Region 3 (3HS61)
1650 Arch Street
Philadelphia, PA 19103-2029
Email: armstrong.joan@epa.gov

215-814-3155

80. Any Party may, by written notice to the other Parties, change its designated notice recipient or notice address provided above.

81. Notices submitted pursuant to this Section will be deemed submitted upon mailing, unless otherwise provided in this Consent Decree or by mutual agreement of the Parties in writing.

XVI. EFFECTIVE DATE

82. The Effective Date of this Consent Decree is the date upon which this Consent Decree is entered by the Court or a motion to enter the Consent Decree is granted, whichever occurs first, as recorded on the Court's docket.

XVII. RETENTION OF JURISDICTION

83. The Court retains jurisdiction over this case until termination of this Consent Decree, for the purpose of resolving disputes arising under this Decree pursuant to Section XI, entering orders modifying this Decree pursuant to Section XVIII, or effectuating or enforcing compliance with the terms of this Decree.

XVIII. MODIFICATION

84. The terms of this Consent Decree, including any attached appendices, may be modified only by a subsequent written agreement signed by all the Parties. Where the modification constitutes a material change to this Decree, it is effective only upon approval by the Court.

85. Any disputes concerning modification of this Decree will be resolved pursuant to Section XI of this Decree (Dispute Resolution), provided, however, that, instead of the burden of proof provided by Paragraph 63, the Party seeking the modification bears the burden of

demonstrating that it is entitled to the requested modification in accordance with Federal Rule of Civil Procedure 60(b).

XIX. TERMINATION

86. After Defendant has maintained satisfactory compliance with this Consent Decree for a period of ten years, has complied with all material requirements of this Consent Decree, including those relating to the SEP required by Section VII of this Consent Decree, and has paid the civil penalty and any accrued stipulated penalties as required by this Consent Decree, Defendant may serve upon the United States a Request for Termination, stating that Defendant has satisfied those requirements, together with all necessary supporting documentation.

87. Following receipt by the United States of Defendant's Request for Termination, the Parties shall confer informally concerning the Request and any disagreement that the Parties may have as to whether Defendant has satisfactorily complied with the requirements for termination of this Consent Decree. The United States may not unreasonably withhold agreement of satisfactory completion. If the United States agrees that the Decree may be terminated, the Parties shall submit, for the Court's approval, a joint stipulation terminating the Decree.

88. If the United States does not agree that the Decree may be terminated, Defendant may invoke Dispute Resolution under Section XI of this Decree. However, Defendant shall not seek Dispute Resolution of any dispute regarding termination, under Paragraph 59 or 61 of Section XI, until three months after service of its Request for Termination.

XX. PUBLIC PARTICIPATION

89. This Consent Decree will be lodged with the Court for a period of not less than 30 Days for public notice and comment in accordance with 28 C.F.R. § 50.7. The United States reserves the right to withdraw or withhold its consent if the comments regarding the Consent

Decree disclose facts or considerations indicating that the Consent Decree is inappropriate, improper, or inadequate. Defendant consents to entry of this Consent Decree without further notice and agrees not to withdraw from or oppose entry of this Consent Decree by the Court or to challenge any provision of the Decree, unless the United States has notified Defendant in writing that it no longer supports entry of the Decree.

XXI. SIGNATORIES/SERVICE

90. Each undersigned representative of Defendant and the Assistant Attorney General for the Environment and Natural Resources Division of the Department of Justice certifies that he or she is fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind the Party he or she represents to this document.

91. This Consent Decree may be signed in counterparts, and its validity may not be challenged on that basis. Defendant agrees to accept service of process by mail with respect to all matters arising under or relating to this Consent Decree and to waive the formal service requirements set forth in Rules 4 and 5 of the Federal Rules of Civil Procedure and any applicable Local Rules of this Court including, but not limited to, service of a summons.

XXII. INTEGRATION

92. This Consent Decree constitutes the final, complete, and exclusive agreement and understanding among the Parties with respect to the settlement embodied in the Decree and supersedes all prior agreements and understandings, whether oral or written, concerning the settlement embodied herein. No other document, nor any representation, inducement, agreement, understanding, or promise, constitutes any part of this Decree or the settlement it represents, nor may it be used in construing the terms of this Decree.

XXIII. FINAL JUDGMENT

93. Upon approval and entry of this Consent Decree by the Court, this Consent Decree constitutes a final judgment of the Court as to the United States and Defendant. The Court finds that there is no just reason for delay and therefore enters this judgment as a final judgment under Fed. R. Civ. P. 54 and 58.

XXIV. APPENDICES

94. The following appendices are attached to and part of this Consent Decree:

“Appendix A” is the Compliance Measures for Standard Operating Procedures;

“Appendix B” is the West Sump Expansion SEP and its milestones/schedule;

“Appendix C” is the Mobile Communications SEP and its milestones/schedule;

“Appendix D” is the Police Equipment SEP and its milestones/schedule;

“Appendix E” is the School Cleanout and Equipment SEP and its milestones/schedule;

“Appendix F” is the Emergency Equipment SEP for the Charleston Fire Department, and its milestones/schedule;

“Appendix G” is the Emergency Equipment SEP for the Dunbar Fire Department, and its milestones/schedule;

“Appendix H” is the Emergency Equipment SEP for the Institute Volunteer Fire Department, and its milestones/schedule;

“Appendix I” is the Emergency Equipment SEP for the Jefferson Volunteer Fire Department, and its milestones/schedule;

“Appendix J” is the Emergency Equipment SEP for the Nitro Fire Department, and its milestones/schedule;

“Appendix K” is the Emergency Equipment SEP for the St. Albans Fire Department, and its milestones/schedule;

“Appendix L” is the Emergency Equipment SEP for the South Charleston Fire Department, and its milestones/schedule;

“Appendix M” is the Emergency Equipment SEP for the Tyler Mountain Fire Department, and its milestones/schedule;

“Appendix N” is the Emergency Responders Training SEP and its milestones/schedule;

“Appendix O” is the Shelter-in-Place Training SEP and its milestones/schedule;
and

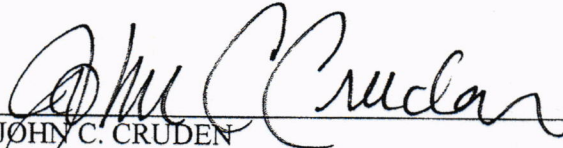
“Appendix P” is a list of all local and state emergency response organizations that responded to the August 2008 incident.

SO ORDERED THIS _____ DAY OF _____, 20__

UNITED STATES DISTRICT JUDGE
Southern District of West Virginia

THE UNDERSIGNED PARTIES enter into this Consent Decree in the matter of *United States v. Bayer CropScience, LP*.

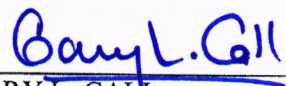
FOR PLAINTIFF UNITED STATES OF AMERICA:


JOHN C. CRUDEN
Assistant Attorney General
Environment and Natural Resources Division
U.S. Department of Justice

September 21, 2015
Dated


s/ Daniel S. Smith
DANIEL S. SMITH
Senior Counsel
Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
P.O. Box 7611, Ben Franklin Station
Washington, D.C. 20044
601 D Street NW
Washington, DC 20004
202-305-0371 (voice)
202-514-0097 (fax)
dan.smith2@usdoj.gov

Sept. 21, 2015
Dated

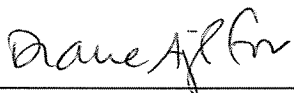

GARY L. CALL
Assistant United States Attorney
WV State Bar No. 589
U.S. Attorney's Office,
Southern District of West Virginia
P.O. Box 1713
Charleston, WV 25301
(304) 345-2200 (voice)
(304) 347-5440 (fax)
gary.call@usdoj.gov

THE UNDERSIGNED PARTIES enter into this Consent Decree in the matter of *United States v. Bayer CropScience, LP*.


FOR PLAINTIFF UNITED STATES OF AMERICA:



SHAWN M. GARVIN
Regional Administrator
U.S. EPA Region III
1650 Arch Street
Philadelphia, PA 19103-2029



MARY B. COE
Acting Regional Counsel
U.S. EPA Region III
1650 Arch Street
Philadelphia, PA 19103-2029



CYNTHIA T. WEISS
Senior Assistant Regional Counsel
U.S. EPA Region III
1650 Arch Street
Philadelphia, PA 19103-2029

THE UNDERSIGNED PARTIES enter into this Consent Decree in the matter of *United States v. Bayer CropScience, LP*.

FOR PLAINTIFF UNITED STATES OF AMERICA:



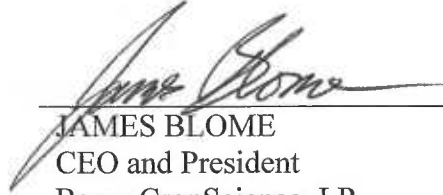
DEAN B. ZIEGEL, Attorney Advisor
Waste and Chemical Enforcement Division
Office of Civil Enforcement
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, DC 20460

THE UNDERSIGNED PARTIES enter into this Consent Decree in the matter of *United States v. Bayer CropScience LP*.

KIC

FOR DEFENDANT BAYER CROPSCIENCE LP:

Dated August 21, 2015



JAMES BLOME
CEO and President
Bayer CropScience, LP



EILEEN MILLETT, Esq.
Epstein Becker Green
250 Park Avenue
New York, NY 10177
212-351-4547 (voice)
212-878-8600 (fax)
emillett@ebglaw.com



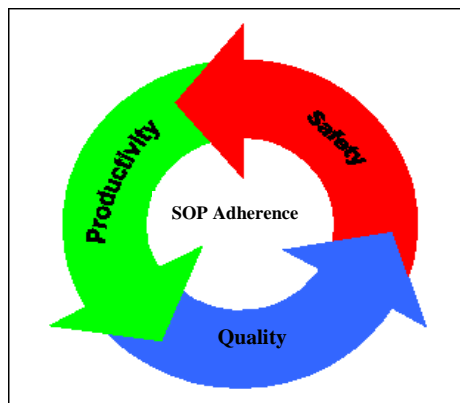
ALVIN L. EMCH, Esq.
Jackson Kelly PLLC
500 Lee Street East
Suite 1600
Charleston, WV 25301-3202
304-340-1172 (voice)
304-340-1050 (fax)
aemch@jacksonkelly.com

Appendix A
DOJ Case #90-5-1-10802

Compliance Measures for Standard Operating Procedures

1. Introduction and Objectives

The Plant and Process Safety Steering Committee sponsored a SOP Adherence Task Team in June, 2009 to investigate the various reasons for adherence vs. lack of adherence to SOPs, and develop recommendations for continual improvement in SOP Adherence. The Team comprised various BCS and BMS participants, representing different disciplines.



The Team used information from several sources:

- Literature surveys
- Research of articles regarding industries (such as the aviation and nuclear industries) and their best practices for SOP adherence
- Various books by experts (i.e., the Center for Chemical Process Safety and American Institute of Chemical Engineers)
- BCS and BMS Employee Surveys
- Focus Sessions comprised of BCS and BMS employees

Appendix A
DOJ Case #90-5-1-10802

Compliance Measures for Standard Operating Procedures

The research conducted by the Team indicated several major factors for procedural non-compliance:

Major Factors for Non-Compliance to SOPs

1. **Leadership** – inadequate communication of clear and unequivocal expectation about procedure adherence
2. **Employee** - Lack of ownership arising from lack of stakeholder input in procedure development and validation
3. **Procedure Clarity** - unclear and/or inaccurate procedures
4. **Training** - not effective and/or insufficient

This standard includes new requirements to address these non-compliance factors and provide for continual improvement in SOP adherence.

2. Scope

This standard applies to all manufacturing operational procedures at BCS and BMS manufacturing and formulation sites in North America. These procedures include: (i) Normal Operations; (ii) Start-up/Shutdown activities; (iii) Emergency Operations; (iv) Equipment Malfunctions; and (v) Maintenance preparations and activities.

It is recommended that other types of Bayer facilities also consider this SOP standard for use in writing their procedures.

Note: This standard is not to be used in place of FDA or regulatory requirements.

Appendix A
DOJ Case #90-5-1-10802

Compliance Measures for Standard Operating Procedures

3. Requirements

The following requirements have been adopted for continual improvement in SOP adherence.

3.1. General Requirements

A. Short-Term Requirements (2011)

1. Leadership will:
 - i. Enforce clear, unambiguous expectations of SOP adherence at all levels
 - ii. Establish a program for SOP Audits and follow-ups (starting with the most critical SOPs)
2. Stakeholder Involvement – stakeholders, including operators and maintenance personnel, will participate in SOP development, review before issue, and continual improvement
3. Procedure Clarity - require all current SOPs and new SOPs to conform to the new Bayer SOP Structure (see 3.2 SOP Structure)
4. Training - maximize realistic and effective training for all SOPs directly relevant to the employee's responsibilities.
 - i. Subgroups and sites should define training requirements, taking into consideration procedure risk assessments and individual site needs.

B. Long-Term Requirements (2011 – 2017)

1. Appoint a Procedure Management Team at each site
2. Conduct an assessment of the site SOP Process using the “Plan-Do-Check-Act” Framework (see 3.3)
 - i. Assess gaps and implement corrective action plan
 - ii. Existing SOPs:
 - a. Perform a risk-assessment to prioritize SOPs
 - b. Audit and implement corrective action plan based on priority
 - c. Convert all SOPs to the new Bayer SOP Structure and validate
 - iii. New SOPs: Implement per the SOP Process, including new SOP Structure and Change Management
3. Incorporate KPIs into the Sites' KPI program (See 3.4)
4. Conduct an external audit of the Site SOP Process every 3 years, starting in 2016

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Compliance Measures for Standard Operating Procedures

3.2. SOP Structure

1. A modified structure for SOPs was developed from literature recommendations and employee suggestions. Each SOP shall contain the following 14 sections, except as indicated:

SOP Sections

- 1) Purpose
- 2) Scope
- 3) Hazards and Precautions
- 4) Prerequisites and Initial Conditions
- 5) Procedural Steps
- 6) Responsibilities
- 7) Safety, Health and Environmental Considerations
 - A. Safe Operating Limits
 - B. Contingencies
 - Emergency Procedures
 - Temporary Operations
- 8) Forms and Appendices
- 9) Reports and Recordkeeping*
- 10) Definitions and Acronyms*
- 11) References*
- 12) Training*
- 13) Audits and Assessments*
- 14) Revision History

* Optional in some cases

A description of each section's contents is located in the table on page 9.

2. SOPs will be written utilizing the following best practices:
 - Clear, easy to understand wording
 - Text broken into short, easy to read groupings
 - Information is easy to find and well-organized, e.g., Table of Contents, searchable content, etc.
 - Consistent format, utilizing the new SOP Structure
 - Maximize use of visuals, such as charts, graphs, and other visual summaries of information
 - Warning, and Caution and Note statements placed within a box for emphasis

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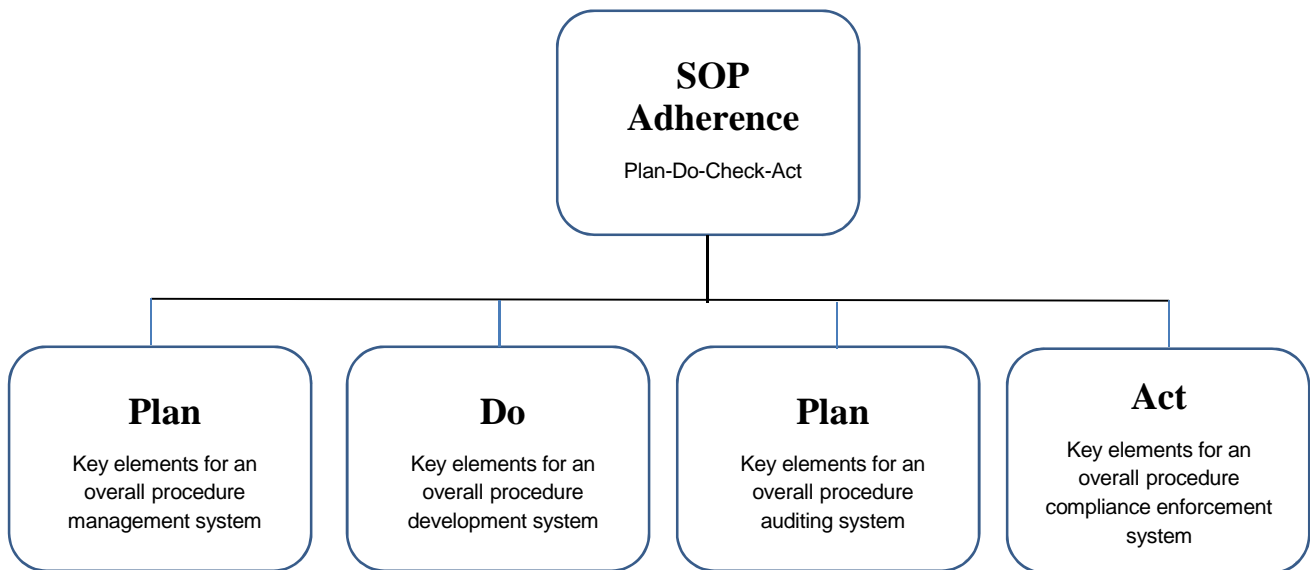
Compliance Measures for Standard Operating Procedures

- Changes to SOP are visually distinct and identifiable by SOP user

An example SOP indicating this structure can be found in Appendix B.

3.3. Plan-Do-Check-Act Framework

A SOP Framework is provided to assist sites with implementing a SOP Process:



Details and descriptions for the Plan-Do-Check-Act Framework can be found in Appendix C.

3.4. Key Performance Indicators (KPIs)

1. The Universal KPI for all BCS sites in North America is:
 - Percentage of procedures converted to the new structure and validated in practice vs. number of procedures in place
 - **Interim Milestones**
 - Develop baseline in 2011; Complete approximately 20% every year, starting 2011 and ending in 2017

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- Provide annual status reports for three years
 - Conduct an external audit of the Site SOP process every three years (3.1B-4)
2. Other KPIs for consideration at a local level are:
- On-time SOP training completion
 - Number of corrective-actions-per-procedure from Audits
 - Percentage of high-level incidents attributed to SOP non-adherence and associated costs (Lagging Indicator)
 - Percentage of high-level incidents attributed to SOP deficiencies and associated costs (Lagging Indicator)

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4. Responsibilities and Procedures

- A) Management is responsible for implementation of short-term and long-term requirements (see Section 3)
- B) Employees are required to:
 - Be an active part of an SOP Team and offer input
 - Follow each SOP unless a change process is initiated
 - If a deviation, error, or problem occurs, report immediately to Management

5. Terms / Definitions

- Standard Operating Manual (SOM) – .An overall collection of documents related to the operation of a process or processes. Included in the SOM are SOPs, regulatory information, process background information, etc.
- Procedure Validation – executing the SOP in practice to determine if the SOP can be followed as written and produces the desired results

6. Distribution List

- Upper Management
- Site Managers
- Site personnel

7. Cross References

- Guidelines for Writing Effective Operating and Maintenance Procedures – Center for Chemical Process Safety and American Institute of Chemical Engineers, 1996
- Creating Effective Safety Procedures and Operating Manuals, Chemical Engineering Progress, December 1997
- Strategies to Reduce Aviation Employees' Procedural Non-Compliance, Ed Mitchell, MS Thesis, City University, London, 2005
- Bending the Rules – Managing violation in the workplace, P.T. Hudson et. al, SPE
- <http://www.bizmanualz.com/information/2009/06/19/top-ten-reasons-why-policies-and-procedures-dont-work.html>

8. Appendices

- A. SOP Structure for Manufacturing and Operational Procedures at BMS and BCS
- B. SOP Example

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Compliance Measures for Standard Operating Procedures

C. Plan-Do-Check-Act Framework

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Compliance Measures for Standard Operating Procedures

SOP Title:		
	Section	Description
1.	Purpose	Brief statement clarifying the “why” & desired outcome
2.	Scope	Brief statement of what is covered or, if appropriate, what is not covered
3.	Hazards & Precautions	<ul style="list-style-type: none"> • List any unique hazards/precautions that are pertinent to this entire SOP (especially relevant for stand-alone SOPs). • General Hazards for unit can be covered elsewhere (e.g. in the Standard Operating Manual - SOM), with a link or note (e.g., See XXX) here • If there are hazards only for certain steps in SOP, document them (only) in the Procedural Steps section, using “Notes, Warnings, and Caution”.
4.	Prerequisites/Initial Conditions	<ul style="list-style-type: none"> • This includes what needs to be in place before procedure is executed. • This information could already be in the existing Procedure and should be extracted, so that it stands out.
5.	Procedural Steps	<ul style="list-style-type: none"> • Simple, concise steps, and includes “Note/Warnings/Cautions” • Less text with more diagrams, charts, checklists, and graphics); refrain from using narrative and paragraph formatting; • Checklists: Prioritize SOPs – High, Medium risks must have checklists; Optional for Low risks; • Start-up, normal operation, shutdown, emergency operations, temporary operations, etc should be in separate SOPs to highlight different hazards and activities, and to provide a clear and concise document.
6.	Responsibilities	<ul style="list-style-type: none"> • If this is covered elsewhere (e.g., in SOM), enter link or note • This section is especially relevant if there are multiple personnel/disciplines involved.
7.	Safety, Health & Environmental Considerations	<p>This section contains the following sub-sections:</p> <p>A) Safe Operating Limits</p> <p>B) Contingencies – Include any contingencies that are not in the Safe Operating Limits</p> <ul style="list-style-type: none"> • Emergency Procedures (include link or reference only) • Temporary Operations (include link or reference only)
8.	Forms & Appendices	<ul style="list-style-type: none"> • Checklists, JSAs, etc. (utilizing links or references to other sections, etc.) should be documented here, so that it is easier for Operators to locate them
9.	* Reports & Recordkeeping	<ul style="list-style-type: none"> • Describe outputs (logs, calibration records, audit sheets, etc.) and their disposition (where are they stored and for how long?)
10.	* Definitions/Acronyms	<ul style="list-style-type: none"> • Describe special terms and acronyms
11.	* References	<ul style="list-style-type: none"> • Items that aid understanding of the procedure
12.	* Training	<ul style="list-style-type: none"> • Describe training plan (personnel who need to be trained, training frequency, and any special requirements, such as passing a written test/demonstration of skill in field, etc)
13.	* Audits/Assessments	<ul style="list-style-type: none"> • An audit and self-assessment plan is defined for the procedure. This may include formal scheduled audits, random peer audits, self audits, etc.
14.	History of Changes	Changes should be visually distinct, e.g. different color or font

* These sections are Optional to include in SOP. They may be more relevant for stand-alone SOPs. If they are located elsewhere (e.g., in SOM) or are not applicable, document the alternative location or N/A for all these fields either in their respective sections, or in the History of Changes section.

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Plan-Do-Check-Act Framework


	Site XXX Unit YYY Procedures		
	Procedure No.	Revision No.	Revision Date
	001-01-0001	010-001	5-24-2010
Title: Initiation of Reactor Feeds (HyperGoo Production Unit SOP)			

INITIATION OF REACTOR FEEDS
(HyperGoo Production Unit SOP)

1) Purpose.....	2
2) Scope.....	2
3) Hazards and Precautions	2
4) Prerequisites and Initial Conditions	3
5) Procedural Steps.....	3
6) Responsibilities	4
7) Safety, Health and Environmental Considerations	5
A) Safe Operating Limits	5
B) Contingencies.....	5
i) Emergency Procedures.....	5
ii) Temporary Operations	5
8) Forms and Appendices.....	6
9) Reports and Recordkeeping	6
10) Definitions and Acronyms	6
11) References.....	6
12) Training.....	6
13) Audits and Assessments.....	6
14) Revision History	7

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Example SOP

	Site XXX Unit YYY Procedures		
	Procedure No.	Revision No.	Revision Date
	001-01-0001	010-001	5-24-2010
Title: Initiation of Reactor Feeds (HyperGoo Production Unit SOP)			

1) Purpose

This procedure describes the initiation of reactor feeds which are required for production of intermediates used in our sales grade products. When this procedure is properly executed, the reactor will remain at a safe temperature during initiation of the reaction, and that will allow normal feed rates to be used without creating an unstable concentration of materials in the reactor.

2) Scope

This procedure only applies to the initial feed of the reactor after the preliminary charges have been completed, and the reactor contents have been brought to the appropriate temperature. For resumption of feeds after this procedure has been satisfactorily completed, see Normal Reactor Feeds SOP, Section B. Resumption of Reactor Feeds.

3) Hazards and Precautions

Hazards

Excess accumulation of reactive materials in the reactor lead to a runaway reaction causing equipment failure and/or a material release

Personnel exposure to reactive or hazardous materials due to system malfunction or hardware failure

Inability to follow this SOP as written leads to an accumulation of reactive materials in the reactor.

Precautions


Control system features are configured to limit the concentration of reactive materials. Do not force any inputs or bypass any control system functions associated with this operation.

Wear standard required PPE per requirements listed in the SOM under “PPE Requirements”. Report any signs of equipment malfunction or failure to the Supervisor

Stop the reactor feed and do not attempt to restart them. Hold the reactor temperature where it is at the time you find you cannot follow the step as written. Contact the Supervisor.

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Example SOP

	Site XXX Unit YYY Procedures		
	Procedure No.	Revision No.	Revision Date
	001-01-0001	010-001	5-24-2010
Title: Initiation of Reactor Feeds (HyperGoo Production Unit SOP)			

4) Prerequisites and Initial Conditions

- A. Ensure that the Initial Reactor Charge and Heat Up SOP has been completed.
- B. Ensure that the Reactor Feed Tank Charging SOP has been completed.
- C. Ensure that the Field Operator has walked out the feed system and the reactor area and has verified that there are no issues or concerns that would prevent execution of this procedure

5) Procedural Steps

- A. Verify that the Field Operator has the system set and ready for the feeds to begin, and that he is in position to give assistance if needed.
- B. Verify that the control system recipe values match the batch sheet provided by the Technical Staff.
- C. Activate the Initiate Reactor Feeds program in the control system.
- D. Verify that the following sequence of events occurs:
 - 1. The “Temperature is at set point” message comes in.
 - 2. The “Feed line pressure is at set point” message comes in.
 - 3. The flow control valve FV—0100-01 opens to no more than 5%.
 - 4. The flow block valve BV—0101-01 opens completely.
 - 5. The “Feed flow initiated” message comes in.
- E. Monitor the temperature and flow controls to verify that the temperature is holding at set point and that the feed flow is increasing. Flow valve FV—0100-01 will open as the feed set point is increased by the control program.


Note: The set point for FV—0100-01 has an absolute limit of 1000 Pounds per Hour at this point in the program.

- F. Verify that the temperature attempts to rise and that the control system responds by adding more cooling to bring the temperature back to set point. This indicates that the reaction has initiated normally.

Warning: The reaction should initiate before 1000 Pounds of material have been fed to the reactor. The control system will stop the feeds at 1000 Pounds if the reaction initiation has not been detected.

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Example SOP

	Site XXX Unit YYY Procedures		
	Procedure No.	Revision No.	Revision Date
	001-01-0001	010-001	5-24-2010
Title: Initiation of Reactor Feeds (HyperGoo Production Unit SOP)			

- G. Verify that the reaction has initiated by answering the control system question “Initiation detected. Proceed to the Normal Reactor Feeds step?” by selecting the Yes target on the screen.

Caution: If you cannot independently verify that the reaction initiated in step F, than you must answer the question “Initiation detected. Proceed to the Normal Reactor Feeds step?” by selecting the No target on the screen.

- H. If you answered the “Initiation detected . . . ” question “No”, the control system will stop the feeds and hold the reactor temperature set point where it is. Contact the Supervisor and refer to the Reaction Failure Emergency SOP.


This is the end of the Procedure Steps.

6) Responsibilities

- The Control Board Operator executes this procedure with support from the Field Operator.
- The Unit Engineer owns and maintains this procedure.

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Example SOP

	Site XXX Unit YYY Procedures		
	Procedure No.	Revision No.	Revision Date
	001-01-0001	010-001	5-24-2010

Title: **Initiation of Reactor Feeds (HyperGoo Production Unit SOP)**


7) Safety, Health and Environmental Considerations

A) Safe Operating Limits

Operating Limit	Consequences of Deviation	Methods to Avoid Deviation	Corrective Action
Reactor Temperature must be above 99 C	Accumulation of unreacted materials creates the potential for a run away reaction to initiate	Low temperature alarm is set at 99 C. Control system will not allow feeds if the reactor is below 98 C. Maintain the reactor at 100 C.	Verify the temperature set point is at 100 C. Troubleshoot the temperature control system and address issues that are found.
Reactor Temperature must be below 102 C	Temperatures above 102 C increase the speed of the reaction making temperature control more difficult. Under certain conditions the reaction can “runaway” potentially resulting in a release of hazardous materials.	High temperature alarm is set at 102 C. Control system will not allow feeds if the reactor is above 105 C. Maintain the reactor at 100 C	Verify the temperature set point is at 100 C. Troubleshoot the temperature control system and address issues that are found.
Do not feed additional material to the reactor if 1000 Pounds of material have been fed and the initiation has not been detected.	A “runaway” reaction can over heat the reactor contents potentially resulting in a release of hazardous materials.	The control system limits the reactor feed to 1000 Pounds until the reaction initiation is detected. The reactor will shut down if 1000 Pounds have been fed and the Operator has not confirmed initiation.	Assure that the correct amounts of pre-charge and catalyst are in the reactor and that the reactor is at 100 C before attempting any feeds to the reactor.

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Example SOP

	Site XXX Unit YYY Procedures		
	Procedure No.	Revision No.	Revision Date
	001-01-0001	010-001	5-24-2010

Title: **Initiation of Reactor Feeds (HyperGoo Production Unit SOP)**

- B) Contingencies
 - i) Emergency Procedures
 - ii) Temporary Operations

8) **Forms and Appendices**

None.

9) **Reports and Recordkeeping**

None.

10) **Definitions and Acronyms**

- SOP, Standard Operating Procedure. - SOPs are typically found in a SOM.
- SOM, Standard Operations Manual - SOMs include general information related to the process. Some of this information is required by regulations. SOPs normally reside in a SOM.

11) **References**

Reaction PHA, feed initiation

12) **Training**


Training on this procedure is included in the routine Operator Certification Process materials. Refer to the site training process.

13) **Audits and Assessments**

Because this procedure is for a critical process step, it must be audited by the Control Board Operator's Peer or Supervisor two times per year. This is in addition to the routine procedure audits called for in the Site Audit Guidelines.

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Example SOP

	Site XXX Unit YYY Procedures		
	Procedure No.	Revision No.	Revision Date
	001-01-0001	010-001	5-24-2010
Title: Initiation of Reactor Feeds (HyperGoo Production Unit SOP)			

14) Revision History

Changes since the last revision are indicated in blue.

- 05/20/2010 Revision 05
Section 13, Audits and Assessments was modified to require procedure compliance audits two times per year. The need for these audits was defined as a result of a PHA finding.

- End -

<u>Minimum Requirements</u>	<u>Recommended Practices</u>
<p>Plan</p> <p>An overall procedure management system is in place and the following elements are included</p> <ol style="list-style-type: none"> 1 Consistent procedure document requirements are defined for the following elements <ul style="list-style-type: none"> Procedure structure Use of checklists or similar tools to support procedure execution Responsibilities for procedure development and maintenance 2 Plans for driving continual improvement of procedures including the following elements <ul style="list-style-type: none"> An auditing system to assure that the procedures can be followed as written and that the desired results are obtained when being followed as written A procedure feedback system to allow stakeholders to report issues and to suggest improvements. 3 Communication of a clear, unambiguous expectation that procedures will be adhered to at all levels of the organization. 4 Procedures are risk ranked so that the highest risk procedures can receive priority for monitoring and review 	<p>Provided separately</p> <p>Require checklists for all procedures that carry High/Medium risk</p> <p>Site to define specific roles/positions to manage the development and maintenance of new and existing procedures. Assignment of an overall Procedure Coordinator is a best practice.</p> <p>A review of the procedure to identify process and personnel safety and health issues and to verify that the issues are adequately addressed is required. This would include communicating the results of an assessment of the potential consequences of deviation from the procedure.</p> <p>Formal scheduled audits as well as informal audits are recommended.</p> <p>A policy statement from upper management should serve as the basis for local policies.</p>

(continued)

<u>Minimum Requirements</u>	<u>Recommended Practices</u>
<p>Do</p> <p>An overall procedure development system is in place. The following elements are specifically included</p> <p>New and significantly modified procedures:</p> <ol style="list-style-type: none"> 1 Procedure development involves input from all 	<p>Procedure users and support groups impacted by the procedure are the</p>

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Example SOP

<p>stakeholders that will be impacted by the procedure</p> <p>2 Procedures are reviewed by stakeholders, and are revised and tested/validated/verified before they are implemented</p> <p>3 The procedure implementation system includes the following elements Procedures are issued using a standard system Individuals impacted by the procedure are trained on the procedure and are given an opportunity to comment on the procedure. Input from training is incorporated in the procedure appropriately</p>	<p>primary stake holders.</p> <p>The first draft is developed with consideration of the stakeholder needs Stakeholders review the draft and updates are made The procedure is issued to all potential users for further review and updates to the draft are made Procedure users test/validate the procedure to confirm it can be executed as written and that it provides the desired results. The final round of updates are made</p> <p>Training must emphasize why the steps are important to perform as written Stand and deliver training is more effective than other training methods. An opportunity to practice the procedure before actual use improves training retention Accumulate comments obtained during the training and feed them into the procedure review process Issue the final procedure to the users Define the training methods, training frequency and how training effectiveness will be measured</p>
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(continued)

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Example SOP

Existing procedures:	
<p>1 A system exists for developing a changed or temporary procedure due to unusual requirements (i.e. an equipment failure forces a change in the actions required). This includes designating the responsible personnel by name or position, and it must apply to all shifts when the process is operational.</p> <p>2 A system exists to create and sustain risk awareness for all procedures. Risks of not following steps as written are explained.</p> <p>Examples are provided where failure to follow similar procedures resulted in negative consequences.</p> <p>3. An overall procedure update and communication system is in place. The requirements for minor changes to existing procedures may be less stringent than for more significant changes to existing procedures.</p>	<p>The plan and training emphasizes the expectation that when procedures can not be followed as written (wrong or unsafe or inappropriate for the current conditions), workers are to stop and contact Supervision. The overarching goal is to have procedures which can be followed safely.</p> <p>Procedures and training includes the consequences of deviation (major hazards and consequences) Communicate site, company and industry incident reports involving procedure non-compliance. Reinforce the down side of non-compliance.</p>

(continued)

<u>Minimum Requirements</u>	<u>Recommended Practices</u>

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Example SOP

Check

An overall procedure auditing system is in place and the following elements are included

- 1 Procedures are validated to prove that: (a) Procedures can be followed as written; and (b) Procedures produce the desired results when followed as written
- 2 Compliance with procedures is measured and tracked
- 3 A system is in place to evaluate and act on why non-compliance activities occur, with the focus being on correcting the "why" and not on "what" or "who".
Specific aspects of violations to consider are:

Types of violations:

- Routine violations which are frequent, known and condoned at some level
- Optimizing violations which are efforts to make the job better or more interesting
- Situational violations which occur under time pressure, heavy work loads, resource limitations, etc.
- Exceptional violations which occur when unexpected events occur

Risk rank procedures and validate on a priority basis. A best practice would be an annual formal validation for the highest risk procedures. All procedures should be validated at least one time followed by audits to assess ongoing validity.

Safety observations, formal and informal audits, incident and accident investigations, and self reports are some tools for measuring compliance. A best practice would have the measurement system include a feature to allow procedure users to self monitor, perhaps anonymously, and to feed back on procedure compliance issues.

All violations that do or potentially could result in an upper level incident (i.e. Level 1 or 2) or where a high risk ranked procedure is involved are formally investigated. Other violations should be investigated at least informally. Train a group of line Operators to help investigate intentional noncompliance incidents.

(continued)

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Example SOP

<p>Drivers for violations:</p> <ul style="list-style-type: none">Worker expectations that rules have to be broken to get the job doneWorker feelings of powerfulness, that they have the ability to do the job without following the procedureWorker recognition that there are opportunities for shortcuts or to do the job betterInadequate work planning which requires solving problems as they arise <p>Elements that lead to intentional violations:</p> <ul style="list-style-type: none">A reward for the non-compliance (i.e. quicker, easier, reach a goal)A high probability of obtaining the award for non-complianceNo adverse reaction to the non-compliance from other members of the group <p>Actions to address violations should:</p> <ul style="list-style-type: none">Eliminate incentives to not complyProvide incentives to comply	<p style="text-align: center;">Have a Recognition program to promote SOP Adherence</p>
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(continued)

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Example SOP

<u>Minimum Requirements</u>	<u>Recommended Practices</u>
<p data-bbox="188 310 248 344">Act</p> <p data-bbox="248 384 760 470">A procedure compliance enforcement system is in place and the following elements are included</p> <ol data-bbox="248 506 760 842" style="list-style-type: none"><li data-bbox="248 506 760 562">1 A system is in place to address all procedure document issues<li data-bbox="248 632 760 718">2 A system is in place to address all procedure execution issues, including disciplining when necessary<li data-bbox="248 753 760 842">3 A system is in place to provide group and individual feedback on procedure compliance performance and issues found.	<p data-bbox="824 464 1235 520">Ensure that SOPs are clear, correct, concise, complete, and comprehensive</p> <p data-bbox="824 556 1295 705">Determine why the procedure execution error occurred (Training, unusual situations, and take appropriate corrective steps Discipline when the non-compliance is solely related to individual actions</p> <p data-bbox="824 741 1414 798">For example, safety meeting topics, individual performance appraisals, routine safety communications</p>

**Schedule of Bayer CropScience LP Facilities
as defined in Paragraph 7.c. of Consent Decree**

1. BCS Facilities covered by the Process Safety Management of Highly Hazardous Chemicals Standard (“PSM Standard”), 29 C.F.R. § 1910.119, or the Chemical Accident Prevention Provisions, 40 C.F.R. part 68:
 - a. BCS Processes at Institute, WV-25, Institute, West Virginia;
 - b. BCS’s facility at 8400 Hawthorne Road, Kansas City, Missouri;
 - c. BCS’s facility at 1740 Whitehall Road, Muskegon, Michigan;
 - d. BCS’s facility in 1500 East Delano Avenue, Littlefield, Texas; and
 - e. BCS’s facility in 103 Erskine Street, Lubbock, Texas.

2. BCS Facility involved in chemical formulation and/or manufacturing but not covered by the PSM Standard or 40 C.F.R. part 68:
 - a. BCS’s facility at 3310 Pasadena Blvd, Pasadena, Texas.

APPENDIX B

STATEMENT OF WORK SUPPLEMENTAL ENVIRONMENTAL PROJECT

Project:

Provide an 840,000 gallon sump to collect high process sewer flows going to the West Sump. Very high flows exceeding the capacity of the West Sump system can back into operating units and into the roadway and on to the Kanawha River. These flows may result from high rain events, equipment failures, and some firewater deluge scenarios.

Nexus to CAA 112(r):

This SEP will reduce the risk of overflowing raw chemical wastewater to the Kanawha River by enlarging sump capacity at the Institute facility. This project will allow Operators enough time to start the back-up diesel-powered pump or correct electrical pump problems to prevent spills of untreated wastewater into the Kanawha River. This SEP would limit releases and prevent adverse environmental and public health impacts. This SEP would reduce the generation of pollution through "source reduction" by preventing a hazardous substance from entering the waste stream, and thereby being released into the environment. Adequate nexus is deemed to exist using categories B and C —reducing adverse impact to public health, pollution prevention and reduction, and reducing overall risk to public health — in the March 2015 Update to the 1998 SEP Policy.

Description of Project:

The proposed project will install an 840,000 gallon gravity fed collection sump to provide surge capacity ahead of the West Sump, thus preventing the overflow of those surge flows from production units and roadways.

The West Sump collects process sewer flows from BCS, Dow and tenant operating areas on the West end of the Institute facility. Though improvements have been made to the West Sump to reduce the likelihood of overflow from the sump itself, the risk still remains during high flow events (i.e., firefighting and heavy rains).

Examples of very high flow events that could trigger an overflow on the West end are very heavy rains, some fire water scenarios, catastrophic storage tank or pipeline failure, and equipment failures at the West Sump itself. In those cases, the lines going to the sump can become the limiting factor and water can back up into production units and roadways on the West end of the site. The West Sump has limited capacity and its overflow goes directly into the Kanawha River. This can result in contaminated water reaching the Kanawha River. The river is primarily a commercial and recreational waterway. Boating and recreational fishing are common in the area. The proposed solution is to install an 840,000 gallon sump to provide process sewer surge capacity ahead of the West Sump. This will allow the surge flow to be collected in the sump and then removed over time.

Chemicals contained in process sewer streams going to the west sump are as follows:

- Methomyl and Thiodicarb from the production of Carbamate pesticide
- Methylisobutylketone (MIBK), Naphthalene, Pyridine, Tetrahydronaphthalene (Tetralin), from the production of a Thiodicarb pesticide
- Acetone, Barquot, 1-4 Dioxane, Ethanol, Ethyl Cellosolve (2-Ethoxyethanol), Ethylene Glycol, Ethylene Oxide, Glutaraldehyde, Isophorone, Methanol, Methoxydihydropyran, and Mesitylene from site tenants.
- The worst case is believed to be a catastrophic release of 254,000 gallons of Tetralin (2,059,046 lbs.) from the above ground storage tank to the process sewer. Some portion of that release would discharge to the Kanawha River as a result of an overflow.

1) Identifiable harm avoided:

The additional capacity to divert excess flow of process wastewater from the West Sump into the collection sump would prevent untreated BCS, Dow and tenant process wastewater from backing up into the process sewer and overflowing into the Permitted Cooling Water outfall #002 and into the Kanawha River.

2) Specific improvements to water quality that BCS can identify:

BCS cannot quantify improvements, although the proposed West Sump expansion will aid with WVDEP proposed reclassification of the Kanawha River from a category C (Recreational Use) to Category A (Drinking Water Use). The ability to collect process wastewater during an overflow condition would prevent the discharge of chemicals listed in the Priority Pollutant List, and contained in the process wastewater streams from the BCS and tenant production units on the site, into the Kanawha River.

3) Amount of water pollution avoided:

In the last 4 years (2011-2014), approximately 373,000 gallons of untreated process wastewater have overflowed the West Sump and ultimately discharged into the Kanawha River.

4) Drinking water intakes improved:

The nearest surface water downstream public water supply intake is the Huntington District/Guyandotte Station Intake which is 101 miles west of the Site on the Ohio River. Thus, this project has the potential to improve drinking water intakes much closer to the local community.

Scheduling:

Construction Milestone Schedule:

Start after winter weather of 2016 due to a major utility outage that is planned for the fall that will not allow work to take place in the west end of the plant.

- Sheet pile installation – to commence no later than May 1, 2016 and be completed no later than July 15, 2016;
- Install new manholes and underground piping – to commence no later than May 1, 2016 and be completed no later than July 1, 2016 except tie-in to live sewers;
- Excavate hole for sump – to commence no later than July 1, 2016 and to be completed by August 31, 2016;
- Install floor rebar installation and pour concrete floor – to commence no later than August 31, 2016 and to be completed no later than October 15, 2016;
- Install sump wall rebar installation and pour concrete wall - to commence no later than October 15, and to be completed no later than December 31, 2016;

- Set submersible pumps, platform, install instruments and electrical – to commence no later than December 31, 2016;
- Safety barrier installation and cleaning of site to commence no later than January 15, 2017;
- Commissioning and Testing – to commence no later than January 31, 2017;
- Tie-in new underground sewer to live sewers – to commence no later than February 1, 2017 and complete no later than February 28, 2017;
- Substantial completion (i.e. sump in operation) – to be completed no later than February 28, 2017;
- Paving to commence on March 31, 2017 (post start-up, weather permitting).

A. \$3,100,000

A project cost summary and an indirect field cost summary is attached herein and made a part of this appendix as a spreadsheet. It includes a detailed breakdown of costs for equipment, steel, paint, electrical, scaffolding and equipment rental.

BCS proposes to invest in a collection sump to provide surge capacity on the West end of the site ahead of the West Sump.

• Equipment	\$260,000
• Piping and associated plumbing	\$230,000
• Sump installation	\$1,820,000
• Instrument and Electrical installation	\$70,000
• Insulation and paint installation	\$170,000
• Engineering and Design	\$550,000

TOTAL COST: Approximately \$3,100,000



150 Years
Science For A Better Life

Infrastructure Spill Prevention

January 6, 2015



Scenarios for Spills to River

- Background
 - Existing Process Sewer Manholes and Process Sewer Sumps have Overflows to Cooling Water Returns which go directly to the River

- Normal Operational Problems Cause Overflows to River
 - Power failure
 - Pump failure
 - Heavy rain
 - Operator error



Scope & Cost

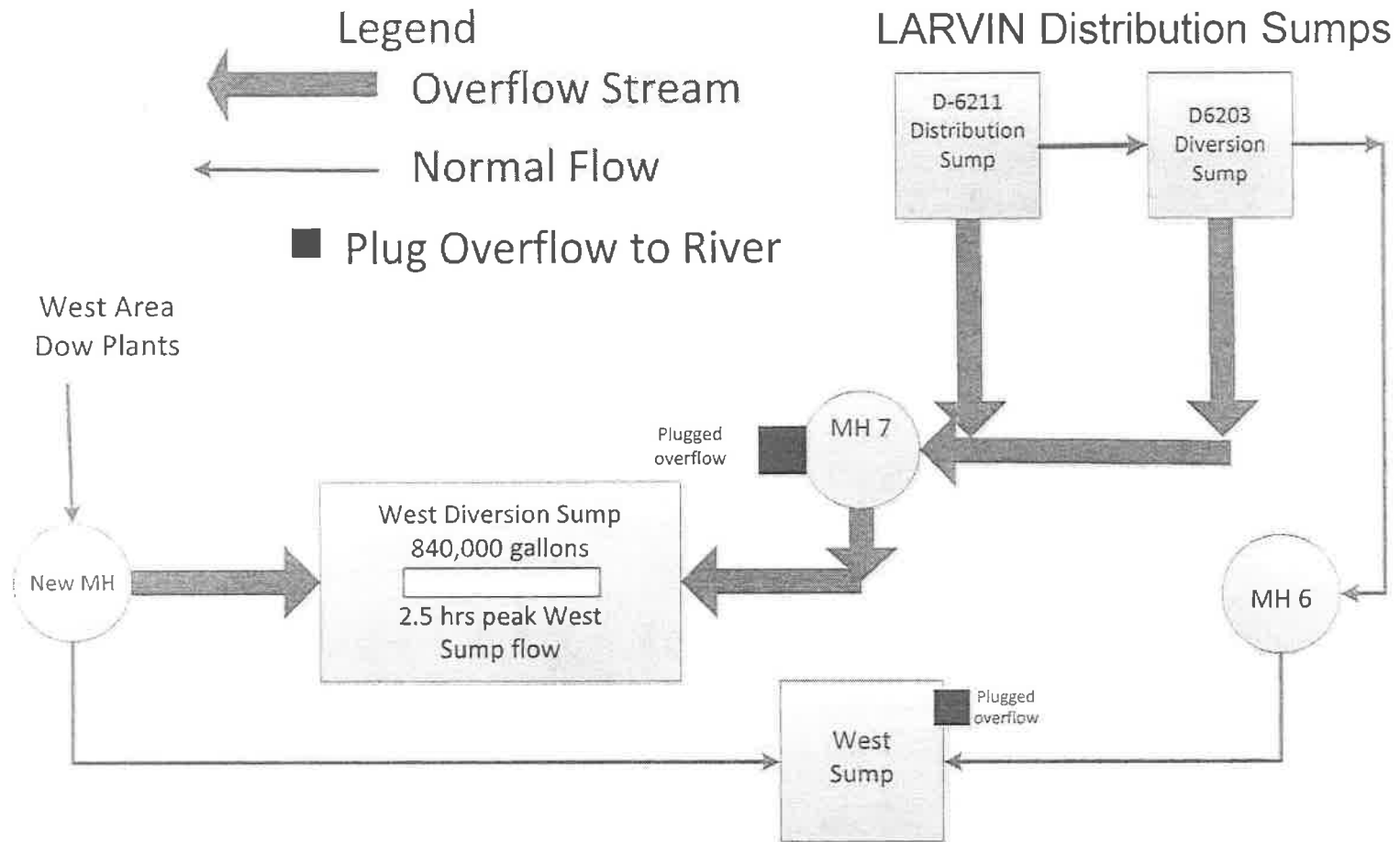
Scope:

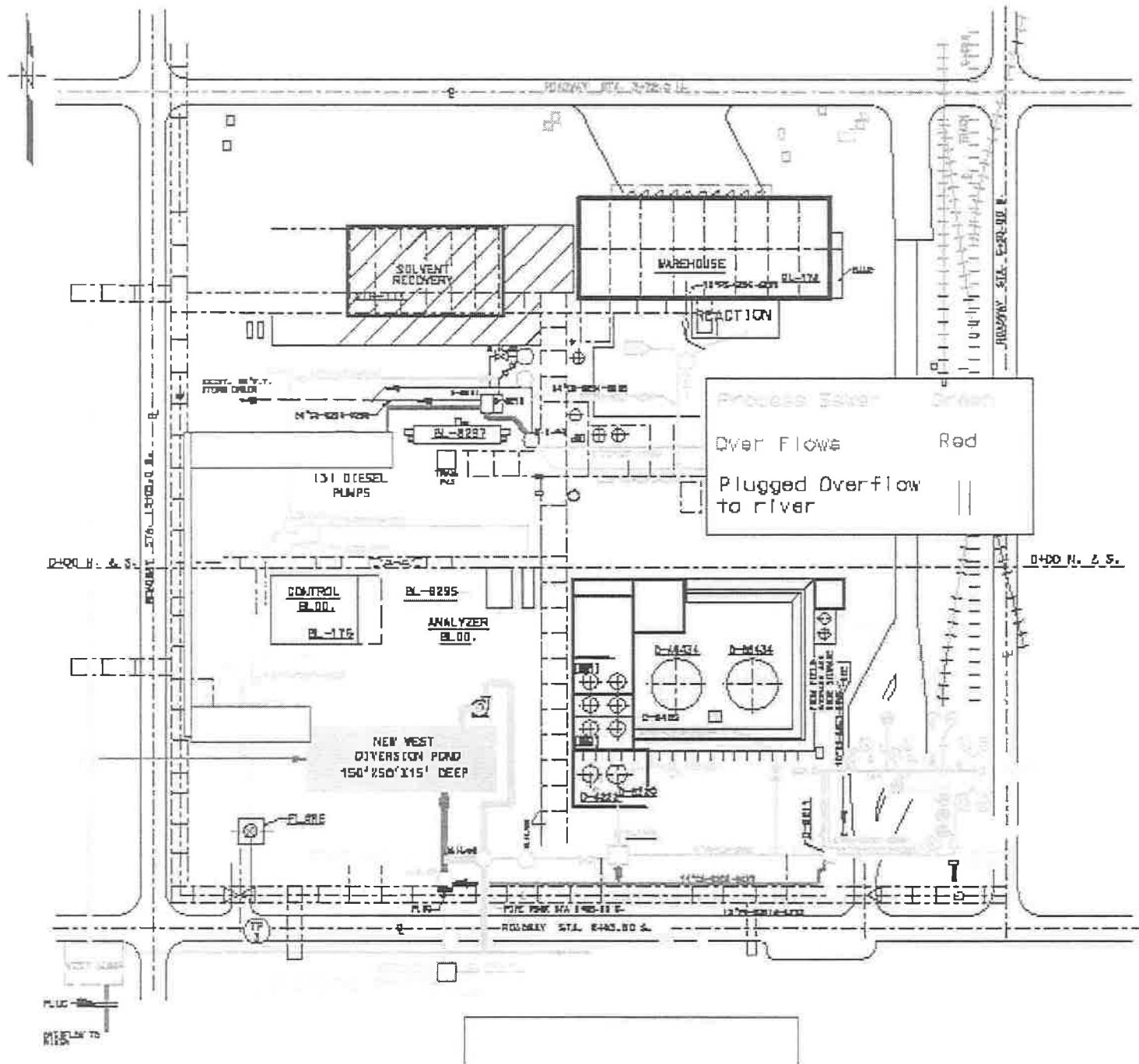
Plug Center Sump Overflow and West Sump Overflow

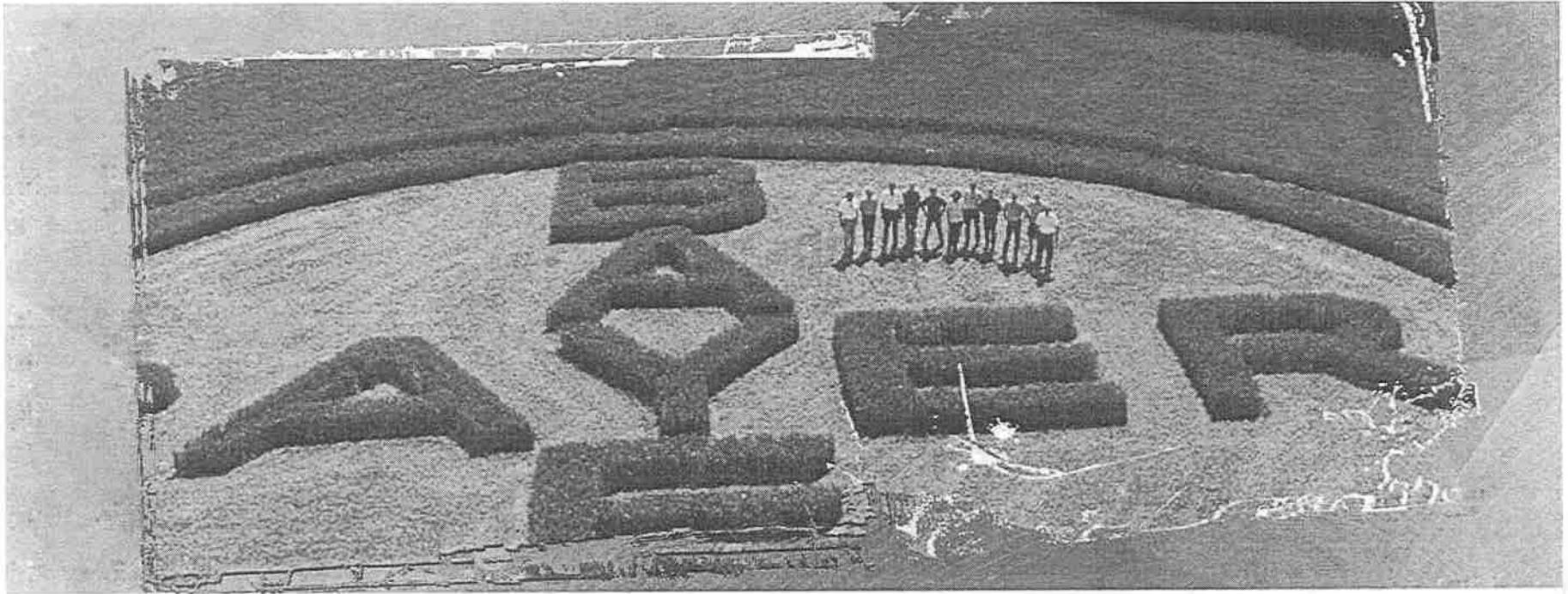
West Sump: Add new Sump with Gravity Overflow from West Sump to this new Sump. Re-route Gravity Overflow from LARVIN Distribution Sumps from River to this new Sump

Cost: \$3,100,000

New West Sump Diversion Sump (All Gravity Flow)







Science For A Better Life

Thank you!

APPENDIX C

STATEMENT OF WORK SUPPLEMENTAL ENVIRONMENTAL PROJECT

Project:

AT&T will design, and implement an application for mobile devices (i.e. cell phones) to alert and communicate with the public during emergencies. Another third party will develop and coordinate a communications effort directed at those who work and live in Kanawha County. This system will function in addition to the reverse 911 system which is already in place.

In addition, Kansas City is in the process of implementing a similar system which will include areas containing Bayer CropScience manufacturing facilities. For that program we propose to fund development and coordination of a communications effort directed at those who work and live in Kansas City.

Nexus to CAA 112 (r):

This SEP enhances a facility's ability to communicate emergency incidents to on-site and off-site emergency operations centers (EOCs) and thereby enhances coordination with local emergency responders, in this instance in two locales — Kanawha County, West Virginia and Kansas City, MO. This mobile communication system will facilitate a quicker and more efficient response to releases associated with emergency events. It will assist Kanawha County and Kansas City, MO to develop emergency response plans, to train emergency response personnel. Adequate nexus is deemed to exist using categories G — emergency planning and preparedness, and reducing overall risk to public health — in the March 2015 Update to the 1998 SEP policy.

Description of Project:

For the Kanawha County mass notification system to be effective for the 191,300 citizens, visitors and area businesses they must be aware of the system and then sign up to receive the important notices. This Application will be a partnership of Emergency Management, Metro 911, Appalachian Power, West Virginia 511, and the National Weather Service, and the West Virginia Water Company. The Application will be used to close communication gaps by addressing public information and warning, planning, and community recovery capabilities and reduce the number of calls to Metro 911 during emergencies. The total startup cost of the project is estimated to be \$65,000. Annual maintenance costs for this system are projected to be \$15,000. Bayer Crop Science LP will assume responsibility for annual maintenance cost for three years. A program to introduce the system to the served populations and to promote its use will also be undertaken at an initial cost of \$10,000. This system will be available to anyone with a cell phone and will communicate about emergencies throughout Kanawha County. Underserved areas in the county are already included in the existing reverse 911 system which reaches home phones. This cell phone application will expand service to those and other areas where cell service is available. Information, warnings, and updates can be pushed out to anyone with a cell phone regardless of where they reside.

For the Kansas City mass notification system to be effective for the 460,000 citizens, visitors and area businesses they must be aware of the system and then sign up to receive the important notices. A comprehensive and targeted marketing campaign is planned utilizing direct outreach and mass media outlets. These communications will be both informational and educational in nature. Part of this campaign will be focused on reaching vulnerable populations within the community where early notification is critical

Scheduling:

BCS will work and partner with AT&T in the design and implementation of a mobile alert application. The goal will be to develop such an application within 90 to 150 days of the entry of the final Consent Decree or December 30, 2015 whichever comes later. The goal will be to complete the application no later than May 31, 2016.

A. \$65,000

A third party will develop and startup a mobile device (i.e. cell phone) Application for communication regarding emergencies in Kanawha County, WV. The projected total development and startup cost is \$65,000. See the AT&T letter attached to this form.

B. \$10,000

A third party public relations firm will communicate the existence of the Kanawha County system and facilitate subscription to the service throughout Kanawha County. Initial communication and promotion activities are projected to cost \$10,000.00. See the Charles Ryan associates letter attached to this form.

C. \$75,000

A third party public relations firm will communicate the existence of the Kansas City system and facilitate subscription to the service throughout the city. A city wide communications effort is projected to cost \$75,000.00. See the December 22, 2014 e-mail from Gene Shepherd to Connie Stewart with a proposed budget and budget justification attached to this environmental project proposal.

D. \$ 45,000

Bayer Crop Science LP will assume responsibility for annual maintenance cost for three years. Annual maintenance costs for this system are projected to be \$15,000 for a three year total of \$45,000.

TOTAL COST: Approximately \$195,000.00



Dale Petry, Director
Homeland Security and Emergency Management
Kanawha County Commission
PO Box 3627
Charleston, WV 25336

Re: Kanawha County Emergency Management Application

Mr Petry:

Per our discussion, Kanawha County Commission will be the customer of record for the Kanawha County Emergency Management Application. Kanawha County Commission will be signing the attached WSCA Participating Addendum and the Statement of Work.

Additionally, Kanawha County Commission will own the Developed Work and be responsible for the support and changes of the Developed Work.

It is AT&T's understanding, Bayer CropScience will be responsible for the costs of developing the Kanawha County Emergency Management Application in the amount of \$65,000 per the attached Statement of Work. The development charges will be invoiced to the Kanawha County Commission account. Bayer CropScience should remit payment with a copy of the Kanawha County Commission invoice.

Sincerely,

DJ Sigman
AT&T Mobility
816 Lee Street
Charleston WV 25301
Cell: 304 932 8104
e-mail: ds8355@att.com



Dale A. Petry, Director
C.W. Sigman, Deputy Director

407 VIRGINIA STREET, EAST
P.O. Box 3627
CHARLESTON, WV 25336

Office: (304) 357-0966
Fax: (304) 357-0788
www.kanawha.us

KANAWHA COUNTY EMERGENCY MANAGEMENT

September 2, 2014

OVERVIEW

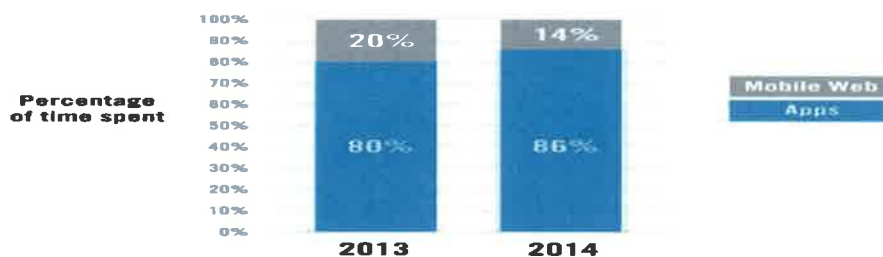
1. Project Background and Description

Reflecting back on our water contamination event allowed us an opportunity to not only look at strengths and weaknesses in our preparedness, planning and response, it also allowed us an opportunity to see how our organization can evolve. We discovered that a major platform for alerting and communication with the public was Twitter and Facebook. Mobile devices and apps became a way to provide live updates and form a two way communication with the public. As with most emergency operations, communications and public alert and notification can always be refined and improved upon. The ability to be able to disseminate one specific message, as fast as possible to first responders, citizens, municipalities, businesses and all entities is goal to we strive to accomplish.

From 1990 to 2011, worldwide mobile phone subscriptions grew from 12.4 million to over 6 billion, penetrative about 87% of the global population and reaching the bottom of the economic pyramid. With a potential platform to contact a large majority of residents in Kanawha County, idea sharing and research led to the identification and need for designing an emergency app.

The app will be a partnership of Emergency Management, Metro 911, Appalachian Power, West Virginia 511 and the National Weather Service.

Apps Continue to Dominate the Mobile Web



2. Project Scope

In emergency management when you identify gaps in your plan and the improvement you make to close those gaps are focused around 31 core capabilities. We feel that this app will close some gaps in our plan by addressing public information and warning, planning, and community resilience capabilities. We also felt that it was important for emergency management to communicate with the public when possible to alleviate the call load of Metro 911. During large emergency events Metro Dispatches can become inundated taking multiple calls for the same event. Our goal is to provide a platform to prepare, alert and help the public recovery by utilizing our resources efficiently. This app will be one more resource the county can depend on such as our Outdoor Warning Siren, Swift Reach, and Text 911.

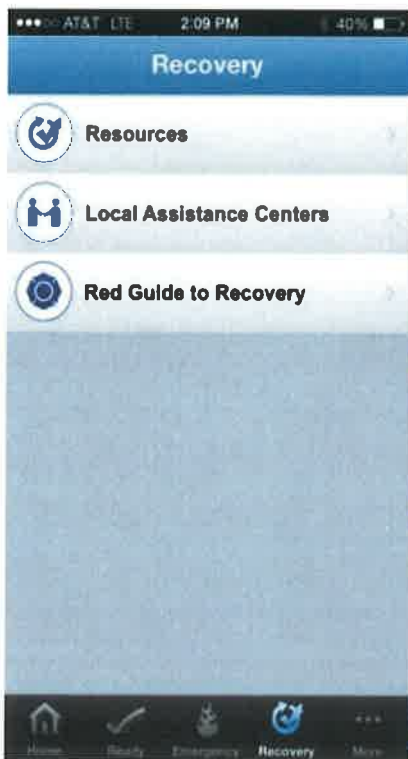
The app will be able to tie into Metro 911 to provide live call information. Emergency Management can then trigger an action item for the public via push notification.

The app will address the 3 capabilities of public information and warning, planning and community resilience by providing the ability to:

- Alert the public by sending out push notifications (i.e. shelter in place).
- Alert the public by creating an archive of media releases.
- Alerting the public by connecting to our Facebook and Twitter accounts.
- Community resiliency information such as emergency operations plan, traffic diversion plan and evacuation plan.
- Community resiliency information by locating shelters and distributions centers throughout the county.
- Community resilience information for recovery and local assistance centers
- Planning and preparedness tips addressing specific Kanawha County Risks and Hazards.
- Planning and preparedness tips such as tips to build a kit.
- Planning and preparedness tips such as Metro Live Call Data, Live Traffic Information, Mapping, Power Outages and Weather.

Project Vision – Emergency app





3. Startup and Costs

App developers are ready to move on this project immediately. We have currently set through one mobile application demo and another demo is slated for 9/15/14. Kanawha County Emergency Management has had continued talks about design and costs since the start of this project in May.

The estimated startup fee to design this app is \$65000.&15,000 annual maintenance and software upgrade fee. Kanawha County Emergency Management has built that maintenance fee into our Emergency Management Performance Grant Application.

The version of the Ready San Diego app, which was the template for this project has a video here:

<https://www.youtube.com/watch?v=hqui43Xztm0>

APPROVAL AND AUTHORITY TO PROCEED

We approve the project as described above, and authorize the team to proceed.

Name	Title	Date
Dale Petry	Emergency Management Director	
C.W Sigman	Deputy Emergency Manager	





Kanawha County Citizens Emergency App

AT&T Mobile App Development Proposal
September 15th, 2014





Agenda

- About AT&T
- Brief recap of the project vision
- Review the updated requirements
- Discuss pricing models
- Determine next steps
- Q & A



Advanced Mobile Application Development

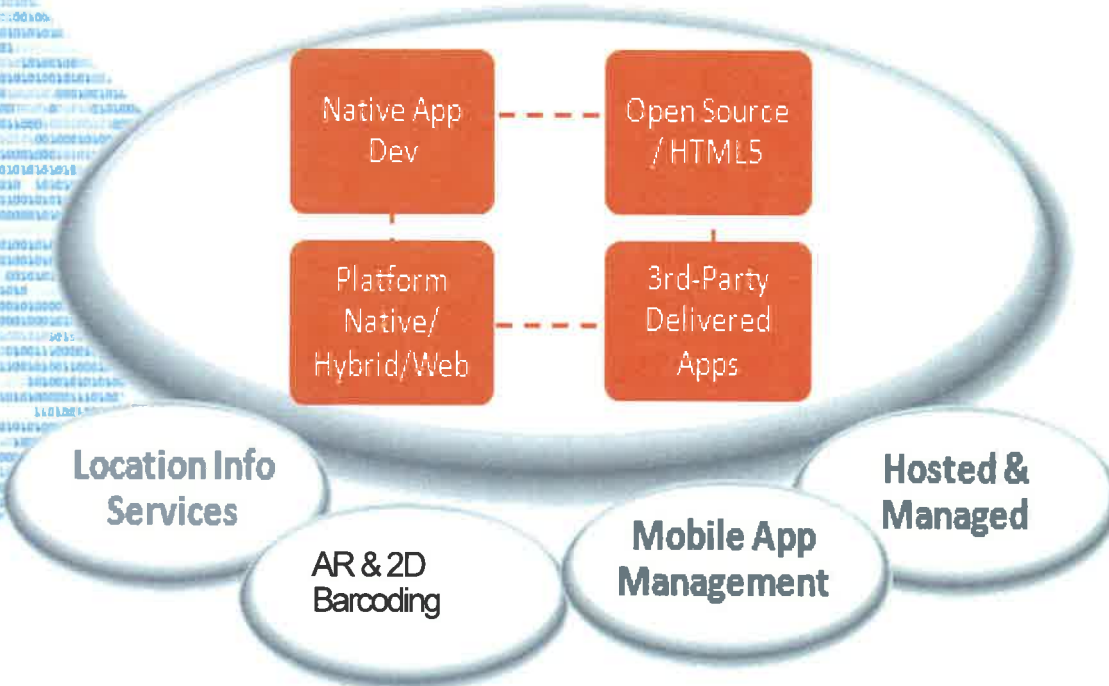


AT&T Approach & Value

Backend Platform



Mobile Application Development from AT&T



B2E / B2C / B2B Applications

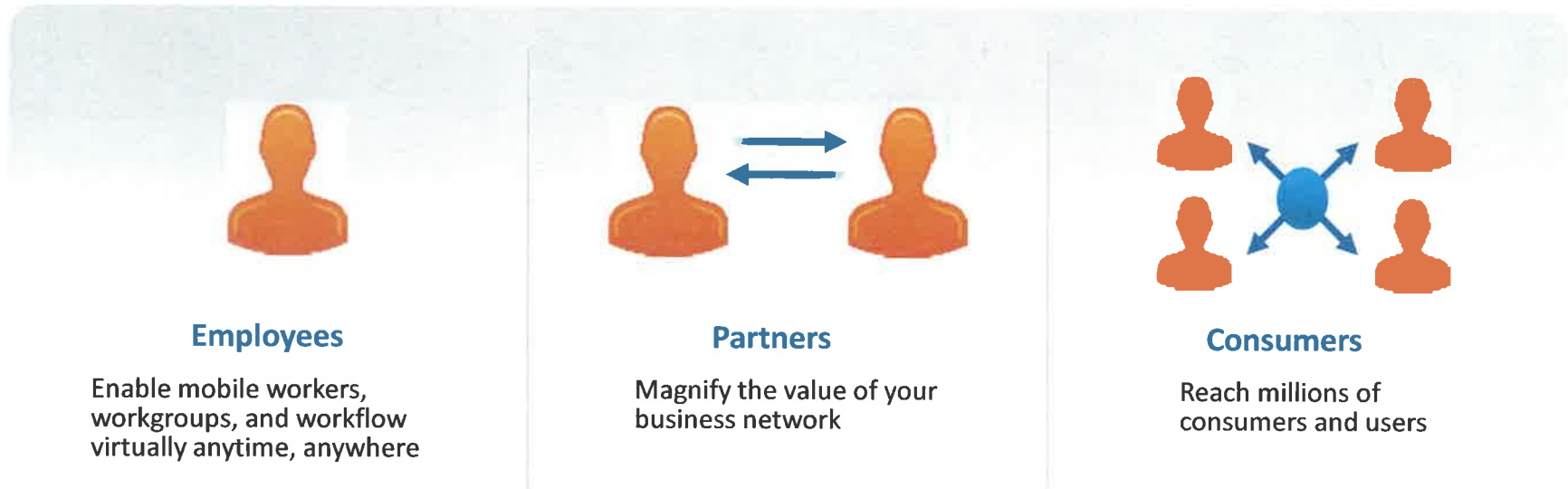


Multiple OS & Access Points

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Delivering Applications to a Wide Range of Users



Supports a state of the art user experience

HTML 5

Consumer-inspired design

Interactive navigation

Intuitive decision making

“Mobile Application Development in the enterprise can only be successful if it is agile enough to tailor itself for the business requirements”

Sources: Mobile Enterprise – white paper (It’s all in the app, November 2012)

Delivers End-to-end Mobility Solutions



AT&T Government/Education Projects



Inaugural 2013



Amtrak



California Lottery



FEMA



University of South Florida



DNC



Saint Louis University



Kern County, CA



RNC



Penn State



St. Louis Science Center



SD County Emergency



State of Colorado



Maryville University



State of Washington



State of Kansas



Bowling Green, KY



And many more...

Industry Buzz About Mobility Solutions by AT&T



AT&T is an “End-To-End Provider of Mobility Solutions, Application Development, Device Management, and Security Solutions.”

Forrester, "Market Overview: Mobility Services," March 2012



Frost & Sullivan 2012 North American Mobile Network Product Line Strategy Award



Frost & Sullivan: 2013 Best Practice Award: NA Mobile Sales Force Automation Competitive Strategy Leadership Award, February 2013



AT&T Rated "Excellent," the Top Ranking in Gartner's Critical Capabilities for Managed Mobility Services Report

Gartner, "IT Services for Machine-to-Machine Communications, US 2012," October 2012

“AT&T leads the U.S. market in terms of net connected devices, and plays a similar role globally, leveraging its roaming relationships to provide connectivity in over 200 countries.”



“My view is that AT&T's Advanced Mobility Solutions strategy is mastering the ecosystem and its evolution..”

ABI Research, 07/12, "AT&T Enterprise Mobility Solutions – Creating a Core Competency in the Ecosystem, Not Just the Network."



Enterprise Developers Choose AT&T as the “Most Effective” Vendor for Mobile Application Development Services

01/12 - IDC - "Brand Recognition: U.S. Companies Rank AT&T, Verizon, and IBM as Top 3 Vendors for Mobile Application Development Services"



AT&T is a “Leader,” the Highest Ranking Possible in the 2012 US Enterprise Mobility Services, Global Managed Mobility Services, and Global M2M Services Ranking Reports

"Global Managed Mobility Services 2013: Who's on Top?" Current Analysis, January 2013



“Among Competing Operators, We Consider AT&T The Furthest Along In Becoming A Key Supplier For Mobility For The Enterprise.”

AT&T Brings Toggle To IOS – Outlines Plan To Serve The Mobile Enterprise, 451 Research



Citizen Demands for Mobility

- 33% of the market does not own a landline phone
- Cellular penetration rates over 100% in the United States
- 80% of time spent is in a mobile app
- Smartphone penetration at 65-75% penetration
- \$25 Million Invested in End User Devices in Kanawha County
 - 65% Penetration / \$200 Device



Project Vision

Creating a Kanawha County Citizens Emergency mobile solution to...

Native Mobile application

AT&T will leverage native application development technologies to deploy the mobile app on smartphone devices.

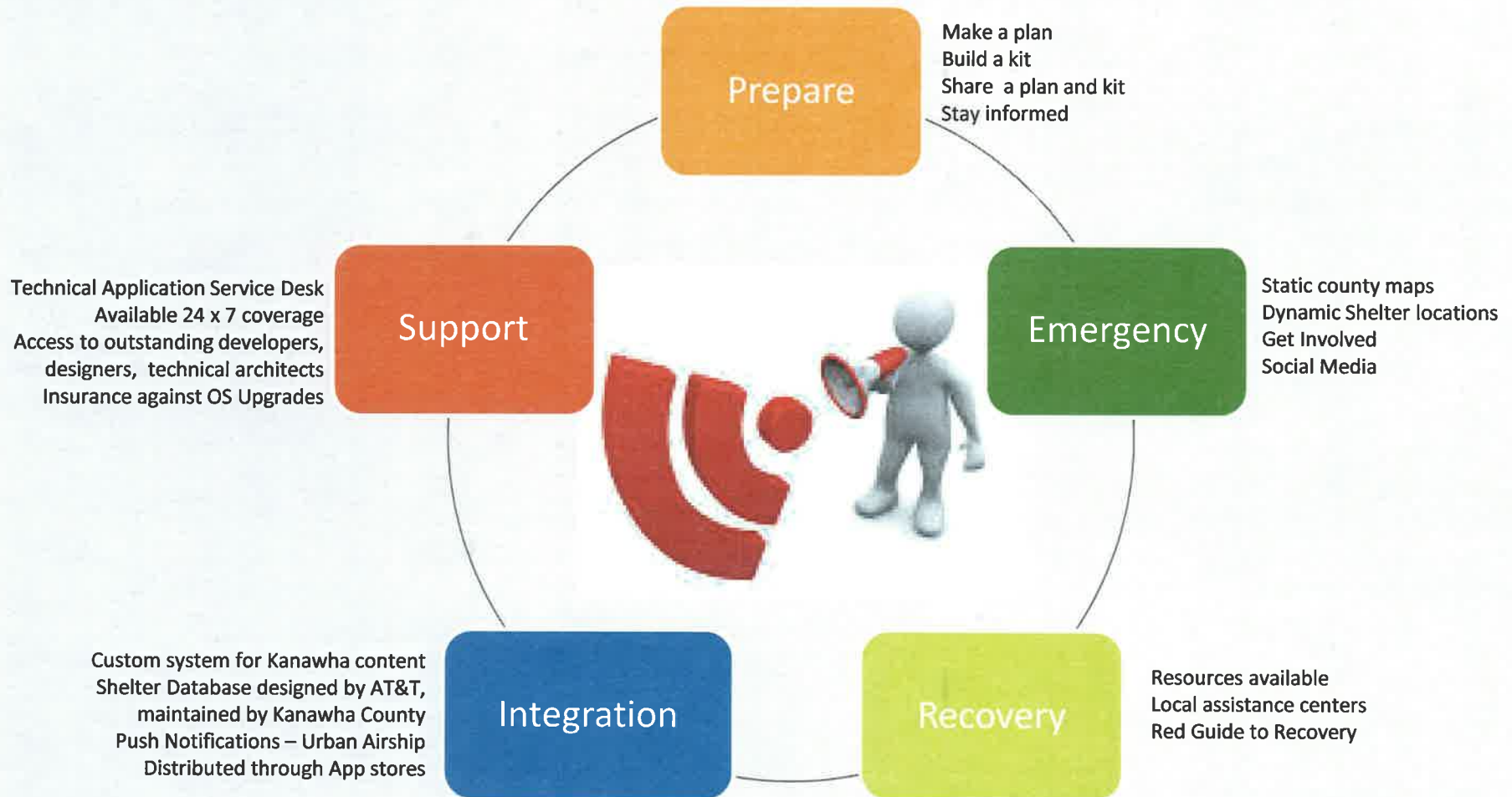
- Built for iPhone and Android smartphones
- Enables citizens to prepare for disasters
- Improves communication with citizens



A tool to improve planning, preparation, and response to natural disasters



Project Vision – Emergency app



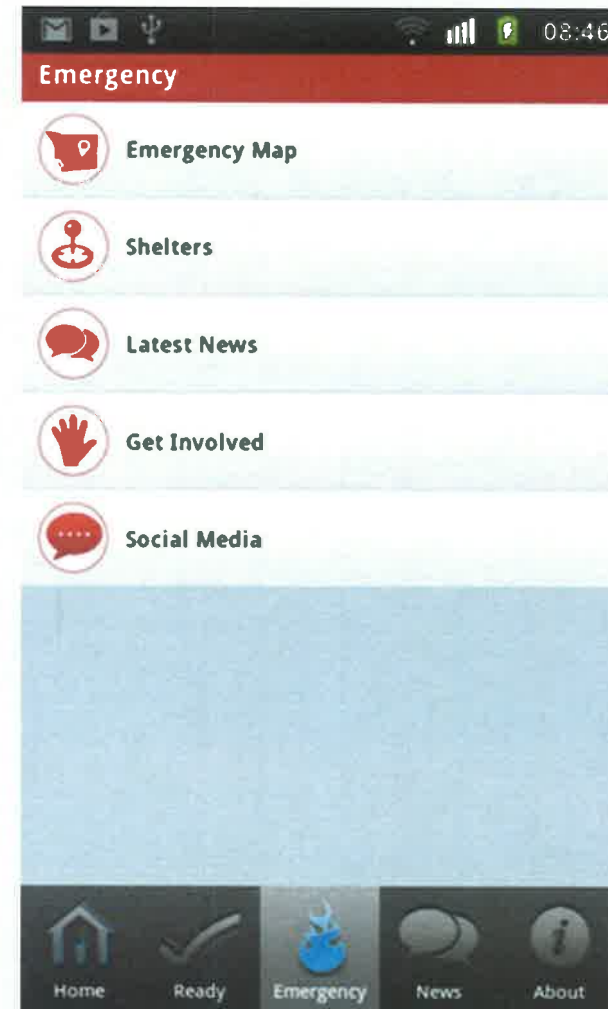
UX Concepts Screen

Emergency information and sharing

A visual concept mockup

The app is designed to provide simple screen displays to the Kanawha County citizens that provides important information they need.

1. Provide easy access to options
2. Find Shelter locations
3. Share updates with Social Media



Main Screen

Launches Ready Page



Ready Kanawha
Plan, Prepare

Launches Emergency Page



Emergency
News, Maps, Shelters

Launches Recovery Page



Recovery
Resources, Assistance, Guidance

Displays latest Media Release

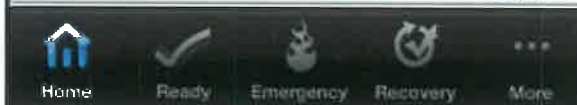


Updated 9-14-2004 3:45PM
All Shelter Locations will be open until 9PM through Friday 9/19

Links to External Web Pages And Mobile Apps



Sponsored by: Your Log and Link



Ready Screen

Static Content Provided by KC



Prepare for Disasters

Operates as Today



Make a Plan

Operates as Today



Build a Kit

Static Content Provided by KC
Full PDF also downloaded in
subscreen



Stay Informed

Static Content Provided by KC



Get Involved

Removed



Community Readiness



Emergency Screen

Static Sector Map that can be drilled down for Evacuation Routes → **Emergency Map** ← Label Could be changed

Dynamic List of Shelters maintained Through website provided by AT&T → **Shelters**

Removed → **Latest News**

Static Content Provided by KC → **Get Involved**

Facebook and Twitter links to KC Pages → **Social Media**



Recovery Screen

Static Content Provided by KC



Resources

Static Content Provided by KC

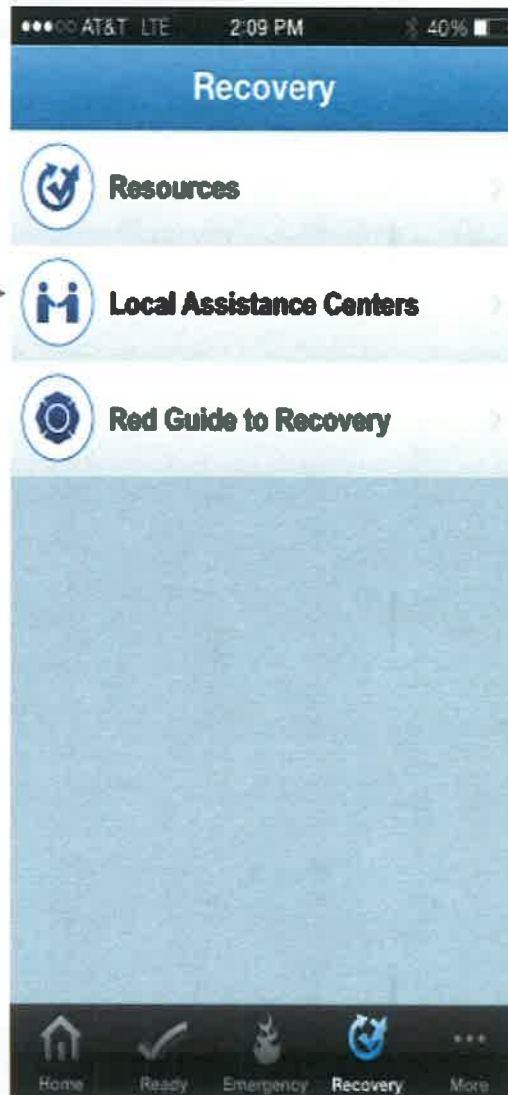


Local Assistance Centers

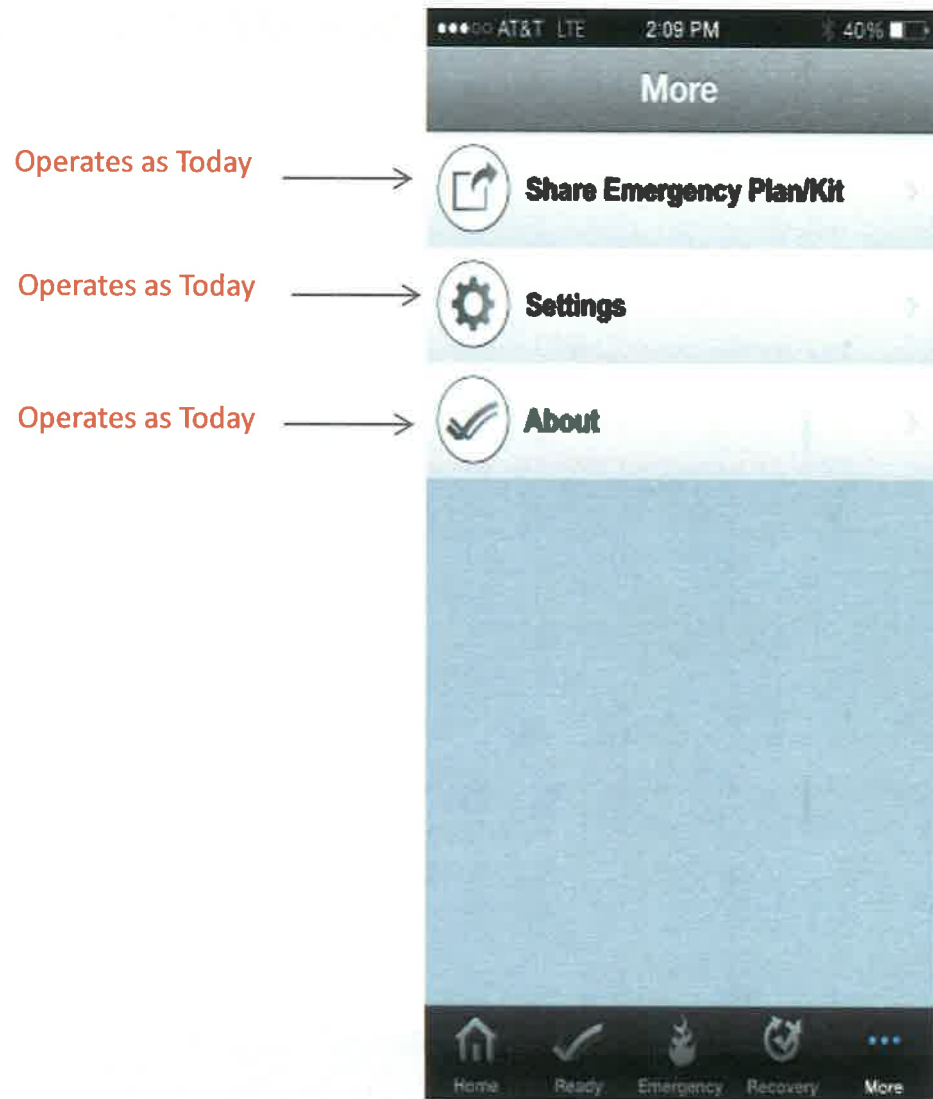
Operates as Today



Red Guide to Recovery



More Screen



Platinum Application Development Support Package

- Standard support hours are 24x7.
- Access to AT&T's outstanding, developers, designers and technical architects to identify and resolve any code-related issue
 - Support hours include any support activity performed by Application Service Desk, Service Assurance and Application Development. This also includes code development and QA required to fix any code related issues.
 - For non-AT&T hosted solutions, does not include change management support required to deploy any code changes
- Platform Updates
 - Assessment of required update included. However, Professional Services are not included as part of this service
 - Application related services not included (requires Change Management process)
 - Any event requiring planning, preparation, and coordination of activities associated with deploying a new build in the production environment will be supported at an additional charge and determined by required time and effort.
 - Assumes access/remote access available to customer's systems and does not require site visit
- Access to AT&T's Application Service Desk for Technical Support
 - 90% of calls received answered within 60 seconds
 - Average call handle time 15 minutes or less
 - Percentage of calls abandoned less than 5%
- Service Level Objective metrics:
 - Severity Level 1: Response Time = 30 min
 - Severity Level 2: Response Time = 2 hours
 - Severity Level 3: Response Time = 8 hours
 - Severity Level 4: Response Time = 24 hours



About Use of Urban Airship for Push Notifications

- County of San Diego uses Urban Airship
 - Over 3 million Push Notifications in latest incidents...without issues
- Contract Direct with Urban Airship
- Code Integrated into Mobile App
- Dedicated Infrastructure to handle Billions of Push Notifications



Urban Airship



Project Cost

Solving Kanawha County emergency preparedness needs

Application Development

\$65,000 One Time Charge

Application Support – Platinum 24/7 + iOS and Android OS Upgrade Support

\$15,000 Annually

Push Notification Hosting Charges – Urban Airship List Pricing

First 1 Million Push Notifications – Free

Additional Push Notifications - \$.001 per recipient message

Hosting – Emergency Shelter Admin and Database

Rackspace.com - \$100 - \$250/month depending on options. Priced at \$140/month for “standard” setup

AT&T – Working on a quote



Thank You!





Dale A. Petry, Director
C.W. Sigman, Deputy Director

407 VIRGINIA STREET, EAST
P.O. BOX 3627
CHARLESTON, WV 25336

Office: (304) 357-0966
Fax: (304) 357-0788
www.kanawha.us

December 5, 2014

Thank you for helpful assistance as we seek to fund an important public warning tool. Like many other communities and political jurisdictions, and the proliferation of smartphones, we see the value of putting timely emergency public warning and information into the hands of the citizen, as well as certain key resources useful during an emergency information.

Over the last decade, my office has exploited emerging technology to enhance, and add layers of redundancy to, public warning assets. For instance, we have purchased a reverse-911 system that not only dials massive landline subscribers in a short time, it also allows wireless and email users to opt-into our database. More recently, we have increased the presence of our outdoor warning system, growing the network from forty-seven to fifty-nine sirens. In key locations, we've placed newer siren technology capable of public address announcements.

We have invested much of this year researching how to best deliver critical information directly to each citizen. We've developed a concept for a smartphone application (app) in which functionality follows form; an idea for an app that is sensible and ergonomic, but would powerfully deliver key information and resources with a finger touch.

We consider it imperative that such an app be rock-solid in performance and not merely a presence. Therefore, we believe we've found the right vendor to develop our app, on both Apple and Android platforms with functional integrity. However, we are limited by our own financial resources.

Of course, once the app is developed and hosted for free download, it will not be successful without an impactful rollout that includes, among other facets, a multimedia campaign to raise awareness so that the entire population is aware of this resource and seeks it out.

As you know, ours is a large county and home to several significant hazards, both natural and manmade. Timely warning of potential or developing emergencies is one of our core responsibilities. We consider the deployment of app technology to be an important project to enhance the safety of the population we serve and I thank Bayer for careful consideration for a \$60 thousand dollar contribution to help make this a reality.

Sincerely,

JOHN OWEN

From: Gene Shepherd <Gene.Shepherd@kcmo.org>
Sent: Monday, December 22, 2014 3:58 PM
To: Connie Stewart; JOHN OWEN
Subject: Kansas City Mass Notification Marketing Campaign

Connie and John,

Your request for more information regarding the proposed mass notification system marketing campaign is understood and appreciated. Unfortunately we have not developed a fully scoped marketing strategy and must abide by City policies and processes for contract solicitation, therefore we are unable to provide you with a third party quote for the project at this time.

However, the City has undertaken similar marketing campaigns for other services and projects that can be looked at to get an idea of types of media outlets and estimated costs for a project such as this.

One example is a recent Parks and Recreation Department marketing campaign for one of the City's entertainment venues with the following project costs:

Target Cable Ads	6 weeks	\$13,725
Radio Traffic Sponsorships	3 weeks	\$7,240
Outdoor Billboards	4 weeks	\$3,590
Gas Pump Toppers	8 weeks	\$3,388
Frozen Billboards	4 weeks	\$2,717
Facebook Ads	6 weeks	\$500
TV Production		\$10,000
Photo Shoot & Image Licensing		\$5,000
Out of Home Creative Services		<u>\$3,840</u>
Total		\$50,000

In addition to costs similar to those listed above this project may also include the development and production of written pamphlets to be handed out at public events, advertising on metro buses, and other possible strategies. This campaign will be structured to ensure that the widest audience possible, including vulnerable populations, are aware of and motivated to sign up for emergency notices via the City's enhanced mass notification system. We are confident that our proposed budget of \$75,000 will provide the funds necessary to ensure a comprehensive and successful marketing project.

Hopefully this information, combined with the project details outlined in my previous email, will sufficiently address your request for further information. I look forward to working with you on this funding effort to increase public safety for the citizens of Kansas City, Missouri. If you have further questions, please let me know. Thank you for your consideration of support for this endeavor.

Gene

CITY OF FOUNTAINS
HEART OF THE NATION



KANSAS CITY
MISSOURI

Office of Emergency Management

635 Woodland, Suite 2107
Kansas City, Missouri 64106



Phone (816) 513-8600

December 4, 2014

Dear Connie,

In follow up to our phone call this morning below is a brief synopsis of the mass notification implementation and outreach campaign being proposed in Kansas City Missouri. This project would significantly enhance the safety of the citizens of Kansas City.

The project is related to the future implementation of a mass notification system that will be used to alert our community to important emergency information.

While we are currently using the Nixle notification system to alert our citizens of advisories and community messages it is not capable of issuing true emergency alerts. To address this city of Kansas City has purchased Nixle 360 and is in the process of upgrading to the enhanced system. Upgrading to Nixle 360 will allow us multiple ways to alert our community to emergencies of all types including hazardous materials incidents. This may include text, email and phone notifications. While this upgrade will be a great benefit to the citizens of Kansas City there is still significant work to be done to make it successful.

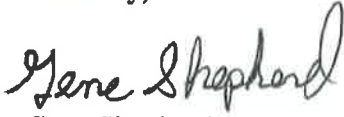
For the mass notification system to be effective the 460,000 citizens, along with visitors and area businesses of Kansas City, Missouri must be aware of the system and then sign up to receive the important notices. For various reasons, one of the known challenges to the success of any mass notification system is the initial reluctance of individuals to register to receive messages.

A way to significantly increase the number of individuals and businesses that opt into our mass notification system is through a comprehensive and targeted marketing campaign. This proposed campaign would utilize direct outreach and mass media outlets and be both informational and educational in nature. Part of this campaign will be focused on reaching vulnerable populations within the community where early notification is critical. With an endowment of \$75,000 we could educate the public on the benefits of receiving emergency notices from the City of Kansas City, Missouri. The money would be used in various ways including marketing and outreach to effectively convey the importance of registering with our mass notification system, thus enhancing public safety.

Your consideration of this public safety project is greatly appreciated. This project will enhance the safety and security of the residents in the vicinity of the Bayer facility and also have a

positive effect on the safety of all of those who work and live within Kansas City. Again thank you for the opportunity and please do not hesitate to contact me if any further clarification or information is needed.

Sincerely,

A handwritten signature in cursive script that reads "Gene Shepherd". The signature is written in dark ink and is positioned above the printed name.

Gene Shepherd

Cc Greg Moerer, Bayer Crop Science Kansas City Mo



Gene Shepherd
Emergency Manager
Office of Emergency Management
City of Kansas City, Mo.
635 Woodland, Suite 2107
Kansas City, MO 64106
Email: Gene.Shepherd@kcmo.org
Office: 816-513-8601
Cell: 816-812-6835
Fax: 816-513-8616

Kanawha County Emergency Management Community Outreach Scope of Work

Based on discussions between Dale Petry, director of emergency services in Kanawha County, and members of the Charles Ryan Associates account services team, our firm offers the following Scope of Work for community outreach.

Kanawha County Emergency Management (OEM) is looking to evolve in 2015, and a new mobile app is at the center of that push. The OEM has \$10,000 to direct toward a community outreach campaign that would encourage residents to download the app as well as educate about the app's benefits, including the link to sign up for "Reverse 911," available on the Metro 911 website.

CRA hopes to work within that budget to manage a campaign implementing the following tactics and methods:

App Unveiling - News Conference & Earned Media

CRA would work with the County to organize and promote a media event to officially "unveil" the app. We would schedule the event shortly (within seven days) after the app launches and is available for download, which could be early spring 2015. CRA would send out a media advisory announcing the event and follow up with media to ensure coverage.

Media Kit

CRA's creative department will design and print materials for a media kit, including a fact sheet and FAQ sheet, which would be distributed during the app launch event (discussed above). CRA also would produce a news release for the kit and electronic dissemination. Included in the kit would be a DVD containing the short video produced by AT&T about the app.

Electronic Kit

CRA would produce an electronic version of the media kit for the OEM to send to various employers and others throughout the Kanawha Valley. We would prompt those employers to share with employees and others, encouraging download of the app and providing links to the County's website and app video.

Social Media

CRA would provide potential social media topics for both Facebook and Twitter posts. Topics could include teasers about the app, alerts, information about various Emergency Services programs and tips. The posts could start in early 2015 and run the duration of the app campaign.

Public Service Announcements

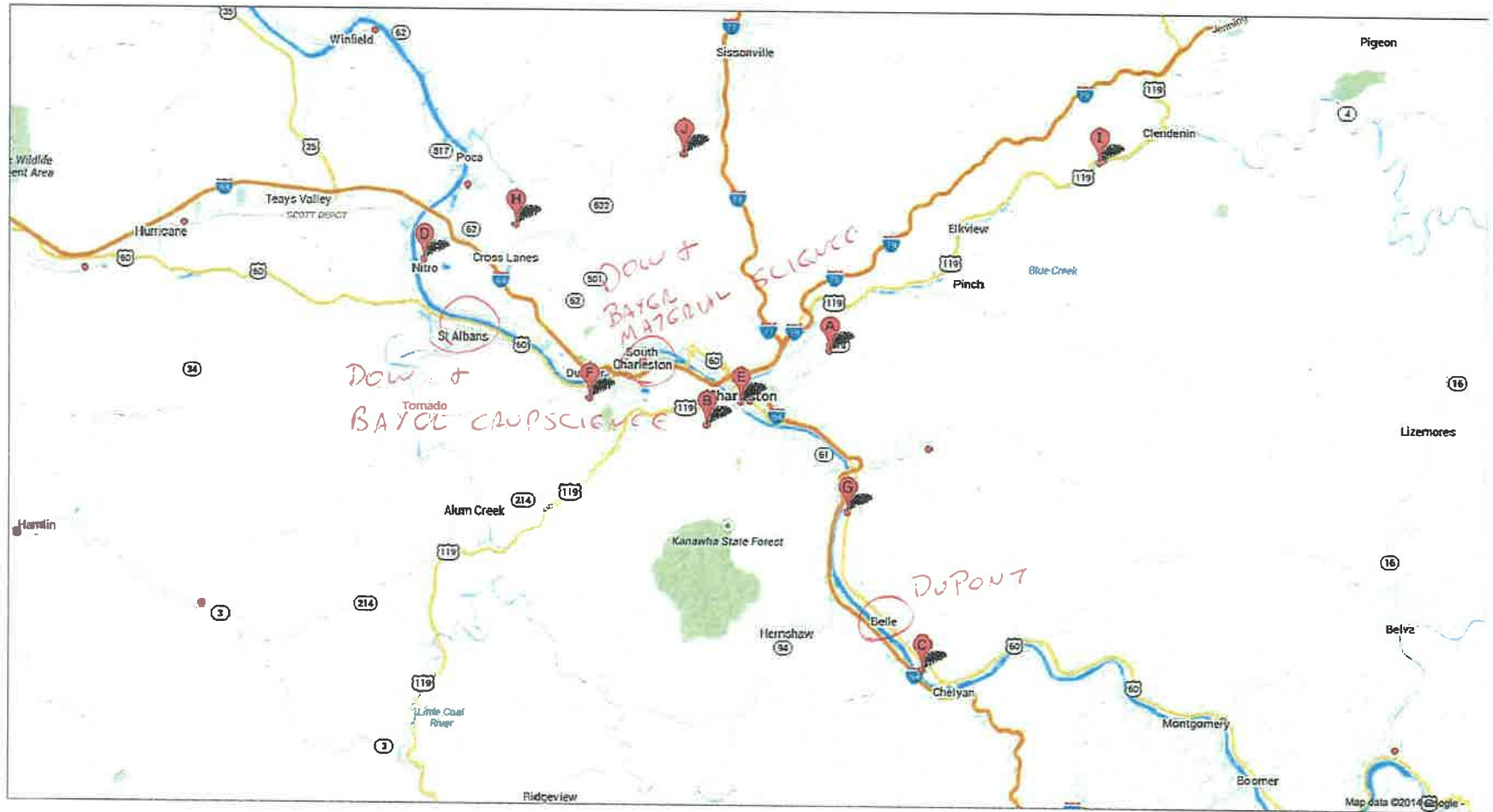
CRA would contact local television outlets and request the app video be placed in rotation.

Budget Breakdown

- App launch event and media relations \$4,000
- Media kit and electronic kit \$4,000
 - *Design* \$2,500
 - *Copywriting/Proofing* \$1,500
- Social media topic calendar \$1,000
- Media relations for PSAs \$1,000

Additional Funding Opportunities

We understand additional funds might be available in the future. CRA could use that money to organize grassroots efforts throughout the community, manage social media accounts, design online ads, buy interactive advertising, implement partnerships within the community and purchase Facebook boosts, among a variety of possibilities. We would be happy to provide more detailed strategies if the budget expands in 2015.



APPENDIX D-1

STATEMENT OF WORK SUPPLEMENTAL ENVIRONMENTAL PROJECT

Project:

Provide equipment for the Nitro Police Department to facilitate traffic control during emergency events near the Institute BCS site.

Nexus to CAA 112(r):

This SEP enhances the capabilities of local emergency responders and will facilitate quicker and more efficient responses to releases associated with emergency events. Adequate nexus is deemed to exist using categories F and G — environmental compliance promotion and emergency planning and preparedness, providing technical support to members of the regulated community in order to identify, achieve and maintain compliance with applicable statutory and regulatory requirements, and enabling organizations to fulfill their obligations under the Emergency Planning and Community Right-to-Know Act (EPCRA) to assess dangers of hazardous chemicals present, and to develop emergency response plans to better respond to chemical incidents — in the March 2015 Update to the 1998 SEP Policy. This SEP is appropriate as the primary impact of facilitating traffic control during emergency events is within the same emergency planning district as the Institute facility, and violations of Section 112 (r) of the Clean Air Act are alleged in the complaint.

Description of Project:

Purchase a trailer and equipment for the Nitro Police Department that will allow the Department to promptly provide traffic control response in the event of a major site emergency. The trailer would be used for storage and transportation of traffic control equipment for immediate response to emergencies.

Scheduling:

BCS's goal is to order the equipment for the Nitro Police Department within 90 days following the entry of the final Consent Decree or by December 1, 2015, whichever comes later. Dependent upon supplier capabilities, BCS expects delivery within a reasonable time after the order is placed.

A. \$9,500

8ft X 18ft Traffic Trailer enclosed box style. \$6000.00
Labor to install equipment into trailer and Decal. \$3500.00

B. \$5,299.80

12 - A post style collapsible barricades 6 ft. high intensity double sided. \$85.00 each, \$1020.00 total
24 - Barricade lights solar powered. \$45.00 each, \$1,080.00 total
100 - Traffic cones 36 inch orange with reflective collar. \$24.00 each, \$2,400.00 total

50 – Delineator Posts with reflective band and rubber base. \$48.00 each, \$2400.00 total.
4 – Portable speed humps 9 ft. folding with storage bags. \$199.95 each, \$799.80 total.

C. \$5,090.00

6 – Vinyl roll up signs (Road Closed Ahead, Right Left Lane Closed). \$45.00 each, \$270.00 total
4 – 6 pack Power flares, orange body with red lights and magnetic base. \$700.00 each, \$2,800.00 total.
10 – Hand held traffic wands (Night stick with yellow cone with blue and white). \$35.00 each, \$350.00 total
10 – Streamlight poly Stinger DS LED rechargeable flashlight with orange cone. \$115.00 each, \$1150.00 total
2 – 5 bank charger for Poly Stinger DS LED Flashlights. \$260.00 each, \$520.00 total.

D. \$5,069.70

12 – Motorola hand held radio batteries. \$85.00 each, \$1,020.00 total
2 – 6 bank charger for Motorola batteries. \$525.00 each, \$1,050.00 total
1 – Expandable “Police Line Do Not Cross” barricade, yellow. \$500.00 each, \$500.00 total
10 – Rain Coats Hi Vis yellow reversible black. \$139.99 each, \$1,399.90 total
20 – Reflective Vest with POLICE hi visibility yellow. \$39.99 each, \$799.80 total.
2 – Emergency shelter tents. \$150.00 each, \$300.00 total

E. \$4,409.95

1 – 3500 watt generator. \$500.00 each, \$500.00 total
8 – Whelen Surface Mount flue flash with white scene work lights. \$450.00 each, \$3,600.00 total
1 – 30 Amp Power Supply for radio and emergency lights. \$260.00 each, \$260.00 total
1 – Radio antenna. \$110.00 each, \$110.00 total
1 – Radio antenna. \$139.95 each, \$139.95 total
1 – Small refrigerator for water. \$200.00 each, \$200.00 total

TOTAL COST: Approximately \$32,170.00

APPENDIX D-2

STATEMENT OF WORK SUPPLEMENTAL ENVIRONMENTAL PROJECT

Project:

Provide communications equipment for the Saint Albans Police Department to support emergency response

Nexus to CAA 112(r):

This SEP enhances the capabilities of local emergency responders and will facilitate quicker and more efficient responses to releases associated with emergency events. Adequate nexus is deemed to exist using categories F and G — environmental compliance promotion and emergency planning and preparedness, providing technical support to members of the regulated community in order to identify, achieve and maintain compliance with applicable statutory and regulatory requirements, and enabling organizations to fulfill their obligations under the Emergency Planning and Community Right-to-Know Act (EPCRA) to assess dangers of hazardous chemicals present, and to develop emergency response plans to better respond to chemical incidents — in the March 2015 Update to the 1998 SEP Policy. This SEP is appropriate as the primary impact of responding to emergencies with improved equipment during emergency events benefits the same emergency planning district as the Institute facility, and violations of Section 112 (r) of the Clean Air Act are alleged in the complaint.

Description of Project:

The Saint Albans Police Department is requesting funding for hand held radio equipment to support emergency response activities. The hand held radios described in this statement of work are needed to expand the capabilities of radios that are currently used. Currently the Department uses radios in police cruisers (mobile radios). The radio equipment proposed, a hand held radio, will enable the St. Albans Police Department to have statewide communication with emergency responders. These hand held radios will allow the department to provide each officer, including the Reserve Officers to carry a radio on their person, thus, enabling officers to utilize radios in their vehicles as well as hand held ones. Hand held radios are able to broadcast in areas where mobile radios cannot, since the hand held radio equipment has a broader range, they will enhance and expand communication as they will act as a true statewide communication system. Due to the financial constraints of their current city budget, these hand held units are equipment that the department would not otherwise be able to purchase. This proposed equipment will assist tremendously during a chemical emergency when the department will rely on all of the communication units at the same time to assist with traffic control and other vital and necessary emergency measures.

Scheduling:

BCS's goal is to place an order for equipment for the St. Albans Police Department 90 days following the entry of the final Consent Decree, or by December 1, 2015, whichever comes later. Dependent upon supplier capabilities, BCS expects delivery within a reasonable time after the order is placed.

A. \$14,000

Eight (8) Kenwood Model TK-5310-K5 Hand Held Radios at \$1,800 each

TOTAL COST: Approximately \$14,400.00

APPENDIX E

STATEMENT OF WORK SUPPLEMENTAL ENVIRONMENTAL PROJECT

Project:

Clean out services for use by area High Schools.

Description of Project:

Provide services to be used by Kanawha County High Schools and Career Schools. Although schools may be required to manage chemicals and hazardous wastes appropriately, many lack the skills and resources to do so. This SEP will identify, remove and properly dispose of hazardous chemicals from schools as these chemicals impact children's health and communities with environmental justice concerns. Clean Harbors Environmental Services, Inc. will provide materials, labor and disposal for hazardous materials found in school chemistry and other labs. Kanawha County lists 17 High schools and Career schools which will from time to time generate waste for removal under this program. The total cost per event will be variable based on the materials, quantities, and locations of materials to be picked up, transported, and disposed of. The total cost is a budgetary estimate based on multiple events for 17 Kanawha County schools. Attached is a quote from Clean Harbors, Inc.

Nexus to CAA 112 (r):

This SEP has the potential to reduce releases and prevent hazardous materials from entering the waste stream in Kanawha County; accordingly, it will lower levels and amounts of pollution. The primary beneficiary is the community in the vicinity of the Institute plant in the Kanawha Valley which is potentially at risk. Adequate nexus is deemed to exist using categories B and C — pollution reduction, pollution prevention, reducing adverse impact to public health, and reducing overall risk to public health— in the March 2015 Update to the 1998 SEP Policy.

Scheduling:

BCS's goal is to establish a schedule for clean outs when schools are in session, taking into consideration that many schools will be closed during the summer and for holidays, but to accomplish cleanouts at the majority of the schools within 360 days of the entry of the final Consent Decree. Working in conjunction with Clean Harbors, BCS would commence the cleanouts no later than November 30, 2015, complete half of the cleanouts by June 30, 2016, and complete the remaining cleanouts by December 15, 2016.

A. \$450.00

Task 1, Lab Pack Mobilization per event

B. \$4,007.40

Task 2, Disposal - \$2,406.40 depending on the materials and quantities. See quote

Task 2, Labor, Supplies, and Equipment - \$1,351.00 depending on the materials and quantities. See quote

Task 2, Transportation – \$250.00 per event

C. \$60.00

Estimated energy fee - \$60.00 per event

D. \$5,000

Lab Personal Protection Equipment (PPE) for distribution to the schools. Typical examples include safety glasses, face shields, disposable gloves, and lab coats.

E. 17 Kanawha County School Locations

- Carver Career & Technical Education Center, Rand
- Capital High School (Charleston, West Virginia)
- Charleston Catholic High School, Charleston
- Cross Lanes Christian School, Cross Lanes (Charleston)
- Elk Valley Christian School, Elkview
- Ben Franklin Career & Technical/Vocational Center, Dunbar
- Garnet Career Center, Charleston
- Herbert Hoover High School, Falling Rock (Clendenin)
- Kanawha County Schools Academy
- Nitro High School, Nitro
- Riverside High School, Quincy (Belle)
- St. Albans High School, St. Albans
- Sissonville High School, Pocatalico (Charleston)
- South Charleston High School, South Charleston
- South Charleston Christian Academy, South Charleston
- George Washington High School, Charleston
- University Collaborative School, Institute

TOTAL COST: Approximately \$161,795.80



Clean Harbors Environmental Services, Inc.
4879 Spring Grove Avenue
Cincinnati, OH 45232
www.cleanharbors.com

November 4, 2014

Attn: Mrs. Connie Stewart
Bayer Crop Science
100 Bayer Road
Building 14
Pittsburgh, PA 15205

Quote #2033612, Bayer Cropscience, Institute, WV

Dear Mrs. Stewart:

Thank you for considering Clean Harbors Environmental Services, Inc. (Clean Harbors) for your laboratory chemical waste management needs. We are pleased to provide you with the following pricing. Additionally, Clean Harbors has the appropriate permits and licenses for the acceptance and disposal of the waste streams identified within this quotation.

In addition to providing laboratory chemical management services and disposal to our company owned and operated facilities, Clean Harbors offers a broad range of environmental services including:

- Waste Transportation & Disposal
- Laboratory Chemical Packing
- Field Services
- 24-Hour Environmental Emergency Response
- Industrial Services
- InSite Services

I look forward to continuing to service your environmental needs. To place an order, please contact our Customer Service group at 800.444.4244. If you have any questions or need further assistance, you may reach me at the number below.

Sincerely,

James A Gintz
Cleanpack Specialist
Phone: 513.681.5738



November 4, 2014
Clean Harbors, Quote #2033612

Page 2 of 5

QUOTE SUMMARY

Description	Amount
TASK 1: LAB PACK MOBILIZATION	\$450.00
TASK 2: ONSITE LABOR, DISPOSAL AND TRANSPORTATION	\$4,007.40
Subtotal	\$4,457.40
Estimated Energy Fee	\$60.00
QUOTE TOTAL	\$4,517.40



TASK 1: LAB PACK MOBILIZATION

TASK 1: TOTAL LABOR, EQUIPMENT, AND MATERIAL	\$450.00
Estimated Energy Fee	\$0.00
Estimated total, including Fees	\$450.00

TASK 2: ONSITE LABOR, DISPOSAL AND TRANSPORTATION

DISPOSAL

Profile/Waste Code	Waste Description	Qty	UOM	Price	Total
LCCR	LABPACK FOR INCINERATION	2	55 gallon drum	\$203.00	\$406.00
LCCR	LABPACK FOR INCINERATION	1	30 gallon drum	\$193.00	\$193.00
LCCR	LABPACK FOR INCINERATION	3	16 gallon drum	\$121.80	\$365.40
LCCR	LABPACK FOR INCINERATION	5	5 gallon pail	\$82.00	\$410.00
LCHG2	LABPACK ELEMENTAL MERCURY FOR RETORT	1	5 gallon pail	\$437.00	\$437.00
LCHG4	LABPACK MERCURY SALTS AND SOLUTIONS FOR RETORT	1	5 gallon pail	\$437.00	\$437.00
LRCT	LABPACK REACTIVES FOR INCINERATION	1	pounds	\$13.20	*\$158.00
Total					\$2,406.40

*The following minimum price(s) will apply:

Profile/Waste Code	UOM	Minimum Price
LRCT	55 gallon drum	\$158.00

LABOR, SUPPLIES, AND EQUIPMENT

Amount	Description	Qty/UOM	Days	Price	Total
1	Chemist	5 hour	1	\$45.00	\$225.00
1	Lead Chemist	5 hour	1	\$45.00	\$225.00
1	Box Truck	5 hour	1	\$64.00	\$320.00
2	Standard Clean Pack PPE	1 each	n/a	\$0.00	\$0.00
3	16 Gal / 70 L Poly Drum 1H2/Y56/S	1 each	n/a	\$40.00	\$120.00
1	30 Gal / 120 Litre Poly Drum 1H2/Y142/S	1 each	n/a	\$45.00	\$45.00



Amount	Description	Qty/UOM	Days	Price	Total
8	5 Gal / 20 Litre Poly Drum 1H2/Y1.5/60	1 each	n/a	\$22.00	\$176.00
2	55 Gal / 205 Litre Open Head Poly, Reconditioned Drum 1H2/Y2	1 each	n/a	\$50.00	\$100.00
4	Vermiculite 4 cuft	1 bag	n/a	\$35.00	\$140.00
				Total	\$1,351.00

TRANSPORTATION

Dispatch Location	Price UOM	Total
Cincinnati, OH Hub	\$250.00 pickup	\$250.00

TASK 2: TOTAL ESTIMATE	\$4,007.40
Estimated Energy Fee	\$60.00
Estimated total, including Fees	\$4,067.40

GENERAL CONDITIONS

- Except where superseded by an existing services agreement the following terms and conditions apply to this quoted business.
- Prices firm for 30 days.
- Terms: Net 60 Days
- Interest will be charged at 1.5% per month or the maximum allowed by law for all past due amounts.
- Local, state and federal fees/taxes applying to the generating location/receiving facilities are not included in disposal pricing and will be added to each invoice as applicable.
- Materials subject to additional charges if they do not conform to the listed specifications.
- Electronically submitted profiles will be approved at no charge. Paper profiles will be charged at \$75.00 each.
- Compressed gas cylinders requiring special handling due to inoperable valves will be assessed an additional charge of \$400.00 per cylinder. Cylinders larger than medium size will be quoted case by case. This charge may be sent as supplemental invoice.
- A variable Energy Fee (that fluctuates with the DOE national average diesel price), currently at 24.0%, will be applied to transportation items only. For more information regarding our energy fee calculation please go to: www.cleanharbors.com/recoveryfee.
- Pickups that require same day or next day service may be subject to additional charges.
- Pickups cancelled within 72 hours of scheduling will be subject to cancellation charges.



GENERAL CONDITIONS

- Transportation charges to the final disposal facility will be charged in addition to local transportation to our truck to truck hub/local facility and will vary with logistics and routing.
- Time over eight (8) hours in the normal workday and all day Saturday is considered overtime and will be billed at 1.5 times the applicable straight time rate for all billable personnel unless otherwise quoted. Sunday and Holidays are considered premium time and will be billed at 2.0 times the applicable straight time rate for all billable personnel unless otherwise quoted.
- Standard disposal conversions (excluding minimums) apply to containers other than 5 gallon drums unless otherwise quoted: 6-20g 60%, 21-30g 75%, 31-55g 100%, 56-85g 145%, FBIN 350%, TOT2(<300gal TOTE) 500%, TOTE 630%.
- Final invoicing will be based upon the unit rates for those items used in performance of the services and materials shipped for disposal. In the event the unit price of an item required for proper performance of service is not listed in this quotation, the item will be invoiced at list pricing.
- In the event that legal or other action is required to collect unpaid invoice balances, Customer agrees to pay all costs of collection, including reasonable attorneys' fees, and agrees to the jurisdiction of the Commonwealth of Massachusetts.

ACKNOWLEDGEMENT

Your signature below indicates your acceptance of the pricing and terms detailed in the quote above.

Thank you for the opportunity to be of service.

Signature	PO#	Date
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Print Name

Quote # 2033612

Container	Chemical	Quantity
1	(ethylenedinitrilo)tetra-acetic acid disodium salt	100 g
2	? Ether	1 lb
3	?amine	200 g
4	0-nitrophenol	500 g
5	0-toluidine	100g
6	1-(2-pyridylazo)-2-naphthol	5 g
7	1,1,2,2-tetrabromoethane	unlisted or illegible quantity
8	1,2-dichloroethane	946 mL
9	1,2-dichloroethane	946 mL
10	1,2-dichloroethane	946 mL
11	1,2-propanediol cyclic carbonate	1 kg
12	1,3-dihydroxynaphthalene-3,6-disulfonic acid	unlisted or illegible quantity
13	1,4-dioxane	473.2 mL
14	1,6 hexanediamine	200 g
15	1-amino-4-nitronaphthalene	unlisted or illegible quantity
16	1-aminobenzothiozole	20 g
17	1-bromobutane	500 g
18	1-bromonaphthalene	100 g
19	1-bromonaphthalene	100 g
20	1-chloro-2-methylpropane	100 mL
21	1-ethylquinolinium iodide	100 g
22	1-hexadecanol	25 g
23	1-iodo-3-nitrobenzne	unlisted or illegible quantity
24	1-iodo-4-nitrobenzene	100 g
25	1-iodo-4-nitrobenzene	100 g
26	1-iodo-4-nitrobenzene	100 g
27	1-iodopentane	unlisted or illegible quantity
28	2,2,2-nitrilotriethanol	1 kg
29	2,2,2-nitrilotriethanol	unlisted or illegible quantity
30	2,2,4,4,6,6,hexanitrodiphenylamine	200 g
31	2,2-oxydiethanol	500 g
32	2,4,5-trichlorophenol	unlisted or illegible quantity
33	2,4-dichloro-1-naphthol	100 g
34	2,4-dichlorobenzaldehyde	100 g
35	2,4-dinitro-1-naphthol-7 sulfonic acid	unlisted or illegible quantity
36	2,4-dinitrofluorobenzene	25 mL
37	2,4-dinitro-phenylhydrazine	100 g
38	2,4-dinitro-phenylhydrazine	100 g
39	2,4-dinitro-phenylhydrazine	100 g
40	2,4-dinitro-phenylhydrazine	100g
41	2,4-toluenediamine	unlisted or illegible quantity
42	2,5-dichloro-3,6-dihydroxy-p-benzoquinone	unlisted or illegible quantity
43	2,5-dichloroaniline	300 g
44	2,5-dihydrothiophene-1,1-dioxide	500 g
45	2,5-dimethyl-p-quinone	unlisted or illegible quantity
46	2,5-dimethyl-p-quinone	unlisted or illegible quantity
47	2,5-toluenediamine dihydrochloride	25 g
48	2,6-dibromoquinone-chloroimide	unlisted or illegible quantity
49	2,6-dibromoquinone-chloroimide	unlisted or illegible quantity
50	2,6-dichloreindophenol sodium salt	5 g
51	2-amino-9-fluorenone	10 g
52	2-aminopyridine	100 g
53	2-bromo-4-methylacetanilide	25 g
54	2-bromoacetophenone	100 g
55	2-bromoacetophenone	unlisted or illegible quantity
56	2-chloro-2-butene	25 mL
57	2-heptanone	unlisted or illegible quantity

58	2-hydroxyacetanilide	100 g
59	2-iodoaniline	25 g
60	2-iodoquinoline	25 g
61	2-methylactic acid	25 g
62	2-naphthol	100g
63	2-nitro-6-chlorotoluene	unlisted or illegible quantity
64	2-nitrobiphenyl	100 g
65	2-octanone	1 kg
66	2-pentanol	1 kg
67	2-thiobarbituric acid	unlisted or illegible quantity
68	3,3,5-tetrabromo-m-cresolsulfonephthalein sodium salt	5 g
69	3,4-dimethylphenol	500 g
70	3,4-toluenediamine	unlisted or illegible quantity
71	3,5-dimethylphenol	100 g
72	3,5-dinitro-o-cresol	unlisted or illegible quantity
73	3,5-dinitrosalicylic acid	unlisted or illegible quantity
74	3'-aminoacetophenone	unlisted or illegible quantity
75	3-heptanone	3 kg
76	3-iodoaniline	10 g
77	3-methylcyclohexanone	600 g
78	3'-nitroacetophenone	100 g
79	3-nitrophthalic acid	500 g
80	3-nitrosalicylic acid	unlisted or illegible quantity
81	3-pentanol	100 g
82	3-picoline-N-oxide	20 g
83	3-picoline-N-oxide	50 g
84	4(p-nitrophenylazo)resorcinol	unlisted or illegible quantity
85	4-(p-nitrophenylazo)resorcinol	10 g
86	4-(p-nitrophenylazo)resorcinol	25 g
87	4-(p-nitrophenylazo)resorcinol	25 g
88	4-aminoacetophenone	unlisted or illegible quantity
89	4-aminoantipyrine	50 g
90	4-aminobenzophenone	unlisted or illegible quantity
91	4-bis(dimethylamino)benzophenone	unlisted or illegible quantity
92	4-chloro-2-nitroaniline	1 lb
93	4-dihydroxyethyl-amino-1-hydroxy-benzene	unlisted or illegible quantity
94	4-hydroxyacetanilide	500 g
95	5-amino-2-benzimidazolethiol	unlisted or illegible quantity
96	5-chloro-3-nitro-o-phenylenediamine	500 g
97	5-nitroquinoline	100g
98	5-phenylsalicylic acid	100g
99	6-nitroquinoline	25 g
100	8-aminoquinoline	50 g
101	8-hydroxyquinoline	25 g
102	8-hydroxyquinoline	500 g
103	8-hydroxyquinoline	500 g
104	8-hydroxyquinoline	500 g
105	acetamide crystals	1 lb
106	acetanilide	unlisted or illegible quantity
107	acetic acid glacial	20 L
108	acetyl p-anisidine	500 g
109	acetylsalicylic acid	1 lb
110	a-chloronaphthalene	473 mL
111	acid ammonium salt	25 g
112	acid cinnamic	8 oz
113	acid crotonic	unlisted or illegible quantity
114	acid formic	1/4 lb
115	acid lactic	1/4 lb
116	acid malic	unlisted or illegible quantity

117	acid malic	unlisted or illegible quantity
118	acid mandelic	1 lb
119	acid monochloroacetic	1/4 lb
120	acid pyrogalllic	5 lb
121	acid tannic	1/4 lb
122	acid tartaric	1/4 lb
123	acid thioglycollic	unlisted or illegible quantity
124	acrylamide	1 kg
125	acrylamide	500 g
126	acrylamide	unlisted or illegible quantity
127	acrylic acid	500 g
128	activated alumina	5 lb
129	adipic acid	500 g
130	adipic acid	500 g
131	agar	1 lb
132	agar	1/4 lb
133	agarose	unlisted or illegible quantity
134	alpha-ketoglutaric acid	10 g
135	albumin, egg powder	unlisted or illegible quantity
136	albumin, egg powder	unlisted or illegible quantity
137	allylthiourea	unlisted or illegible quantity
138	alpha keto glutaric acid	100 g
139	alpha keto glutaric acid	unlisted or illegible quantity
140	alpha-chloro-m-nitrotoluene	unlisted or illegible quantity
141	alpha-lactose	500 g
142	alpha-L-rhamnose	unlisted or illegible quantity
143	alpha-nitronaphthalene	25 g
144	alpha-nitronaphthalene	unlisted or illegible quantity
145	alpha-nitroso-beta-naphthol	unlisted or illegible quantity
146	ammonium bitartrate	1 lb
147	ammonium purpurate	25 g
148	ammonium sulfamate	100 g
149	ammonium tartrate	1/4 lb
150	amyl acetate	unlisted or illegible quantity
151	aniline hydrochloride	1 lb
152	aniline sulphate	300 g
153	anthranilic acid	100 g
154	anthrone	25 g
155	ascorbic acid	unlisted or illegible quantity
156	auramine hydrochloride	1 lb
157	auramine hydrochloride	300 g
158	aurin tricarboxylic acid	unlisted or illegible quantity
159	aurin tricarboxylic acid	unlisted or illegible quantity
160	aurin tricarboxylic acid	unlisted or illegible quantity
161	aurin tricarboxylic acid	unlisted or illegible quantity
162	aurintricarboxylic acid triammonium salt	unlisted or illegible quantity
163	balsam	100 g
164	balsam canada	50 g
165	barbital sodium	1 lb
166	barbituric acid	100 g
167	barium biphenylamine sulfonate	5 g
168	bentonite	1 lb
169	bentonite	1 lb
170	benzaldehyde	473 mL
171	benzamide	100 g
172	benzanilide	100 g
173	benzanilide	100 g
174	benzanilide	100g
175	benzhydrol	50 g

176	benzidine dihydrochloride	1/4 lb
177	benzidine hydrochloride	25 g
178	benzoin	100 g
179	benzoin	100 g
180	benzophenone	2 kg
181	beta naphthol	unlisted or illegible quantity
182	beta-alanine	100 g
183	beta-nitroso-alpha-naphtho	unlisted or illegible quantity
184	biphenyl	500 g
185	biuret	100 g
186	boileezers	250 g
187	boileezers	250 g
188	brilliant blue	50 g
189	bromothymol blue	50 g
190	brucine	100 g
191	butyl p-aminobenzoate	unlisted or illegible quantity
192	caffeine	1 lb
193	calamine	1 lb
194	calcon	250 g
195	camphor	4 oz
196	camphor gum	1 lb
197	camphor tablets	unlisted or illegible quantity
198	capryl alcohol	unlisted or illegible quantity
199	caprylic alcohol	4 oz
200	caraway	473. 18 mL
201	carbon disulfide	5 pts
202	carolina flynap	unlisted or illegible quantity
203	carolina flynap	unlisted or illegible quantity
204	castile soap	1 lb
205	chloramine-T	5 lb
206	chloranil	250 g
207	chlorobenzene	1 gallon?
208	chlorobenzene	1 gallon?
209	chlorobenzene	1 gallon?
210	chlorobenzene	1 gallon?
211	cholesterol	unlisted or illegible quantity
212	cinchonine	100 g
213	cinchonine	100 g
214	cinnamic aldehyde synthetic	1 oz
215	cis-4-cyclohexene-1,2-dicarboxylic anhydride	unlisted or illegible quantity
216	citric acid	1 lb
217	citric acid	1 lb
218	collodion	1 lb
219	cotton seed oil	1 qt
220	creatinne zinc chloride	unlisted or illegible quantity
221	creosol red	50 g
222	cresol	1 lb
223	crotonaldehyde	unlisted or illegible quantity
224	crotyl chloride	25 g
225	cryolite	unlisted or illegible quantity
226	crystal viol et solution	500 g
227	crystal violet	10 g
228	cyclopentanol	100 g
229	cyclopentanol	100 g
230	d(-)levulose	500 g
231	d(+)-galactose	unlisted or illegible quantity
232	d-(+)-galactose	unlisted or illegible quantity
233	D(+)-trehalose dihydrate	25 g
234	demethylaminobenzaldehyde	100 g

235	dextrin	1 lb
236	dextrin	500 g
237	dextrine	500 g
238	dextrose	unlisted or illegible quantity
239	d-fructose	unlisted or illegible quantity
240	diacetyl	100 g
241	dibutyl phthalate	unlisted or illegible quantity
242	diethyl ethylmalonate	unlisted or illegible quantity
243	diethylamine	1 lb
244	diethylamine	1 pt
245	diethylamine	1 qt
246	diethylcarbamoyl chloride	100 g
247	digitonin	100 g
248	dimethylaniline	1 lb
249	dimethyldihydroresol	unlisted or illegible quantity
250	dimethyldioxime	200 g
251	dimethylglyoxime	100 g
252	diphenyl carbonate	100 g
253	diphenylacetic acid	100 g
254	diphenylamine	100 g
255	diphenylamine	2 lb
256	diphenylamine	200 g
257	diphenylamine-sulfonic acid sodium salt	5 g
258	diphenylthiocarbazon	unlisted or illegible quantity
259	diphenylthiocarbazon	unlisted or illegible quantity
260	diphenylthiocarbazon	unlisted or illegible quantity
261	diphenylthiocarbazon	unlisted or illegible quantity
262	disodium dihydrogen ethylenediaminetetraacetate dihydrate	unlisted or illegible quantity
263	dl alanine	100 g
264	DL-iso-leucine	unlisted or illegible quantity
265	DL-lactic acid	500 mL
266	DL-lactic acid	500 mL
267	dodecylamine	500 g
268	d-sorbitol	10 g
269	d-tartaric acid	1/4 lb
270	emersol 233 L L oleic	unlisted or illegible quantity
271	epinephrine	5 g
272	ethanolamine	500 ml
273	ethyl benzene	unlisted or illegible quantity
274	ethyl propionate	unlisted or illegible quantity
275	ethyl sulfate	500 mL
276	ethyl sulfate	500 mL
277	ethylene bromide	1 lb
278	ethylene cyanohydrin	unlisted or illegible quantity
279	ethylene dichloride	32 oz
280	ethylene dichloride	32 oz
281	ethylene dichloride	32 oz
282	ethylene dichloride	32 oz
283	ethylhexadecyldimethyl ammonium bromide	500 g
284	ethylhexadecyldimethyl ammonium bromide	500 g
285	ethylhexadecyldimethyl ammonium bromide	500g
286	ethylhexylamine	5 g
287	fehling solution	3 lb
288	film remover (contains isopropanol)	1 qt
289	film remover (contains isopropanol)	1 qt
290	fluorenone	unlisted or illegible quantity
291	fluoride-thymol mixture	10 g
292	formaldehyde solution 37%	510 g
293	formic acid	1 lb

294	formic acid	1 pt
295	formic acid	500 mL
296	formin	1 oz
297	fumaric acid	unlisted or illegible quantity
298	furfural	1 lb
299	furfural	1 lb
300	furfuryl alcohol	1 kg
301	galactose	25 g
302	galactose	unlisted or illegible quantity
303	gallic acid	200 g
304	gallic acid	unlisted or illegible quantity
305	gelatin	1 lb
306	gelatine	1 lb
307	gluconic acid	1 kg
308	glycine	200 g
309	glycine	250 g
310	gum arabic	100 g
311	gumtragacanth	1 lb
312	halogenated compound	unlisted or illegible quantity
313	hexachloroethane	500 g
314	hexachloroethane	unlisted or illegible quantity
315	hexamethylenetetramine	unlisted or illegible quantity
316	histowax	453.6 g
317	hydrazine dihydrochloride	100 g
318	hydrazine dihydrochloride	unlisted or illegible quantity
319	hydrazine monohydrochloride	450 g
320	hydroxy naphthol blue, disodium salt	100g
321	hydroxy naphthol blue, disodium salt	100g
322	inositol	100 g
323	iodine monochloride	16 oz
324	iodoform	unlisted or illegible quantity
325	isoamyl nitrite	500 g
326	iso-butylamide	100 g
327	isopropyl alcohol	16 oz
328	isotin	100 g
329	itaconic acid	unlisted or illegible quantity
330	l asparagine	10 g
331	l cystine	100 g
332	l glutamine	500 g
333	l glutamine	500 g
334	L(-) cystine	unlisted or illegible quantity
335	L(-)-sorbose	unlisted or illegible quantity
336	L(+) ascorbic acid	100 g
337	L(+) aspartic acid	100 g
338	L-(+)-glutamic acid	500 g
339	L-(+)-glutamic acid	500 g
340	lactic acid	500 mL
341	lactose	453.6 g
342	lactose	453.6 g
343	lactose	453.6 g
344	lactose powder	1 lb
345	L-alanine	unlisted or illegible quantity
346	L-alanine	unlisted or illegible quantity
347	lauryl sulfate	unlisted or illegible quantity
348	levulose	100 g
349	levulose	25 g
350	L-glutamic	unlisted or illegible quantity
351	L-glutamic acid	100 g
352	linseed oil	1 qt

353	L-tyrosine	25 g
354	L-tyrosine	50 g
355	maleic acid	500 g
356	maleic acid	unlisted or illegible quantity
357	maleic anhydride	25 g
358	maleic anhydride	unlisted or illegible quantity
359	maltose	100 g
360	maltose	100 g
361	maltose	500 g
362	maltose	unlisted or illegible quantity
363	m-bromoaniline	50 g
364	m-bromobenzoic acid	100 g
365	melamine	unlisted or illegible quantity
366	menthol	28.35 g
367	menthol	unlisted or illegible quantity
368	mesityl oxide	1 kg
369	meta-diisopropenylbenzene	1 gallon
370	methyl acrylate	500 g
371	methyl benzoate	unlisted or illegible quantity
372	methyl bromoacetate	100 g
373	methyl bromoacetate	100 g
374	methyl bromoacetate	100 g
375	methyl bromoacetate	500 g
376	methyl cellosolve	1 lb
377	methyl cellulose	1 oz
378	methyl cellulose	unlisted or illegible quantity
379	methyl m-bromobenzoate	unlisted or illegible quantity
380	methyl m-bromobenzoate	unlisted or illegible quantity
381	methyl oxalate	unlisted or illegible quantity
382	methyl p-aminobenzoate	25 g
383	methyl p-hydroxybenzoate	500 g
384	methyl salicylate	1 pt
385	methyl salicylate	1 pt
386	methylamine hydrochloride	250 g
387	methylamine hydrochloride	500 g
388	methylaniline	unlisted or illegible quantity
389	methylurea	100 g
390	metol	unlisted or illegible quantity
391	mineral oil heavy	unlisted or illegible quantity
392	mineral oil heavy	unlisted or illegible quantity
393	mineral oil--light	32 oz
394	m-methoxybenzoic acid	unlisted or illegible quantity
395	m-nitroacetanilide	100 g
396	m-nitroaniline	500 g
397	m-nitrobenzoic acid	1 kg
398	monochloroacetic acid	unlisted or illegible quantity
399	monostearin (distilled)	unlisted or illegible quantity
400	morin	500 g
401	m-toluic acid	1 kg
402	m-toluidine	unlisted or illegible quantity
403	m-toluidine	unlisted or illegible quantity
404	N,N,N,N-tetramethylethylenediamine	unlisted or illegible quantity
405	n,n-diethylacetamide	unlisted or illegible quantity
406	N,N-methylene-bis-acrylamide	25 g
407	n-amyl iodide	unlisted or illegible quantity
408	naphthalamine, alpha	unlisted or illegible quantity
409	naphthol alpha	unlisted or illegible quantity
410	naphthylamine [beta] hydrochloride	25 g
411	naphthylamine [beta] hydrochloride	25 g

412	naphthylamine [beta] hydrochloride	25 g
413	naphthylamine alpha, crystal	453.6 g
414	naphthylamine, alpha	unlisted or illegible quantity
415	naphthylamine, beta resublimed	453.6 g
416	naphthylamine, beta resublimed	453.6 g
417	n-ethylaniline	100 g
418	n-heptaldehyde	unlisted or illegible quantity
419	n-hexadecane	250 g
420	ninhydrin	10 g
421	n-methylaniline	1 kg
422	n-methylaniline	1 kg
423	n-methylbenzylamine	500 g
424	NN diethylaniline	100 g
425	NN-diphenyl p-phenylenediamine	100 g
426	NN-diphenyl p-phenylenediamine	200 g
427	NN-diphenyl p-phenylenediamine	200 g
428	N-n-propylacetanilide	100 g
429	n-octylurea	10 g
430	N-phenylbenzylamine	100 g
431	N-phenylbenzylamine	unlisted or illegible quantity
432	N-phenylbenzylamine	unlisted or illegible quantity
433	N-Phenylglycine	unlisted or illegible quantity
434	o-??trotoluene	1 kg
435	o-acetotoluidide	100 g
436	o-benzoylbenzoic acid	unlisted or illegible quantity
437	o-bromophenol	unlisted or illegible quantity
438	ocalic acid	1 lb
439	o-chlorophenoxyacetic acid	unlisted or illegible quantity
440	o-chloroquinoline	100 g
441	o-creosolphtalate	50 g
442	o-creosolphtalate	50 g
443	o-cresyl benzoate	unlisted or illegible quantity
444	octyl isocyanate	unlisted or illegible quantity
445	octylurea	10 g
446	ocytl alcohol	unlisted or illegible quantity
447	o-iodosobenzli....	unlisted or illegible quantity
448	o-phenylenediamine	500 g
449	o-phenylenediamine	unlisted or illegible quantity
450	orcinol	25 g
451	organic acid	unlisted or illegible quantity
452	organic acid	unlisted or illegible quantity
453	organic acid	unlisted or illegible quantity
454	organic acid	unlisted or illegible quantity
455	o-toluidine	500 g
456	o-toluidine	unlisted or illegible quantity
457	oxalic acid	unlisted or illegible quantity
458	oxamide	100 g
459	palmitic acid	100 g
460	p-aminoacetanilide	250 g
461	p-aminoazobenzene	100 g
462	p-aminobenzoic acid	100 g
463	p-aminobenzoic acid	unlisted or illegible quantity
464	p-aminophenol	5 lb
465	pamolyn 200 hercules	unlisted or illegible quantity
466	pancreatin	100 g
467	paraform-aldehyde	1 lb
468	paraldehyde	1 lb
469	paraldehyde	unlisted or illegible quantity
470	p-benzoquinone	unlisted or illegible quantity

471	p-bromoaniline	100 g
472	p-bromoaniline	100 g
473	p-bromoanisole	unlisted or illegible quantity
474	p-bromophenyl hydrazine hydrochloride	25 g
475	p-chloromercuribenzoic acid	unlisted or illegible quantity
476	p-cresol	500 g
477	p-cresyl benzoate	unlisted or illegible quantity
478	p-dimethylaminobenzaldehyde	100 g
479	p-dimethylaminobenzaldehyde	25 g
480	p-dimethylaminobenzalrhodamine	10 g
481	p-dimethylaminobenzalrhodamine	10 g
482	p-diphenylaminesulfonic acid	unlisted or illegible quantity
483	peanut oil	1 qt
484	pentaerythritol	unlisted or illegible quantity
485	pepsin 1:3000 powder	125 g
486	p-ethylaniline	25 g
487	petrolatum	1 lb
488	phenolphthalein	16 oz
489	phenyl isothiocyanate	100 g
490	phenyl -mercuric-chloride	4 oz
491	phenyl -mercuric-chloride	4 oz
492	phenylhydrazine	500 g
493	phenylhydrazine	500 g
494	phenylhydrazine	unlisted or illegible quantity
495	phenylhydrazine hydrochloride	unlisted or illegible quantity
496	phenylhydrazine hydrochloride	unlisted or illegible quantity
497	phloroglucinol	25 g
498	phloroglucinol	25 g
499	phthalic anhydride	100 g
500	phthalic anhydride	unlisted or illegible quantity
501	phthalimide	unlisted or illegible quantity
502	phthalimide potassium salt	unlisted or illegible quantity
503	p-hydroxybenzoic acid	unlisted or illegible quantity
504	p-hydroxybenzaldehyde	unlisted or illegible quantity
505	p-hydroxybenzaldehyde	unlisted or illegible quantity
506	p-hydroxybenzoic acid	unlisted or illegible quantity
507	pimelic acid	unlisted or illegible quantity
508	p-methoxyacetophenone	500 g
509	p-nitroacetanilide	100 g
510	p-nitro-benzaldehyde	unlisted or illegible quantity
511	p-nitrobenzoic acid	100 g
512	p-nitrobenzoic acid	unlisted or illegible quantity
513	p-nitrobenzoic acid	unlisted or illegible quantity
514	p-nitrophenol	unlisted or illegible quantity
515	p-nitrophenylacetic acid	unlisted or illegible quantity
516	polyoxyethylene (20) sorbitan monolaurate	473 mL
517	polyoxyethylene (20) sorbitan monolaurate	473 mL
518	polyoxyethylene (20) sorbitan monolaurate	473 mL
519	polyoxyethylene sorbitan Tween 80 (mono-oleate)	500 g
520	potassium bitartrate	453.6 g
521	potassium carbonate anhydrous	500 g
522	potassium tert-butoxide	unlisted or illegible quantity
523	potassium tert-butoxide	unlisted or illegible quantity
524	potassium tertiary butyl alcoholate	50 g
525	potassium tertiary butyl alcoholate	unlisted or illegible quantity
526	p-phenylphenol	unlisted or illegible quantity
527	p-quinone	unlisted or illegible quantity
528	propionaldehyde	500 g
529	propionic acid	473 mL

530	propionic acid	unlisted or illegible quantity
531	propionic acid	unlisted or illegible quantity
532	propionic anhydr...	1 oz
533	p-toluenesulfonic acid	unlisted or illegible quantity
534	p-toluidine	100 g
535	p-toluidine	100 g
536	p-toluidine hydrochlde	5 lb
537	pyrene	100 g
538	pyrocatechol	unlisted or illegible quantity
539	pyrrol	unlisted or illegible quantity
540	quercetin	25 g
541	quinaniline	25 g
542	quinhydrone	1 lb
543	quinhydrone	4 oz
544	quinine	1 oz
545	quinine sulfate	1 oz
546	quinoline	473 mL
547	quinoline ethiodide	unlisted or illegible quantity
548	resin powder	1 lb
549	resorcin	453.6 g
550	rhodamine "B"	1 g
551	riboflavin	100g
552	saccharin	4 oz
553	safrole	500 g
554	salicylaldehyde	unlisted or illegible quantity
555	salicylaldehyde	unlisted or illegible quantity
556	salicylaldoxime	100 g
557	salicylamide	250 g
558	salicylamide	250 g
559	saponin	100 g
560	saponin	100 g
561	schiff reagent	946 mL
562	s-diphenylcarbazine	unlisted or illegible quantity
563	s-diphenylcarbazine	unlisted or illegible quantity
564	s-diphenylcarbazone	5 g
565	s-diphenylcarbazone	unlisted or illegible quantity
566	s-diphenylcarbazone	unlisted or illegible quantity
567	sebacoyl chloride	unlisted or illegible quantity
568	semicarbazide hydrochloride	100g
569	semicarbazide hydrochloride, crystal	100 g
570	shellac flakes orange	unlisted or illegible quantity
571	sodium acetate	unlisted or illegible quantity
572	sodium glycerophosphate	25 g
573	sodium p-dimethylamino benzene-p-carboxylate	unlisted or illegible quantity
574	soluble chloride	unlisted or illegible quantity
575	soluble starch	500 g
576	spearmint oil	16 oz
577	sperm oil	unlisted or illegible quantity
578	stearic acid	unlisted or illegible quantity
579	sterox SE	1 box 4"x3"x2" (approximate)
580	succinamide	250 g
581	succinic anhydride	250 g
582	sulfanilamide	500 g
583	sulfanilic acid	250 g
584	sulfosalicylic acid	100 g
585	temed	4 oz
586	tergitol nonionic	unlisted or illegible quantity
587	tergitol NPX nonionic	unlisted or illegible quantity
588	tert-butyl alcohol	3 kg

589	tert-butyl alcohol	3 kg
590	tetrachloroethylene	500 g
591	tetrachlorohydroquinone	100 g
592	tetrahydronaphthalene	unlisted or illegible quantity
593	tetrahydroxy-p-benzoquinone	unlisted or illegible quantity
594	tetramethyl-ammonium hydroxide pentahydrate	25 g
595	tetramethyldiamino-diphenylmethane	unlisted or illegible quantity
596	tetramethyldiamino-diphenylmethane	unlisted or illegible quantity
597	tetra-n-butylammonium iodide	25 g
598	tetra-n-butylammonium iodide	25 g
599	thiamine hydrochloride	500 g
600	thimerosal	10 g
601	thimerosal	10g
602	thioacetamide	250 g
603	thioacetamide	500 g
604	thioacetamide	unlisted or illegible quantity
605	thiocarbanilide	250 g
606	thiocarbanilide	unlisted or illegible quantity
607	thionyl chloride	100 g
608	thionyl chloride	100g
609	thiourea	100 g
610	thiourea	453.6 g
611	thymol	113.4 g
612	thymol	113.4 g
613	trans-stilbene	100 g
614	triacetin	473 mL
615	tricarboxylic acid	unlisted or illegible quantity
616	trichloroacetic acid	unlisted or illegible quantity
617	triethanol amine	unlisted or illegible quantity
618	triethanolamine	unlisted or illegible quantity
619	triethyl 1,1,2-ethanetricarboxylate	100 g
620	triethyl 1,1,2-ethanetricarboxylate	100 g
621	triketo-hydrindene hydrate	10 g
622	triketo-hydrindene hydrate	10 g
623	triketo-hydrindene hydrate	10 g
624	trimethylamine hydrochloride	500 g
625	trimethylolpropane	unlisted or illegible quantity
626	tri-n-butylamine	unlisted or illegible quantity
627	triphenylamine	25 g
628	triphenylamine	25 g
629	triphenylarsine	50 g
630	triphenylarsine oxide	30 g
631	triphenylarsine oxide	30 g
632	triphenylmethane	100 g
633	triphenylphosphine	100 g
634	tris	500 g
635	trishydroxy methyl amino methane	unlisted or illegible quantity
636	triton X-100 non-ionic surfactant	32 oz
637	turpentine	1 qt
638	undecylamine	25 g
639	unlabeled or illegible container	500 mL
640	unlabeled or illegible container	unlisted or illegible quantity
641	unlabeled or illegible container	unlisted or illegible quantity
642	unlabeled or illegible container	unlisted or illegible quantity
643	unlabeled or illegible container	unlisted or illegible quantity
644	unlabeled or illegible container	unlisted or illegible quantity
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654	unlabeled or illegible container	unlisted or illegible quantity
655	unlabeled or illegible container	unlisted or illegible quantity
656	unlabeled or illegible container	unlisted or illegible quantity
657	unlabeled or illegible container	unlisted or illegible quantity
658	unlabeled or illegible container	unlisted or illegible quantity
659	unlabeled or illegible container	unlisted or illegible quantity
660	unlabeled powder	100 g
661	unlabeled solution	250 g
662	urea	unlisted or illegible quantity
663	vanillin	100 g
664	vanillin	unlisted or illegible quantity
665	violuric acid	unlisted or illegible quantity

APPENDIX F

STATEMENT OF WORK SUPPLEMENTAL ENVIRONMENTAL PROJECT

Project:

Equipment for use by the Charleston Fire Department

Nexus to CAA 112 (r):

This SEP enhances the capabilities of local emergency responders and will facilitate quick and efficient response to releases associated with emergency events. Adequate nexus is deemed to exist using categories F and G — environmental compliance promotion and emergency planning and preparedness, providing technical support to members of the regulated community in order to identify, achieve and maintain compliance with applicable statutory and regulatory requirements, and enabling organizations to fulfill their obligations under the Emergency Planning and Community Right-to-Know Act (EPCRA) to assess dangers of hazardous chemicals present, and to develop emergency response plans to better respond to chemical incidents — in the March 2015 Update to the 1998 SEP Policy. This SEP is appropriate as the primary impact of responding to emergencies with improved equipment during emergency events benefits the same emergency planning district as the Institute facility, and violations of Section 112 (r) of the Clean Air Act are alleged in the complaint.

Description of Project:

Purchase of equipment to be owned and used by the Charleston Fire Department. Replacement of expired Level A suits, upgrade to Chlorine B kit, Training, and replacement of expired test kits.

Scheduling:

BCS's goal is to order the equipment for the Charleston Fire Department 90 days following the entry of the final Consent Decree or by December 1, 2015, whichever comes later. Dependent upon supplier capabilities, BCS expects delivery within a reasonable time after the order is placed.

A. \$9,375.48

12 TYCHEM TK Commander Level A suits FE, EXP BCK, Extra-Wide face shield 1/CS, Front Entry \$781.29 each, total \$9375.48

B. \$1,040.00

Upgrade to Chlorine B Kit, Kit B Device 14 Conversion Package, \$1040.00 each, total \$1040.00

C. \$3,000.00

Training: 3 MC-406 Leaking Tank Drills, 1 per shift - \$1,000 for incidentals each, total \$3,000.00

D. \$330.00

Replacement of expired test kits, 12 BioCheck™ Power Screening Test Kit, \$27.50 each, total \$330.00

TOTAL COST: Approximately \$13,750.00

APPENDIX G

STATEMENT OF WORK SUPPLEMENTAL ENVIRONMENTAL PROJECT

Project: Equipment for use by the Dunbar, West Virginia Fire Department personnel

Nexus to CAA 112 (r):

This SEP enhances the capabilities of local emergency responders and will facilitate quick and efficient response to releases associated with emergency events. Adequate nexus is deemed to exist using categories F and G — environmental compliance promotion and emergency planning and preparedness, providing technical support to members of the regulated community in order to identify, achieve and maintain compliance with applicable statutory and regulatory requirements, and enabling organizations to fulfill their obligations under the Emergency Planning and Community Right-to-Know Act (EPCRA) to assess dangers of hazardous chemicals present, and to develop emergency response plans to better respond to chemical incidents — in the March 2015 Update to the 1998 SEP Policy. This SEP is appropriate as the primary impact of responding to emergencies with improved equipment during emergency events benefits the same emergency planning district as the Institute facility, and violations of Section 112 (r) of the Clean Air Act are alleged in the complaint.

Description of Project:

Purchase of equipment to be used by the Dunbar, West Virginia Fire Department. Upgrade equipment on the aerial ladder truck, including gas leak detectors, 100 foot of high pressure flex hose (for refilling Apparatus mounted cylinders) and fittings, new face pieces and regulators for aerial Bucket breathing air, 2 complete SCBA 4500 psi. The Fire Department is a first responder organization which works in conjunction with police, and other emergency medical departments throughout the Dunbar, West Virginia area. (See request from David “Butch” Ellis, Chief of Dunbar, West Virginia Fire Department).

Scheduling:

BCS’s goal is to order the equipment for the Dunbar Fire Department within 90 days following the entry of the final Consent Decree or by December 1, 2015, whichever comes later. Dependent upon supplier capabilities, BCS expects delivery within a reasonable time after the order is placed.

A. \$247.38

2 UEi Combustible Gas Leak Detectors at \$123.69 each

B. \$563.50

100 feet of high pressure flex hose and fittings for refilling apparatus mounted cylinders at \$563.50 each

C. \$3,501.80

Face pieces and regulators for aerial bucket breathing air

D. \$12,264.30

2 complete SCBA 4500 psi and 2 spare cylinders to upgrade from the 2216 cylinders at \$6,132.15 each

TOTAL COST: Approximately \$16,580.00



Fire Department

www.dunbarfd.org

David "Butch" Ellis,
Chief of Department

304.766.0215
chief@dunbarfd.org

Vince, per our e-mails, here is a request for funding for Dunbar Fire Department. We are looking to upgrade equipment on our aerial ladder truck.

2 UEi Combustible Gas Leak Detectors	2 @	123.69	\$247.38
100 ft, high pressure flex hose (for refilling Apparatus mounted cylinders) and fittings	1 @	563.50	\$563.50
New face pieces and regulators for aerial Bucket breathing air	1 @		\$3,501.80
2 complete SCBA 4500 psi (to upgrade from the 2216 cylinders) and 2 spare cylinders	2 @	6,132.15	\$12,264.30
			<hr/>
			\$16,576.98

If you have any questions feel free to give me a call anytime. Thanks for considering our request.

Butch Ellis, Chief, DFD

APPENDIX H

STATEMENT OF WORK SUPPLEMENTAL ENVIRONMENTAL PROJECT

Project:

Equipment for use by the Institute Volunteer Fire Department

Nexus to CAA 112 (r):

As proposed, this SEP enhances the capabilities of local emergency responders and will facilitate quicker and more efficient response to releases associated with emergency events, thus, it fulfills the statutory objectives of the CAA. Adequate nexus is deemed to exist using categories F and G — environmental compliance promotion and emergency planning and preparedness, providing technical support to members of the regulated community in order to identify, achieve and maintain compliance with applicable statutory and regulatory requirements, and enabling organizations to fulfill their obligations under the Emergency Planning and Community Right-to-Know Act (EPCRA) to assess dangers of hazardous chemicals present, and to develop emergency response plans to better respond to chemical incidents — in the March 2015 Update to the 1998 SEP Policy. This SEP is appropriate as the primary impact of responding to emergencies with improved equipment during emergency events benefits the same emergency planning district as the Institute facility, and violations of Section 112 (r) of the Clean Air Act are alleged in the complaint.

Description of Project:

Purchase of equipment to be owned and used by the Institute Volunteer Fire Department, including several types of hose described in detail below, monitors, power blower, with Stratton engine, electric smoke hazardous location motor, and other equipment. The Fire Department is a first responder organization which works in conjunction with police, and other emergency medical departments throughout the Institute, West Virginia area.

Scheduling:

BCS's goal is to provide funding and equipment for the Institute Volunteer Fire Department 90 days following the entry of the final Consent Decree or by December 1, 2015, whichever comes later. Dependent upon supplier capabilities, BCS expects delivery within a reasonable time after the order is placed.

A. \$40, 617.01

41-55.0" x100' JAF RIB synthetic, single- jacket hoe with a nitrile/PVC rubber lining and cover

20-2.5" x 50' JAFLINE HD synthetic, double-jacket fire hose with Rubber Lining
24-1.75" x50' JAFLINE HD synthetic, double-jacket fire hose with Rubber Lining
1-Drager UCF 9000 Truck Kti: Includes UCF 9000 Camera, Desktop Charger, Charging
cords, IFU, Software disc, Crawling Plate, Truck Mount, and
Retractable Lanyard

B. \$14, 231.05

303443 Mercury Quick Attack Monitor (Quick Attack Monitor, Mounting Bracket with
Style 4445 Nozzle Fixed Gallonage Nozzle) 3- Black Mx Pistol Intake Valve with 6 inch
NST outlet, 5' Storz inlet, includes 5" storz cap and chain.

C. \$6,239.91

1- Model DD -16-B-6.5 Power Blower with Briggs & Stratton Engine 24.25" x21.00"
x24.00" 82 lbs
1- EBS-16-EP Electric Smoke Ejector Hazardous Location Motor (Explosion Proof)
(120V, 60Hz)
3-RIT*@ Emergency SCBA Pack
3-Pack Label "RIGGING" (2"x6")
1-Deluxe USAR Pack Set (Red)

D. \$2,306.00

1-X-am 2500 Confined space Kit for Ex, O₂, CO and H₂S with Alkaline and NiMH Battery
pack w/charger kit includes:

X-am125 Pump	Cal/Bump Gas w/regulator,
4.5' telescoping probe,	Cal/Bump adapter
Tubing,	DIRA Communication port and cable, float probe,
Carrying case	
12" FKM tubing	

E. \$3,423.80

4-BL 389 FlipTip 1 1/2" NHF Tip w/G-Force w/integrated Ball
Valve and Grip

TOTAL COST: Approximately \$66,817.77

APPENDIX I

STATEMENT OF WORK SUPPLEMENTAL ENVIRONMENTAL PROJECT

Project:

Help to assure adequacy and availability of volunteer fire department by upgrading equipment of the Jefferson Volunteer Fire Department. Improve responder safety by replacing old turnout gear to meet current standards.

Nexus to CAA 112(r):

This SEP enhances the capabilities of local emergency responders and will facilitate quicker and more efficient responses to releases associated with emergency events. Adequate nexus is deemed to exist using categories F and G — environmental compliance promotion and emergency planning and preparedness, providing technical support to members of the regulated community in order to identify, achieve and maintain compliance with applicable statutory and regulatory requirements, and enabling organizations to fulfill their obligations under the Emergency Planning and Community Right-to-Know Act (EPCRA) to assess dangers of hazardous chemicals present, and to develop emergency response plans to better respond to chemical incidents — in the March 2015 Update to the 1998 SEP Policy. This SEP is appropriate as the primary impact of responding to emergencies with improved equipment during emergency events benefits the same emergency planning district as the Institute facility, and violations of Section 112 (r) of the Clean Air Act are alleged in the complaint.

Description of Project:

Purchase equipment to be owned and used by the Jefferson Volunteer Fire Department. Five complete sets of turnout gear are needed to replace existing sets which do not meet current standards. Appropriate equipment is required to minimize the risk to responders to fires and industrial emergencies.

Scheduling:

BCS's goal is to order the equipment for the Jefferson Fire Department 90 days following the entry of the final Consent Decree or by December 1, 2015, whichever comes later. Dependent upon supplier capabilities, BCS expects delivery within a reasonable time after the order is placed.

A. \$13,025.00

Five sets of bunker gear

Five Morning Pride #LTO-3413 "Tails" Coats, \$1,150.00 each, \$5,750.00 total

Five Morning Pride #LTO-3413 Pants, \$790.00 each, \$3,950.00 total

Five Morning Pride "Low Rider" Helmets with NFP EZ Flip Eye Shields, \$265.00 each, \$1,325.00 total

Five 6" Leather Helmet Fronts, \$45.00 each, \$225.00 total

Five Majestic PAC-II Nomex Hoods: 2 ply, \$25.00 each, \$125.00 total

Five Tech Trade "Fusion" Firefighter Gloves Gauntlet Cuff, \$55.00 each, \$275.00 total
Five Fire Dex #FDXL-100 Leather Pull on Boots, \$275.00 each, \$1,375.00 total

TOTAL COST: Approximately \$13,025.00

FIRE CHASERS FIRE EQUIPMENT COMPANY

Ron Dugan: Sales Manager/Owner

240-580-0913 Cell

311 White Oak Lane

Frostburg, MD 21532

301-689-2540 {OFFICE}:

301-689-1632 {FAX}

Email : rdugan@firechasers.com, www.firechasers.com

SALES ORDER

SALES QUOTE

FIELD TEST

QUOTE ONLY

Jefferson Vol. Fire Department	304-720-1919 {fax}
6313 MacCorkle Avenue	jasonwurster1910@gmail.com
St. Albans, West Virginia 25177	

ORDER NUMBER	DATE	SALESPERSON	WHEN SHIP	TERMS	HOW SHIP
	Dec. 18, 2014	Ron Dugan	10 to 12 Weeks	NET 30	FREE
QUANTITY	DESCRIPTION		PRICE	AMOUNT	
5	Morning Pride #LTO-3413 "Tails" Coats		\$1,150.00	\$5,750.00	
5	Morning Pride #LTO-3413 Pants <i>See attached page for specifications</i>		\$790.00	\$3,950.00	
5	Morning Pride Ben "Low Rider" Helmet w/NFPA EZ Flip Eye Shields		\$265.00	\$1,325.00	
5	6" Leather Helmet Fronts		\$45.00	\$225.00	
5	Majestic PAC-II Nomex Hoods: 2 ply		\$25.00	\$125.00	
5	Tech Trade "Fusion" Firefighter Gloves Gauntlet Cuff		\$55.00	\$275.00	
5	Fire Dex #FDXL-100 Leather Pull on Boots		\$275.00	\$1,375.00	
TERMS					
No Charge For Large Sizes					
We Will Measure To Assure Proper Fit					
Delivery 10 to 12 Weeks					
Net 30 Days After Invoicing					
Quote Valid For 90 Days					
S&H			TBD	FREE	
QUOTE-12-18-2014	Total:			\$13,025.00	

APPENDIX J

STATEMENT OF WORK SUPPLEMENTAL ENVIRONMENTAL PROJECT

Project: Equipment for use by the Nitro Fire Department personnel

Nexus to CAA 112 (r):

This SEP enhances capabilities of local emergency responders and will facilitate quick and efficient response to releases associated with emergency events. Adequate nexus is deemed to exist using categories F and G — environmental compliance promotion and emergency planning and preparedness, providing technical support to members of the regulated community in order to identify, achieve and maintain compliance with applicable statutory and regulatory requirements, and enabling organizations to fulfill their obligations under the Emergency Planning and Community Right-to-Know Act (EPCRA) to assess dangers of hazardous chemicals present, and to develop emergency response plans to better respond to chemical incidents — in the March 2015 Update to the 1998 SEP Policy. This SEP is appropriate as the primary impact of responding to emergencies with improved equipment during emergency events benefits the same emergency planning district as the Institute facility, and violations of Section 112 (r) of the Clean Air Act are alleged in the complaint.

Description of Project:

Purchase of equipment to be owned and used by the Nitro Fire Department. The Department is attempting to replace all air packs, and bunker gear due to the unavailability of repair parts. They are currently cannibalizing equipment to make repairs. Bunker gear also must be replaced. (See attached August 27, 2014 memorandum from Chief Jeff Elkins of Nitro Fire Department to Vince McCormack of Bayer). The Fire Department is a first responder organization which works in conjunction with police, and other emergency medical departments throughout the Nitro, West Virginia area.

Scheduling:

BCS's goal is to order the equipment for the Nitro Fire Department 90 days following the entry of the final Consent Decree or by December 1, 2015, whichever comes later. Dependent upon supplier capabilities, BCS expects delivery within a reasonable time after the order is placed.

A. \$29,000.00

5 Scott Air Packs, APX3 at \$5,800 each

B. \$17,600.00

8 sets of Janesville Bunker Gear at \$2,200 each

TOTAL COST: Approximately \$46,600.00



Nitro Fire Department

August 27, 2014

To: Vince McCormick, Bayer

From: Chief Jeff Elkins, Nitro Fire Department

Vincent,

I have put together a short list of our needs per your request.

1. 5 - Scott Air Packs APX3 \$5800.00 each = \$29000.00

At this time we are attempting to replace all air packs due to the fact that we are unable to get parts for our current Scott Air Packs and we have to cannibalize packs taken out of service for parts.

2. 8 - Janesville Bunker Gear \$2200.00 each = \$17600.00

Any assistance in anyway would be greatly appreciated, if you need to contact me for any questions please feel free to contact me at 304-539-5333.

Thank You!

Chief Jeff Elkins, Nitro Fire Department

APPENDIX K

STATEMENT OF WORK SUPPLEMENTAL ENVIRONMENTAL PROJECT

Project:

Provide a vehicle and equipment for the Saint Albans Fire Department to facilitate emergency response and community outreach training for emergency response.

Nexus to CAA 112(r):

As proposed, this SEP enhances the capabilities of local emergency responders and has the potential to facilitate a quicker and more efficient response to releases associated with emergency events, thus, it fulfills the statutory objectives of the CAA. Adequate nexus is deemed to exist using categories F and G — environmental compliance promotion and emergency planning and preparedness, providing technical support to members of the regulated community in order to identify, achieve and maintain compliance with applicable statutory and regulatory requirements, and enabling organizations to fulfill their obligations under the Emergency Planning and Community Right-to-Know Act (EPCRA) to assess dangers of hazardous chemicals present, and to develop emergency response plans to better respond to chemical incidents — in the March 2015 Update to the 1998 SEP Policy. This SEP is appropriate as the primary impact of responding to emergencies with improved equipment during emergency events benefits the same emergency planning district as the Institute facility, and violations of Section 112 (r) of the Clean Air Act are alleged in the complaint.

Description of Project:

The St. Albans Fire Department requires an emergency response vehicle to carry emergency responders, emergency response equipment, and to tow emergency response and training equipment.

The Institute site is located on the Kanawha River and includes barge operations. The St. Albans Fire Department provides water rescue services which could be needed in a site emergency for rescue or evacuation of personnel. The truck will be used to tow the department's water rescue equipment. In addition, the vehicle would be used to transport personnel and equipment to the scenes of other emergency response activities. The St. Albans Fire Department also has a Fire Safety House that is used to train at schools and other events to provide fire safety and shelter in place training. The truck will be used to tow the Fire Safety House to training events.

The current Fire Safety House (trailer) was purchased in 2008 is significantly larger and heavier than the previous one. The truck used to pull the trailer is a 2002 vehicle that is undersized and struggles to pull the trailer. St. Albans has been placed in the position of not being able to respond to calls they receive from outside of St. Albans as the truck cannot pull the trailer and they are concerned about safety on the interstate or on hills. Similarly, St. Albans has struggled with the truck being used to pull the water rescue boat and trailer, owing to the same concern with safety and integrity on the roads. Despite these limitations, last year, St. Albans trained nearly 2,000 children with the Fire Safety House. They use the trailer on a

monthly basis, and daily in October for Fire Safety Month. A new truck would afford them the option of taking calls in the Kanawha Valley and outside of the town of St. Albans. St Albans has represented that if they had more confidence in the safety of their equipment, they could use it on a daily basis.

Scheduling:

BCS's goal is to order the equipment for the St. Albans Fire Department 90 days following the entry of the final Consent Decree or by December 1, 2015, whichever comes later. Dependent upon supplier capabilities, BCS expects delivery within a reasonable time after the order is placed.

A. \$42,472.80

- 2015 Ford 250 4WD Pick-Up Truck, \$33,472.30
- One Kenwood UHF two way digital trunking radio, \$2,527.70
- One Kenwood VHF two way radio, \$700.00
- Emergency lights consisting of a Code 3 lightbar and siren \$1,525.00
- Two antennas and coaxial cable, \$247.80
- Emergency scene lighting equipment, \$4,000.00

B. \$9,000.00

- Four Oceanic SB200 communications systems for use with AGA full face SCUBA masks, \$1,000.00 each, \$4,000.00 total
- Five water rescue exposure suits, \$1,000 each, \$5,000.00 total

C. \$48,528.00

- Ten self-contained breathing apparatus bottles, \$1,000.00 each, \$10,000.00 total
- Two Tempest Power Blower Exhaust Fans, \$2,500 each, \$5,000.00 total
- One Thermal Imaging Camera (Drager), \$10,000.00
- Two Ventmaster Ventilation Saws, \$2,500.00 each, \$5,000.00 total
- Two Akron Quick Attack Monitor Nozzles, \$2,900.00 each, \$5,800.00 total
- Ten AFF Firefighting Foam, \$175.00 each, \$1,750.00 total
- Honda portable pump for the fire boat docked on the river, \$3,500.00
- Honda model 2000 electric generator, \$2,000.00
- Two Large diameter intake pump valves, \$2,200.00 each, \$4,400.00 total
- Two Firefighting nozzles, \$539.00 each, \$1,078.00 total

TOTAL COST: Approximately \$100,000

JOHN OWEN

From: Steve Parsons <chief@stalbansfd.com>
Sent: Wednesday, December 17, 2014 12:43 PM
To: JOHN OWEN
Subject: RE: Revised Grant Request

1. Radio Equipment – (1) Kenwood UHF two way digital trunking radio, \$2527.70 (1) Kenwood Vhf two-way radio \$700.00, Emergency lights consisting of Code 3 lightbar and siren \$1525.00, \$247.80 (2) antennas and coaxial.
2. Underwater Communications Equipment - Currently we use “AGA” full face SCUBA Mask with two-way wireless underwater “Oceanic SB200” communications systems. We had (6), four of which are not working, replace those four which cost run approximately \$1000.00 each. This equipment allows us to talk to the surface so they can direct us which direction to swim since rescue swimming in the rivers in West Virginia you are diving in what is known as “black water”, you can’t see your hand in front of your face, you have to feel your way.

Does this help?

State Bid vehicles expire December 31, 2014. Do you have any idea when funds may be released? If not is a letter of intent possible? I can order the vehicle before December 31st with the right to refuse for any reason. It takes 8 weeks to get the vehicle. State Bid contracts don’t come out again until July 1, 2015.

Steve

From: JOHN OWEN [<mailto:john.owen@bayer.com>]
Sent: Wednesday, December 17, 2014 11:56 AM
To: chief@stalbansfd.com
Subject: FW: Revised Grant Request

From your first letter I am going to guess that \$2,527.70 is radio equipment for the truck, so I need something to say about the other \$2472.30 for equipment to be used on the truck ($\$5,000 - \$2,527.70 = \$2,472.30$).

Can you give me something on the Underwater Rescue Communications Equipment? Something to let them know what specifically will be purchased (i.e. model number, or number if what generic types of equipment). I do not know much about this stuff so I do not know what might be a good example. I imagine there is some type of unit for the diver and something else for the surface unit.

From: JOHN OWEN
Sent: Wednesday, December 17, 2014 11:40 AM
To: 'Steve Parsons'
Subject: RE: Revised Grant Request

Can you give me some detail about the “Emergency Equipment to be used on the vehicle” for \$5,000. A short list of what you have in mind will be helpful. I know they have rejected generic requests so specifics are needed.

From: Steve Parsons [<mailto:chief@stalbansfd.com>]
Sent: Wednesday, December 17, 2014 10:55 AM
To: JOHN OWEN
Subject: Revised Grant Request

Thanks so much for all of your guidance help and generosity. This is such a game changer in allowing us to purchase some needed equipment and the replacement vehicle I have been trying to replace for two years.

God Bless and have a Merry Christmas.

Stephen D. Parsons, Fire Chief
City of St. Albans Fire Department
51 Sixth Ave
St. Albans, WV 25177
304-727-2253

Save a Childs life click on the following link

http://www.compassion.com/sponsor_a_child/default.htm?referer=111503

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City of St. Albans

P.O. BOX 1488 • ST. ALBANS, WEST VIRGINIA 25177
www.stalbanswv.com

Telephone Numbers:

Mayor's Office.....(304) 727-2971
City Hall 722-3391
Police & Fire Depts. 727-2251
Building Department ... 727-2962
Parks & Recreation 722-4625
Public Works 722-4259

Mayor

Dick Callaway
1499 MacCorkle Avenue
St. Albans, WV 25177

Bayer Crop Science,
Attn: John Owen

Re: REVISED Grant

Mr. Owen,

The St. Albans Fire Department has requested assistance in purchasing a vehicle that is used in emergency response. The department provides water rescue response in Kanawha and Putnam County and the proposed vehicle purchase would be used to pull the department's current water rescue craft to onsite rescue locations. Water rescue and firefighting equipment will supplement our capabilities for response along the Kanawha and Coal Rivers where numerous industrial sites are located. The department routinely has responded to water rescue emergencies at other locations throughout West Virginia and as far away as Louisiana during Hurricane Katrina. This same proposed replacement vehicle transports necessary emergency equipment and personnel to the scenes of all types of other emergencies as well, such as fires, trench rescue, high-angle rescue and medical first responder emergencies. The current eleven year old vehicle is in disrepair and is in dire need of replacement. The current vehicle as well as the proposed replacement vehicle is and will continued to be used to transport our Fire Safety House to all the area schools and other events where we provide fire safety education. In 2014 fire safety education was provided to six area schools and seven other locations with over 3,000 children given training on what to do in emergency situations such as fires and chemical emergencies like, "Sheltering In Place". The water rescue boat or the fire safety house cannot be trailered with any other existing vehicle or fire trucks we have in our fleet. Enclosed is an itemized breakdown of our \$100,000.00 request. Equipment will be transported using the proposed vehicle.

2014 Ford 250 4WD Pick-up "State Bid"	\$33,472.30
Emergency Equipment to be used on the vehicle	\$ 5,000.00
Emergency Scene Lighting Equipment	\$ 4,000.00
Underwater Rescue Communications Equipment	\$ 4,000.00
Water Rescue Exposure Suits \$1,000.00 each	\$ 5,000.00

(10) Self-Contained Breathing Apparatus Bottles	\$10,000.00
(2) Tempest Power Blower Exhaust Fans, \$2,500.00 ea.	\$ 5,000.00
1 Thermal Imaging Camera (Drager)	\$10,000.00
(2) Ventmaster Ventilation Saws \$2,500.00 ea.	\$ 5,000.00
(2) Akron Quick Attack Monitor Nozzle \$2,900.00 ea	\$ 5,800.00
(10) AFF Firefighting Foam \$175.00 ea	\$ 1,750.00
Honda portable pump for our fire boat docked on the river	\$ 3,500.00
Honda mod. 2000 electric generator.	\$ 2,000.00
(2) Large dia. Intake pump valves \$2,200.00 ea.	\$ 4,400.00
(2) Firefighting nozzles \$539.00	<u>\$ 1,077.70</u>

TOTAL \$100,000.00

Enclosed, State Bid from WV Division of Purchasing

Respectfully,



Chief Stephen D. Parsons

Vendor Name: THORNHILL FORD
 Manufacturer/Brand: FORD
 Model Name & Number: F-250 W2B

Vehicle Requirements:

Classification:	Large Pick Up Crew Cab
Drive:	4 Wheel/All Wheel with High and Low Range
Passenger seating:	5 minimum (including driver)
Doors:	4 full doors, minimum
Wheelbase:	148 in., minimum
GVWR:	8,800 lbs. min, 10,000 lbs. max
Engine:	8 cylinder
Off Road Package:	Includes but not limited to: Limited Slip rear, axle tack lok differential, heavy duty engine cooling, skid plates, heavy duty suspension with gas shocks, front & rear tow hooks and all terrain tires.
Bed:	Short bed, with installed drop in bed liner
Tow Package:	Installed Hitch & Wiring
Slush/All-weather mats	Installed driver & passanger, front and second row.
Sliding Rear Window:	Installed

The vehicle bid shall include the standard equipment requirements as required in section 3.1.1.1 of the specification.

Vendor Bid Response:	
Vehicle fuel type	Unit Price
Gasoline	
Flex-fuel	\$26,803.50
Diesel	\$33,472.30
CNG/Bifuel	\$35,921.50
Hybrid	

Options:

FOB Dealership: (Deduct)

N/A
 \$ 1.50

FOB Other than Metro Charleston - Per Mile

*Note - The above delivery "options" above are not evaluated as part of the award.

APPENDIX L

STATEMENT OF WORK SUPPLEMENTAL ENVIRONMENTAL PROJECT

Project: Equipment for use by the South Charleston Fire Department personnel

Nexus to CAA 112 (R):

This SEP enhances coordination with local emergency responders and will facilitate quick and efficient response to releases associated with emergency events. Adequate nexus is deemed to exist using categories F and G — environmental compliance promotion and emergency planning and preparedness, providing technical support to members of the regulated community in order to identify, achieve and maintain compliance with applicable statutory and regulatory requirements, and enabling organizations to fulfill their obligations under the Emergency Planning and Community Right-to-Know Act (EPCRA) to assess dangers of hazardous chemicals present, and to develop emergency response plans to better respond to chemical incidents — in the March 2015 Update to the 1998 SEP Policy. This SEP is appropriate as the primary impact of responding to emergencies with improved equipment during emergency events benefits the same emergency planning district as the Institute facility, and violations of Section 112 (r) of the Clean Air Act are alleged in the complaint.

Description of Project:

Requesting funding for equipment to be used by the South Charleston Fire Department. Replacement of webbing, rope, pulleys, anchor plates, scott air packs, scott AV face pieces, rescus racks, rescue carbiners, rope pads, omni slings. The Fire Department is a first responder organization which works in conjunction with police, and other emergency medical departments throughout the South Charleston area.

Scheduling:

BCS's goal is to provide funding and equipment for the South Charleston Fire Department 90 days following the entry of the final Consent Decree or by December 1, 2015, whichever comes later. Dependent upon supplier capabilities, BCS expects delivery within a reasonable time after the order is placed.

A. \$3,054.00

6-200' sections of 1/2" rope
6-100' sections of 1/2" rope

600' type 18 flat webbing
10 Rescue Carbiners

B. \$716.50

2-Rescue 8's
1-Rescue Rack
2-Rope Pads
4-2" Pulleys

C. \$891.00

1-Double Pulley
1-Double Pulley with Becket
1-Prusick Pulley
2-Haul Safe Pulleys
2-Anchor Plates

D. 4-10' Omni Slings
E. 4-5" Omni Slings
F. 1-Equipment Bag
G. 16-Scott Air Pack 75
H. 24-Scott AV 3000 Facepiece

TOTAL COST: Approximately \$99,792.50

APPENDIX M

STATEMENT OF WORK SUPPLEMENTAL ENVIRONMENTAL PROJECT

Project: Equipment for use by the Tyler Mountain Volunteer Fire Department

Nexus to CAA 112 (R):

This SEP enhances the capability of local emergency responders and will facilitate quick and efficient response to releases associated with emergency events. Adequate nexus is deemed to exist using categories F and G — environmental compliance promotion and emergency planning and preparedness, providing technical support to members of the regulated community in order to identify, achieve and maintain compliance with applicable statutory and regulatory requirements, and enabling organizations to fulfill their obligations under the Emergency Planning and Community Right-to-Know Act (EPCRA) to assess dangers of hazardous chemicals present, and to develop emergency response plans to better respond to chemical incidents — in the March 2015 Update to the 1998 SEP Policy. This SEP is appropriate as the primary impact of responding to emergencies with improved equipment during emergency events benefits the same emergency planning district as the Institute facility, and violations of Section 112 (r) of the Clean Air Act are alleged in the complaint.

Description of Project:

Purchase of equipment to be owned and used by the Tyler Mountain Volunteer Fire Department. The Fire Department is a first responder organization which works in conjunction with police, and other emergency medical departments throughout the Tyler Mountain, West Virginia area. The Tyler Mountain Volunteer Fire Department has purchased two new fire engines for their community and surrounding communities due to mutual aid and automatic aid agreements. (See November 18, 2014 letter from Chief David Martin to Vince McCormick of Bayer). To finish equipping these trucks the Tyler Mountain Volunteer Fire Department needs the equipment listed below.

Scheduling:

BCS's goal is to order the equipment for the Tyler Mountain Volunteer Fire Department 90 days following the entry of the final Consent Decree or by December 1, 2015, whichever comes later. BCS expects delivery within a reasonable time after the order is placed.

A. \$3,000.00

600 feet of 5 inch supply hose,

B. \$1,500.00

3 – Bresnan distributor nozzles,

C. \$3,438.00

3 – 1.75 inch midrange breakaway nozzles,

D. \$2,062.00

2 – axial playpipe 2.50 inch nozzles with 1 ¼ inch, 1 1/8 inch, and 1 inch tips

TOTAL COST: Approximately \$10,000.00



Tyler Mountain Volunteer Fire Department, Inc.



5380 Big Tyler Road
P.O. Box 7537
Cross Lanes, WV 25356

Emergency Dial 911

Business Phone (304) 776-7963
FAX (304) 776-7861
E-Mail tmvfd23@earth1.net
Web Site www.tmvfd.com

November 18, 2014

Dear Mr. McCormick,

The Tyler Mountain Volunteer Fire Department has purchased two new fire engines for our community and surrounding communities due to mutual aid and automatic aid agreements. To finish equipping these apparatus, the Tyler Mountain Volunteer Fire Department needs the following:

600' of 5" supply hose-	\$3,000
3- bresnan distributor nozzles-	\$1,500
3- 1.75" mid range breakaway nozzles-	\$3,438
2- axial playpipe 2.50" nozzles with-	<u>\$2,062</u>
(1 1/4", 1 1/8", and 1" tips \$2,062)	

Total: \$10,000

This equipment will assist in firefighters performing their jobs in a more safe and efficient manner. The Tyler Mountain VFD is asking for a contribution of \$10,000 towards the purchase of this equipment.

If you have any questions, please don't hesitate to call me at 304-553-5841.

Thanks for all you do,

David S. Martin
Chief

APPENDIX N

STATEMENT OF WORK SUPPLEMENTAL ENVIRONMENTAL PROJECT

Project:

Provide training at the Texas A&M fire school for area emergency response organizations such as volunteer and professional fire fighters and chemical plant emergency response personnel. Local professional and volunteer fire departments are primarily trained to fight fires in structures such as houses, offices, and stores. These organizations, nevertheless, may be called upon to fight or support efforts to control industrial fires such as at a chemical plant or chemical storage facility. The Kanawha Metro area has partnered with the BCS Institute site in a NIME protocol and common training is important during communication of an incident. Local chemical plant emergency squads are trained to fight industrial fires but newer members of those squads have not yet had the level of training envisioned for this project. This training will improve the skills of primary industrial responders and backup resources that are expected to deal with industrial fires.

Nexus to CAA 112(r):

As proposed, this SEP enhances a facility's ability to respond to a release, evacuate premises during a release, enhances the capabilities of local emergency responders and facilitates a quicker and more efficient response to releases associated with emergency events, thus, it fulfills the statutory objectives of the CAA. Adequate nexus is deemed to exist using categories F and G — environmental compliance promotion and emergency planning and preparedness, providing training to members of the regulated community in order to identify, achieve and maintain compliance with applicable statutory and regulatory requirements, and enabling organizations to fulfill their obligations under the Emergency Planning and Community Right-to-Know Act (EPCRA) to assess dangers of hazardous chemicals present and to develop emergency response plans to train emergency response personnel to better respond to chemical incidents— in the March 2015 Update to the 1998 SEP Policy. This SEP is appropriate as those primarily impacted by the training are firefighters within the same emergency planning district, and violations of Section 112 (r) of the Clean Air Act are alleged in the complaint.

Description of Project:

The Texas A&M fire school is recognized as a leader in fire fighter training, and has been a resource for fire fighter training in the chemical industry. Representatives from local professional and volunteer fire departments would attend the school along with representatives of chemical plant emergency squads. The objective would be to train outside organizations to efficiently and safely respond to the types of situations that can occur in a chemical facility and to bolster the training of local industrial emergency squads. Training will include industrial firefighting techniques, and Hazardous Material training. The disaster that occurred in West, Texas illustrates the need for local fire fighters to understand the risks and precautions associated with events that can occur in nearby facilities.

The plan is to train members of Kanawha County fire and emergency response organizations on a schedule that works for the trainees, their organizations, and the Texas A&M schedule.

We would propose to send three members from each of the following city and volunteer fire departments:

- Nitro Fire Department (20 candidates)
- Institute Volunteer Fire Department (15 candidates)
- Jefferson Volunteer Fire Department (15 candidates)
- Saint Albans Fire Department (27 candidates)
- South Charleston Fire Department (41 candidates)
- Dunbar Fire Department (18 candidates)
- Charleston Fire Department (169 candidates)
- Tyler Mountain Fire Department (35 candidates)

BCS also proposes to pay for four students from each shift plus four Shift Superintendents/Incident Commanders from Dow's South Charleston site to attend, for a total of 20 students. BCS will also send four from each shift plus four Shift Superintendents/Incident Commanders from the Institute site for another 20 students. The two plant sites will send Dow and BCS squad members in the approximate proportion that Dow and BCS are represented on the squads.¹

Thus, BCS proposes to pay for a total of 64 students.²

Scheduling:

Texas A&M fire school conducts six training sessions per year. The school can accommodate 70 people for a 40 hour class. Schedules are published in August or September for the following year. Classes are sought after and very popular, thus, BCS expects to send 3 – 4 students per session, taking 4 – 6 years to complete the training. Some sessions we might be able to send more than 3 – 4 students and some sessions we might not be able to send any. BCS anticipates:

- 1) Completing the identification of students within 120 days of entry of the consent decree;
- 2) Complete a status report within 180 days of entry or six months thereafter;
- 3) Within five years of the entry of the consent decree certify completion and provide name of trainee and facility accommodated.

A. \$144,320.00

NFPA 1081 Industrial Exterior Fire Brigade Training, course IND016, 40 hour, \$2,255.00 per student for 64 students. See attached course description.

B. \$108,800.00

¹ The Dow South Charleston Plant Emergency Squad includes 42 candidates including 8 Securitas, 22 Dow and 12 Bayer MaterialScience employees. The BCS Institute Emergency Squad includes 76 candidates including 39 Dow and 35 BCS CropScience employees.

² The BCS employees counting against this number will be volunteer firefighters in their communities.

Travel, lodging, and meals are approximately \$1,700 per student for 64 students


Flight from CRW to CLL to CRW, \$600.00

Hotel for six nights, \$900.00

Meals for six days, \$200.00

TOTAL COST: Approximately \$253,120.00

2255


Fire Services | Homeland Security | Public Safety & Security | Infrastructure & Safety | Preparedness & Response | Knowledge Engineering

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NFPA 1081 Industrial Exterior Fire Brigade Training

IND016 - 40.00 Hours

Schedule

Start Date	End Date	Location	Class Number	enroll	details
1/12/15	1/16/15	College Station, TX USA	FP IND016 251	enroll	details
3/2/15	3/6/15	College Station, TX USA	FP IND016 259	enroll	details
4/8/15	4/10/15	College Station, TX USA	FP IND016 252	enroll	details
6/16/15	6/19/15	College Station, TX USA	FP IND016 253	enroll	details
8/17/15	8/21/15	College Station, TX USA	FP IND016 254	enroll	details
11/30/15	12/4/15	College Station, TX USA	FP IND016 255	enroll	details

This schedule is subject to change without notice. If you have not received confirmation of the class prior to the class start, please contact the division at (866) 878-8900 or esll@teex.tamu.edu to get the latest schedule.

Description

This course is designed to meet the objectives outlined in the National Fire Protection Association (NFPA) 1081 *Standard for Industrial Fire Brigade Member Professional Qualifications (2012 Edition)* Chapters 5 and 6.

This course will provide your new brigade members, as well as existing emergency response personnel with a solid foundation of knowledge and skills that may be used to safely resolve emergencies involving exterior fire at an industrial facility. All of this is accomplished through a combination of classroom presentations and field exercises.

Prerequisite

If you would like certification, you must provide proof by the end of the class that you are trained to NFPA 472 Hazmat Awareness or above.

We are no longer accepting 29 CFR 1910.120(q) without the course syllabus outlining the exact course content, and the course content must meet NFPA 472 Hazmat Awareness.

You can provide a certificate or a transcript from an accredited agency that lists successful completion of the requirements. This proof must be dated prior to the last day of class.

If you cannot show proof through your training records, go to <http://www.teexwmdcampus.com> and at no cost, you may register and take course number AWR160-W, "Terrorism Awareness for Emergency First Responders" to satisfy the prerequisite. You must print and bring your completed certificate to class.

Topics

- Introduction to fire brigades
- Firefighter Safety/personnel protection
- Applications equipment (PPE)
- Fire Streams and appliances
- Self-contained breathing apparatus (SCBA)
- Dry chemical agents and applications
- Pre-emergency planning
- Strategies and tactics
- Incident command (overview)
- Fire behavior
- Fundamentals of firefighting
- Rescue procedures

Resources

[Registration Form](#)

Related Courses

- [NFPA 1081 Industrial Exterior Fire Brigade Training \(IND016\)](#)
- [NFPA 1081 Leadership Training \(IND103\)](#)

- Salvage and overhaul operations
- Fundamentals of ventilation
- Plant fire prevention

Audience

This course is appropriate for all Industrial emergency response personnel, including fire prevention, suppression, control, and safety personnel.

Potential attendees could include:

- Plant operators
- Plant maintenance personnel
- Laboratory personnel
- Engineers
- Electricians/instrumentation techs
- Security personnel

Recommended

Due to the nature of the training, a physical examination is recommended prior to enrolling in this course.

Education Credits

ACE

Pro Board

4.00 CEU

Contact Information

Mark Jackson
Industrial Fire Training Manager

Phone: 979-458-3642
merk.jackson@teex.tamu.edu

Other Information

Courses

- Will begin at 8 a.m. on the first day of class unless other arrangements have been made.

Fees

- Must be paid prior to or on the first day of class unless other arrangements have been made.
- Includes course materials
- Does not include lodging or meals

Personal Protection Equipment (PPE)

- PPE Level 4 is required as described in the [TEEX Student Safety Manual](#).
- All students are required to follow the [TEEX Student Safety Manual](#) at all times.

Work Attire

- Wear regular work attire for training activities and classroom sessions.
- You may not wear to any class or field activity
 - shorts
 - sleeveless shirts
 - open-toed shoes

Annual Fire Training School

If you are attending this course as part of TEEX's Annual Fire School taught each March and July, you need to be aware of the following additional information as described below.

Registration

- You are required to register on-line with a credit card, print off the [Annual Fire Training School registration form](#) and mail it in with a check, or fax with an approved Purchase Order.

Registration late fee

- \$50.00 will be assessed to payments made after the registration deadline for the Annual Fire Training School.

Class limit

- 264 students

Class hours:

Annual Fire Training School's hours are different than the normal course hours. Please be sure you come at the correct time.

- Monday - Thursday: 7:30 a.m. - 5:30 p.m.
- Friday: 7:30 a.m. - 11:30 a.m.

Questions?

- Call us at [\(866\) 878-8900](tel:866-878-8900) and we would be happy to answer any questions you may have about Annual Fire Training School.

Policies

Pro Board Testing Accommodation Information

Accommodations are provided for those candidates who qualify under the [Americans with Disabilities Act \(ADA\)](#) as disabled.

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APPENDIX O

STATEMENT OF WORK SUPPLEMENTAL ENVIRONMENTAL PROJECT

Project:

Provide Shelter In Place planning and training for Kanawha County Schools

Nexus to CAA 112(r):

This SEP provides a reduction in the deterioration of public health, by instructing the community in the use of a structure and its indoor atmosphere to temporarily separate individuals from a hazardous outdoor atmosphere that could result in actual or potential damage to human health. The primary beneficiary is the community in the vicinity of the Institute plant in the Kanawha valley which is potentially at risk. Adequate nexus is deemed to exist using categories F and G — environmental compliance promotion and emergency planning and preparedness, providing training to members of the regulated community in order to identify, achieve and maintain compliance with applicable statutory and regulatory requirements, and enabling organizations to fulfill their obligations under the Emergency Planning and Community Right-to-Know Act (EPCRA) to assess dangers of hazardous chemicals present, and to develop emergency response plans to better respond to chemical incidents, and inform potentially effected citizens of risks posed by chemicals present in their communities— in the March 2015 Update to the 1998 SEP Policy. This SEP is appropriate as the primary impact of shelter-in-place training is within the same emergency planning district, and violations of Section 112 (r) of the Clean Air Act are alleged in the complaint.

Description of Project:

The contractor will help to define the needs and propose a path forward to prepare and train for shelter in place events in the Kanawha County schools.

- ◆ School Specific Review for Shelter in Place Options and Path Forward
- ◆ School Specific Shelter in Place Plan Development
- ◆ School Specific Shelter in Place Training
- ◆ Demonstration of Shelter in Place Principles and use of Visual Aids
- ◆ Hands on Practice with Shelter in Place Principles and Materials

Scheduling:

BCS's goal is to develop a schedule with the Kanawha County School District to accomplish training at the majority of the schools within 90 days of the entry of the final Consent Decree, and to perform training within three years of the date of entry of the final Consent Decree.

Thus, BCS will endeavor to accomplish the following:

- 1) Within 90 days of entry of the consent decree disseminate the proposed training schedule;
- 2) Within 180 days of entry of the consent decree certify schools completing training to date;
- 3) Within three years of entry of the consent decree certify completion of training for all schools.

A. \$107,800

The costs associated with the above project are \$95 dollars an hour. Travel time will be billed at 1/2 of the hourly rate. A flat rate of \$100 per diem per day if needed for hotel and meals. Shelter in place Materials will be billed at cost plus 10%. A general estimate of cost for the schools in the area is attached. The estimated cost for the Plan Development and Training is \$98,800, and travel and lodging expenses are estimated at \$9,000. The total estimate is \$107,800.

TOTAL COST: Approximately \$107,800

Bayer CropScience - School Shelter in Place Plans, Training, Demonstration and Equipment

Client Information		Building Information	
Contact: Matt Harris Company: Bayer CropScience Address: Telephone No.: 304-767-6632 Fax No.:		Building Name(s): Bayer CropScience Area: Institute Area Schools Additional Information: School Shelter in Place Plan Development, Training, Demonstrations and Hands on Practice	
Project Title: Bayer CropScience - School Shelter in Place Plans and Training			
Scope of Work: The specific scope of work for this project includes:			
<ul style="list-style-type: none"> ◆ School Specific Review for Shelter in Place Options and Path Forward ◆ School Specific Shelter in Place Plan Development ◆ School Specific Shelter in Place Training ◆ Demonstration of Shelter in Place Principles and use of Visual Aids ◆ Hands on Practice with Shelter in Place Principles and Materials 			
Project Cost			
<p>The costs associated with the above project are will be \$95 dollars an hour. Travel time will be billed at 1/2 of the hourly rate. A flat rate of \$100 per diem per day if needed for hotel and meals. Shelter in place Materials will be billed at cost plus 10%. A general estimate of cost for the schools in the area is attached . The estimated cost for the Plan Development and Training is \$98,800, and travel and lodging expenses are estimated at \$9,000. The total estimate is \$107,800.</p>			
Proposal Terms			
Terms of payment for services are net within 30 days after invoicing.			
Authorization to Proceed			
I appreciate the opportunity to present this cost proposal. . We will begin the implementation stages of the project upon receipt of your authorization to proceed.			
Client		Consultant	
Matt Harris		James D. Johnston	
Bayer CropScience		Johnston EHS	
_____	_____	_____	_____
Authorized Signature	Date	Authorized Signature	Date

Cost Estimate For Shelter In Place Plan for Institute Area Schools

ST. ALBANS - 8 Schools

**HAYES MIDDLE SCHOOL (grades 6-8) - Estimated total cost = \$4,400
34 teachers, 490 students**

MCKINLEY MIDDLE SCHOOL (grades 6-8) 22 teachers, 360 students Estimated Total Cost = \$3,800

ALBAN ELEMENTARY (K-5) 22 teachers, 380 students Estimated Total cost =\$3,800

CENTRAL ELEMENTARY (K-5) 462 students, 24 teachers Estimated Total Cost \$4,400

ANN BAILEY ELEMENTARY (K-5) 325; students, 26 teachers = Estimated Total Cost = \$3,800

LAKWOOD ELEMENTARY (K-5) 272 students, 18 teachers - Estimated Total Cost = \$3,200

WEINER ELEMENTARY (K-5) 163 students, 14 teachers - Estimated Total Cost = \$3,000

ST ALBAN HIGH SCHOOL (9-12) 1096 students, 62 teachers. Built 1909 and renovated 2003...appears to be 5 large conjoined buildings, 2 above ground floors - Estimated Total Cost = \$8,800

DUNBAR - 3 Schools

DUNBAR PRIMARY SCHOOL (K-2) 368 students, 25 teachers - Estimated total cost = \$3,800

DUNBAR INTERMEDIATE CENTER (3-5) 341 students, 23 teachers - Estimated Total Cost = \$3,800

-DUNBAR MIDDLE SCHOOL (6-8) 431 students, 28 teachers - Estimated Total Cost = \$4,200

SOUTH CHARLESTON - 4 Schools

BRIDGEVIEW ELEMENTARY SCHOOL (K-5) 464 students, 31 teachers - Estimated Total cost of \$4,400

RICHMOND ELEMENTARY (K-5) 261 students, 20 teachers - Estimated Total Cost = \$3,200

SOUTH CHARLESTON MIDDLE SCHOOL (6-8) 391 students, 24 teachers - Total Estimated Cost = \$3,800

SOUTH CHARLESTON HIGH SCHOOL (9-12) 1007 students, 61 teachers - Total Estimated Cost = \$7,700

***3 above ground floors**

WV STATE UNIVERSITY

91 acres, founded 1891, 35 buildings, 2622 students. (campus map available) - Total Estimated Cost = \$24,400

BEN FRANKLIN VOCATIONAL CENTER

477 students, 24 teachers, 6 buildings - Total Estimated Cost = \$9,200

Appendix P

DOJ Case #90-5-1-10802

Local and state Emergency Responders to the Bayer CropScience Institute Site
August 2008 Incident

Kanawha County Sheriff Detachment

Kanawha County Metro Communications

Kanawha County Ambulance Authority

Nitro Police Department

Dunbar Police Department

South Charleston Fire Department

Nitro Fire Department

Institute Volunteer Fire Department

Jefferson Volunteer Fire Department

Tyler Mountain Volunteer Fire Department

St. Albans Fire Department

State Fire Marshall's Office