

**UNITED STATES DISTRICT COURT  
SOUTHERN DISTRICT OF WEST VIRGINIA  
CHARLESTON DIVISION**

MAYA NYE, LISA BRAGG,  
SUE DAVIS, WARNE FERGUSON,  
REGINA HENDRIX, MILDRED HOLT,  
JIM LEWIS, BEVERLY STEENSTRA,  
ROBIN BLAKEMAN, PAULA CLENDENIN,  
SARAH ELLIOTT, JAMES R. MITCHELL,  
DENISE GIARDINA, MIKE HARMAN,  
DONNA WILLIS AND BARBARA FRIERSON,  
current and former citizens of ,  
and workers in, Kanawha County,  
West Virginia,

Plaintiffs,

v.

Case No. \_\_\_\_\_

BAYER CROPSCIENCE, L.P., a for-profit,  
Delaware limited partnership,

Defendant.

**COMPLAINT**

For their Complaint in this matter, Plaintiffs, by Counsel, state as follows:

I. **Preliminary Statement**

1. In this civil action, current and former citizens of, and workers in, Kanawha County respectfully request that this Court enter an order barring Bayer CropScience, L. P. (Bayer) from resuming or continuing the production of methyl isocyanate (MIC) at Bayer's plant in Institute, West Virginia, unless and until Bayer demonstrates to this Court, by clear and convincing evidence, that they, and the public regulatory agencies with jurisdiction over them, have complied with all of the recommendations of the January 20, 2011 report of the United States Chemical Safety Board (CSB)(**EXHIBIT "A"**); that the National Academy of Sciences (NAS) has completed its Congressionally mandated study (**EXHIBIT "B"**) of the inherent safety issues presented by the production of (MIC) in a

major population center such as Kanawha County, West Virginia, and that the United States Occupational Safety and Health Administration (OSHA) and Environmental Protection Agency (EPA) certify to this Court that they have inspected Bayer's facilities for compliance with applicable laws, including the recommendations of the CSB.

2. MIC is the highly toxic chemical which killed thousands of citizens of Bhopal, India in 1984 from an industrial accident which was virtually identical in all material respects -- other than the number of people killed -- to the explosion in August 2008 at Bayer's Institute, West Virginia which is known to have killed two workers, and released toxic chemicals requiring 40,000 citizens of Kanawha County to shelter in place. Bayer's Offsite Consequences Analysis (OCA), on file at the headquarters of the United States Environmental Protection Agency (EPA) in Washington, DC (not available for viewing anywhere in the state of West Virginia, and barred by federal statute from mechanical reproduction -- but not handwritten copying and subsequent typing (**EXHIBITS "C-1" AND "C-2"**) -- describes the area and population at risk -- the "vulnerability zone" -- from a worst case scenario chemical spill as including 300,912 people in a 25-mile radius of Institute, West Virginia (**EXHIBIT "D"**), virtually the entire metropolitan area of Kanawha County, West Virginia and 100% of the largest city in the state, the capital at Charleston, West Virginia.

## **II. Jurisdiction and Venue**

3. This Court has jurisdiction of this matter under 28 U.S.C. § 1332 because the parties are citizens of diverse states and the amount in controversy involves more than \$75,000, exclusive of interest and penalties.

4. Venue properly lies in the Southern District of West Virginia under 28 U.S.C. § 1391 (b) because a substantial part of the events or omissions giving rise to the claims occurred in this district.

### III. Parties

5. Plaintiffs include the following current or former residents of, and workers in, Kanawha County, West Virginia:

- a. Maya Nye, a resident of St. Albans, West Virginia and spokesperson for People Concerned About MIC;
- b. Lisa Bragg, a student of West Virginia State University residing in Nitro, West Virginia;
- c. Sue Davis, a life-long resident of Institute, West Virginia;
- d. Warne Ferguson, a retired resident of the Pinewood neighborhood of Institute, West Virginia;
- e. Regina Hendrix, a former resident of Kanawha County, WV who moved to Charlestown, WV because of concern about the manufacture of MIC in Institute, WV;
- f. Mildred Holt, a resident of Institute, WV;
- g. Rev. Jim Lewis, a resident of the East End neighborhood of Charleston, WV;
- h. Beverly Steenstra, a resident of Charleston, WV;
- i. Robin Blakeman, a resident of Cabell County, WV who travels for work through the 25-mile radius of Institute designated by Bayer as the area of potential fall out in a worst case scenario chemical spill;
- j. Paula Clendenin, a resident of the East End neighborhood of Charleston, WV and a faculty member of West Virginia State University, immediately adjacent to the Bayer MIC production facility in Institute, WV;
- k. Sarah Elliott, a resident of Charleston, WV and 2010 graduate of West Virginia State University, immediately adjacent to the Bayer MIC production facility in Institute, WV;

- l. James R. Mitchell, a resident of Charleston, WV;
- m. Denise Giardina, a resident of Charleston, WV, and a member of the faculty of West Virginia State University, immediately adjacent to Bayer's MIC production facility in Institute, WV,
- n. Mike Harman, a life-long resident of St. Albans, WV;
- o. Donna Willis, a life-long resident of Institute, WV, and
- p. Barbara Frierson, a resident of St. Albans, WV.

6. Defendant Bayer CropScience, L.P. is a for-profit, limited partnership organized in the state of Delaware, the general partner of which is Bayer CropScience Holding, Inc. The limited partnership's principal office, and the general partner's address, are listed with the West Virginia Secretary of State as 2 T. W. Alexander Drive, Research Triangle Park, NC, 27709. The agent for service of process is listed with the West Virginia Secretary of State as Corporation Service Company, 209 West Washington Street, Charleston, WV, 25302.

#### **IV. Statement of Facts**

7. On August 28, 2008, at about 10:35 p.m., a runaway chemical reaction inside a 4,500 gallon pressure vessel known as a "residue treater" in the methomyl unit at Bayer's pesticide manufacturing plant at Institute, West Virginia caused the 5,700 pound, stainless steel vessel to explode violently, launching the 2 ½ ton "residue treater" 50 feet into the air, releasing shrapnel randomly throughout the methomyl unit and destroying everything in the vessel's path. Highly flammable solvent sprayed from the vessel and immediately ignited, causing an intense fire that burned for more than 4 hours, sending flames 200 feet in the air, and causing windows to break in a 7-mile radius. One Bayer employee died immediately as a result of blunt force trauma, either from being struck by the vessel itself or the shrapnel released at the time of the explosion (this worker later was found to have a

toxic level of cyanide in his blood which has not been explained) (**EXHIBIT "E"**). A second Bayer employee died 41 days later at the Western Pennsylvania Burn Center in Pittsburgh, Pennsylvania. Six volunteer firefighters who assisted in the unit fire suppression activities and two contractors working at the facility were treated for possible toxic chemical exposure. The fire was contained inside the Methomyl-Larvin insecticide unit by the Bayer CropScience fire brigade with mutual aid assistance from local volunteer and municipal fire departments. The incident occurred during the restart of the methomyl unit after an extended outage to upgrade the control system and replace the original residue treater vessel -- circumstances which mirror in virtually all material respects Bayer's currently planned restart of the Bayer facility later this month, and possibly as early as this week.

8. In the late evening of August 8, 2008, the Kanawha-Putnam County Emergency Management Director -- to whom Bayer repeatedly through the hours following the explosion refused to supply the most basic information necessary (**EXHIBIT "F"**) to make decisions affecting public safety, in violation of mandatory reporting duties (**EXHIBIT "R"**) -- advised more than 40,000 residents, including the resident students at the West Virginia State University adjacent to the facility, to shelter-in-place for more than three hours as a precaution. The fire and drifting smoke forced the state police and local law enforcement authorities to close roads near the facility and the interstate highway, which disrupted traffic for hours.

9. The investigation team of the United States Chemical Safety Board (CSB), a non-regulatory agency modeled on the highly regarded National Transportation Safety Board, determined that the runaway chemical reaction and loss of containment of the flammable and toxic chemicals resulted from deviation from the written start-up procedures, including bypassing critical safety devices intended to prevent such a condition. Other contributing factors included an inadequate pre-startup

safety review; inadequate operator training on the newly installed control system; unevaluated temporary changes, malfunctioning or missing equipment, misaligned valves, and bypassed critical safety devices; and insufficient technical expertise available in the control room during the restart.

10. Poor communications during the emergency between the Bayer CropScience incident command and the local emergency response agency -- a direct result of Bayer's flagrant disregard of the most basic National Incident Management System (NIMS) procedures adopted nationwide after the September 11, 2001 attack on the World Trade Center in New York -- confused emergency response organizations and delayed public announcements on actions that should be taken to minimize exposure risk. Although Bayer reported that "no toxic chemicals were released because they were consumed in the intense fires," the CSB later confirmed that the only air monitors suitably placed near the unit to detect toxic chemicals were, in fact, not operational at the time of the incident. In short, no reliable data or analytical methods were available to determine what chemicals were released, or predict any exposure concentrations, both of which are critical to public safety and health.

11. The methomyl unit used the highly toxic chemical, methyl isocyanate (MIC), in a series of complex chemical reactions to produce methomyl, a dry chemical used to make the pesticide, Larvin. **(EXHIBIT "H-1" and "H-2")** MIC is manufactured in a separate production unit at the facility and stored in large underground pressure vessels. Liquid MIC was pumped to a "day tank" pressure vessel near the Methomyl-Larvin unit, which provided the daily production quantity of MIC for the methomyl unit and the carbofuran unit, which is about 200 feet west of the methomyl unit. Fortuitously, given the random shrapnel pattern and uncharted flight path for the "residue treater," the MIC storage tank adjacent to the methomyl unit, and the MIC transfer piping between the production unit and the manufacturing units, escaped damage.

12. The CSB investigation identified the following incident causes:
  - a. Bayer did not apply standard Pre-startup Safety Review (PSSR) and turnover practices to the methomyl control system redesign project. The equipment was not tested and calibrated before the unit was restarted.
  - b. Operations personnel were inadequately trained to operate the methomyl unit with the new distributed control system (DCS).
  - c. Malfunctioning equipment and the inadequate DCS checkout prevented the operators from achieving correct operating conditions in the crystallizers and solvent recovery equipment.
  - d. The out-of-specification methomyl-solvent mixture was fed to the residue treater before the residue treater was pre-filled with solvent and heated to the minimum safe operating temperature.
  - e. The incoming process stream normally generated an exothermic decomposition reaction, but methomyl that had not crystallized due to equipment problems greatly increased the methomyl concentration in the residue treater, which led to a runaway reaction that overwhelmed the relief system and over-pressurized the residue treater.

**EXHIBITS "I-1" AND "I-2".**

13. The CSB released its final report on the August 28, 2008 explosion and chemical release at Institute, West Virginia on January 20, 2011. To Plaintiffs knowledge, no federal or state agency with regulatory authority over the operations of Bayer in Kanawha County, West Virginia has implemented the detailed recommendations of the CSB for avoiding and/or dealing with a chemical release like that which occurred on August 28, 2008 (**EXHIBIT "J"**).

14. The National Academy of Science, mandated by Congress to the inherent safety risks of producing the toxin MIC in a population center, has not completed its study. Indeed, the membership of the NAS study panel was only announced on January 21, 2011, one day after the release of the final CSB study. (**EXHIBIT "K"**) As described in its Statement of Task (**EXHIBIT "B"**), the NAS study will produce a detailed written report, conclusions, and recommendations where appropriate on the following subjects:

1. Review the current industry practice for the use and storage of MIC in manufacturing processes, including a summary of key lessons and conclusions arising from the 1984 Bhopal accident and resulting changes adopted by industrial users of MIC.

2. Review current and emerging technologies for producing carbamate pesticides, including carbaryl, aldicarb, and related compounds, including:

2.1. Synthetic methods and patent literature;

2.2. Manufacturing approaches used worldwide for these materials;

2.3. Manufacturing costs for different synthetic routes;

2.4. Environmental and energy costs and tradeoffs for alternative approaches;

2.5. Any specific fixed-facility accident or transportation risks associated with alternative approaches;

2.6. Regulatory outlook for the pesticides including their expected lifetime on the market.

3. Examine the use and storage of MIC at the Bayer Crop Science facility in Institute, West Virginia:

3.1. Identify possible approaches for eliminating or reducing the use of MIC in the Bayer carbamate pesticide manufacturing processes, through, for example, substitution of less hazardous intermediates, intensifying existing manufacturing processes, or consuming MIC simultaneously with its production;

3.2. Estimate the projected costs of alternative approaches identified above;

3.3. Evaluate the projected benefits of alternative approaches identified above, including any cost savings, reduced compliance costs, liability reductions, reduced emergency preparedness costs, and reduced likelihood or severity of a worst-case MIC release or other release affecting the surrounding community;

3.4. Compare this analysis to the inherently safer process assessments conducted by Bayer and previous owners of the Institute site;

3.5. Comment, if possible, on whether and how inherently safer process assessments can be utilized during post-accident investigations.

15. Toxic chemicals were released into the atmosphere between 1980 and 1985 as follows:

61 MIC leaks, 107 phosgene leaks, and 22 leaks of both MIC and phosgene – all from the current Bayer



facility, all prior to the August 28, 2008, and all without reporting the release as required by law.

**(EXHIBIT "L")** Other violations of applicable laws include the following:

(a) In December 2007, thiodicarb, a toxic chemical used as an insecticide and sold under the trade name Larvin, leaked into the air and could be smelled by residents throughout the Kanawha Valley. In violation of applicable NIMS protocols, Bayer took several hours to notify emergency responders of the nature of the spill, despite hundreds of people calling into Metro 911 about the odor and a visible haze over the plant. Thiodicarb is extremely toxic and has been banned in the European Union. DEP issued a citation against Bayer for this air pollution violation.

(b) In 2008 Bayer released but did not report MIC in volumes it contended were not reportable, but which the KCEMS Director stated should have been reported.

(c) State DEP inspectors recently issued citations to Bayer for mismanagement of the underground MIC storage tank, discovered during a June 2009 inspection for violations dating back to 2003. The citations concern corrosion protection systems installed on the MIC tank. The contractors that installed the cathodic protection system, meant to control corrosion of the tank's metal surface, did not have proper certification. Furthermore, even though tests that subsequent uncertified workers performed showed that the system was not working properly, Bayer took no action. **(EXHIBITS "N-1" AND "N-2")**.

(d) Bayer entered into a Consent Decree with DEP regarding missing Title V (air permit) records from 2007 to 2009.

16. As noted, on August 28, 2008, Bayer failed to comply with the critical NIMS requirement that the Incident Commander immediately report to local emergency preparedness personnel the explosion and release of toxic chemicals, so local officials could determine what course of action (shelter-in-place, evacuation, etc) was appropriate for the safety of the citizens of Kanawha County, West Virginia. The first Metro 911 notification reporting an explosion at the Bayer plant was called in at 10:33 p.m. Over the following eight hours, Bayer only communicated with Metro 911 and other emergency responders through the security guard at the gate, identified only as "Steve." "Steve" would only confirm that there was an emergency at the plant, that an ambulance was needed at the main gate for a burn victim, and that Metro 911 should "alert the public." Even though a sheriff's officer learned that the incident occurred in the Larvin unit by 11:00 p.m., Bayer would not release that information.

This left local and state officials to coordinate amongst themselves what actions to take to protect the public without any information from Bayer about the nature or scope of the emergency, the expected duration of the emergency, the possibilities of further explosions, and what chemicals were released into the air that night and in what quantities. (EXHIBIT "F"). This miscommunication continued after the August 2008 explosion incident to an October 2008 leak of MIC. (EXHIBIT "M").

17. Bayer has admitted that it intentionally, and in bad faith, obstructed the efforts of public officials charged with the safety of Kanawha County citizens to understand the threats facing them after an incident at the plant, or even the existence of such threats at the moment of greatest vulnerability, through a deliberate pattern and practice of concealing vital information from the public and from the plant's closest neighbors. In testimony for the Hearing on Secrecy in the Response to the Fatal Bayer Chemical Plant Explosion on April 21, 2009, before the House Committee on Energy and Commerce, Subcommittee on Oversight and Investigations, Bayer's President and Chief Executive Officer, William Buckner, made perfectly clear the motivations behind his company's use and concealment of information:

There were several reasons why the company sought confidentiality and SSI protection, including legitimate security concerns, the proper scope of the CSB's investigation, and, we frankly admit, the desire to avoid making the controversial chemical MIC part of the public debate regarding the incident. There were, of course, some business reasons that also motivated our desire for confidentiality. These included a desire to limit negative publicity generally about the company or the Institute facility, to avoid public pressure to reduce the volume of MIC that is produced and stored at Institute by changing to alternative technologies, or even calls by some in our community to eliminate MIC production entirely. In any such debate, we believed that because of security concerns, we would have been prevented from a full public defense of our safety and security measures and the multiple layers of protection we employ for our MIC processes. However, we concede that our pursuit of SSI coverage was motivated, in part, by a desire to prevent that public debate from occurring in the first place.

**EXHIBIT “P”** (emphasis added).

18. In response to an August 10, 2010 finding by EPA that the production of aldicarb no longer met the Agency’s food safety standards and may pose unacceptable dietary risks to infants and young children, EPA initiated action to terminate uses of aldicarb, and to revoke aldicarb tolerances, to which Bayer acquiesced in a Memorandum of Understanding.

19. On January 11, 2011 that it would eliminate 220 of nearly 700 jobs at the Institute facility, and terminate the production of MIC entirely by mid-2012. (**EXHIBIT “Q”**) However, also on January 11, 2011, Bayer announced that it had completed its rebuilding of the MIC manufacturing facility in Institute, West Virginia, claiming that it had complied with unspecified “initial” recommendations of the CSB. Bayer also stated its intention to resume the production of MIC, in a facility that eliminated the above-ground storage of MIC -- for the next 18 months -- after which it would cease all MIC operations.

20. Importantly, Bayer did not redesign the MIC production facility in conformity with a Dupont facility in Texas, which minimizes the production of MIC until needed for a chemical process and immediately consumes the manufactured MIC, eliminating the need for any on-site storage. To Plaintiffs’ knowledge, the new process for MIC at Bayer’s current facility has never been employed at any location in the United States, or anywhere else; its startup is, for all practical purposes, an uncontrolled experiment being conducted in a major population center in which 300,000 citizens reside.

21. A CSB review of the alternative methods for production of MIC discloses that numerous alternatives to the procedures historically employed at the Institute facility have been considered and either discarded because of the economic costs of the alternative, or never carried through to completion because of the multiple changes in ownership and management of the Institute facility.

And, as noted, the NAS has not completed its own Congressionally mandated study of the inherent risks of manufacturing MIC in a major population center.

22. Both the Occupational Safety and Health Administration (OSHA) and the Environmental Protection Agency (EPA) had conducted process safety related audits and inspections at the Bayer facility prior to the incident in August 2008. However, the inspections did not correct all the serious, longstanding process safety problems that were revealed by investigations conducted after the incident. Despite full authority to inspect and a mandatory duty to enforce the labor laws of the United States, OSHA has not inspected, and does not intend to inspect, Bayer's MIC production facility in Institute, WV since the modifications of the plant announced on January 11, 2001 to determine that Bayer's claimed improvements since the August 28, 2008 explosion conform with applicable law and do not place American workers at an unreasonable risk of serious bodily injury and/or loss of life.

23. OSHA cited Bayer for deficient process hazard analyses in 2005; however OSHA did not subsequently verify that corrective actions were fully implemented by Bayer, and deficient PHAs were a causal factor in the August 2008 incident. Despite full authority to inspect and a mandatory duty to enforce the environmental laws of the United States, EPA has not inspected, and does not intend to inspect, Bayer's MIC production facility in Institute, WV since the modifications of the plant announced on January 11, 2001 to determine that Bayer's claimed improvements since the August 28, 2008 explosion conform with applicable law and do not place American citizens at an unreasonable risk of serious bodily injury and/or loss of life.

## **V. Cause of Action**

24. Plaintiffs incorporate paragraphs 1 through 23 of this Complaint as though fully set out herein.

25. The resumption and/or continuing operation of the Bayer MIC production facility at Institute, West Virginia constitutes a nuisance which currently deprives plaintiffs of enjoyment of their property and constitutes an imminent and totally unreasonable risk of serious bodily injury and/or loss of life to the public at large. The risks associated with the restarting of the Bayer MIC facility outweigh any social benefit, particularly the manufacture for no more than 18 months of one pesticide historically produced at the Bayer MIC facility. The long term economic risks associated with restarting Bayer's facility also outweigh any temporary economic loss to Bayer and/or the community. To be sure, an explosion at the Bayer MIC facility that caused a significant number of bodily injuries and/or loss of life, would permanently impair the value of Plaintiffs' property in Kanawha County, West Virginia. Moreover, such a catastrophic event would convert the Kanawha Valley into a 21<sup>st</sup> Century "Love Canal," setting back economic development of the Kanawha Valley – **all** economic activity, commercial, industrial, service industry, wholesale and retail -- for many, many decades into the future, assuredly beyond the lifetime of any person now living or working in the Kanawha Valley. Without regard to any concern for the environment, health or human safety, the potential long-term damage to the economy of the Kanawha Valley, and West Virginia generally, from a significant, and unfortunately all-too-possible, chemical spill at Bayer's MIC facility in Institute, is enormous. That potential economic loss dwarfs the incremental adverse economic impact arising from the termination of 220 jobs in February, 2011 vs. the termination of those jobs sometime in mid-2012, which Bayer has already scheduled, as relayed in its January 11, 2011 announcement.

26. The Bayer facility negligently and recklessly releases significant, dangerous and noxious chemicals into the residences of Plaintiffs and the surrounding communities of Institute, which cause

reasonable fear of death and substantial physical injury in Plaintiffs and other citizens, that substantially interfere with the use and enjoyment of land that they own or lease, that offend, interfere with, and cause damage to the public in their exercise of rights common to all, such as traveling through the communities of Institute from the neighboring communities of Charleston, South Charleston, St. Albans, and Nitro; residing in their dwellings; breathing the air and drinking the water; and living free of fear of chemical annihilation. Plaintiffs are suffering special damage as a result of the dangerous and noxious chemical emissions emitted by the Bayer facility, and the serious risk of catastrophic harm posed by current MIC manufacturing, storage and usage procedures at the Bayer facility, and are adversely affected in ways different than the public at large. The dangerous and noxious chemical emissions emitted by the Bayer facility, the serious risk of catastrophic harm, physical and economic, posed by current MIC manufacturing, storage and usage procedures at the Bayer facility, and the frequent emission of noxious odors by the Bayer facility, constitute a public nuisance.

27. The Bayer facility negligently and recklessly releases significant, dangerous and noxious chemicals into the Plaintiff's residences which substantially interfere with the use and enjoyment of land that Plaintiffs own or rent, and cause reasonable fear of death or substantial physical injury to Plaintiffs that substantially interferes with the use and enjoyment of land that they own or lease and constitute a private nuisance.

#### **VI. Relief Sought**

28. In light of Bayer's documented, chronically reckless operation, and admitted dishonesty in public communications relating to the operation of its inherently unsafe MIC, Plaintiffs respectfully request that this Court enter an order declaring Bayer's operation of the Institute pesticide facility a private and public nuisance, and barring Bayer from resuming and/or continuing operation of the Bayer's pesticide manufacturing plant at Institute, West Virginia, until such time as:

(1) The National Academy of Science completes its Congressionally mandated study of the risks of MIC production in a major population center and the citizens of Kanawha County have a reasonable opportunity to review its findings.

(2) Bayer, at a minimum, provides the citizens of Kanawha County and this Court with documentation of the adoption and full implementation of the following CSB recommendations:

- a. Bayer revises its Process Hazard Analysis PHA policies and procedures to require:
  - i. Validation of all PHA assumptions to ensure that risk analysis of each PHA scenario specifically examines the risk(s) of intentional bypassing or other nullifications of safeguards,
  - ii. Addressing all phases of operation and special topics including those cited in chapter 9 of "Guidelines for Hazard Evaluation Procedures" (CCPS, 2008);
  - iii. Training all PHA facilitators on the revised policies and procedures prior to assigning the facilitator to a PHA team;
  - iv. Ensure all PHAs are updated to conform to the revised procedures;
  - v. Review and revise, as necessary, all Bayer production unit standard operating procedures to ensure they address all operating modes (startup, normal operation, temporary operations, emergency shutdown, emergency operations, normal shutdown, and startup following a turnaround or emergency shutdown), are accurate, and approved;
  - vi. Ensure that all facility fire brigade members are trained in the National Incident Management System (NIMS), consistent with municipal and state emergency response agencies;
  - vii. Evaluate the fence-line air monitor program against federal, state, and local regulations, and Bayer corporate policies, and upgrade and install air monitoring devices as necessary to ensure effective monitoring of potential releases of high-hazard chemicals at the perimeter of the facility;
  - viii. Commission an independent human factors and ergonomics study of all Institute site PSM/RMP covered process control rooms to evaluate the human-control system interface, operator fatigue, and control system familiarity and training. Develop and implement a plan to resolve all recommendations

identified in the study that includes assigned responsibilities, required corrective actions, and completion dates.

b. the Director of the Kanawha-Charleston Health Department establishes a Hazardous Chemical Release Prevention Program to enhance the prevention of accidental releases of highly hazardous chemicals, and optimize responses in the event of their occurrence, which at a minimum:

- i. Implements an effective system of independent oversight and other services to enhance the prevention of accidental releases of highly hazardous chemicals;
- ii. Facilitates the collaboration of multiple stakeholders in achieving common goals of chemical safety;
- iii. Increases the confidence of the community, the workforce, and the local authorities in the ability of the facility owners to prevent and respond to accidental releases of highly hazardous chemicals;
- iv. Defines the characteristics of chemical facilities that would be covered by the new Program, such as the hazards and potential risks of their chemicals and processes, their quantities, and similar relevant factors;
- v. Ensures that covered facilities develop, implement, and submit for review and approval applicable hazard and process information and evaluations, written safety plans with appropriate descriptions of hazard controls, safety culture and human factors programs with employee participation, and consideration of the adoption of inherently safer systems to reduce risks, emergency response plans; and performance indicators addressing the prevention of chemical incidents.
- vi. Ensures that the program has the right to evaluate the documents submitted by the covered facilities, and to require modifications, as necessary;
- vii. Ensures that the program has right-of-entry to covered facilities, and access to requisite information to conduct periodic audits of safety systems and investigations of chemical releases;
- viii. Establishes a system of fees assessed on covered facilities sufficient to cover the oversight and related services to be provided to the facilities including necessary technical and administrative personnel; and,
- ix. Consistent with applicable law, ensures that the program provides reasonable public participation with the program staff in review of facility programs and access to the materials submitted by covered facilities (e.g., hazard evaluations, safety plans,



emergency response plans); the reviews conducted by program staff and the modifications triggered by those reviews; records of audits and incident investigations conducted by the program; performance indicator reports and data submitted by the facilities, and; other relevant information concerning the hazards and the control methods overseen by the program, and

x. Ensures that the program will require a periodic review of the designated agency activities and issue a periodic public report of its activities and recommended action items.

c. The Secretary of West Virginia Department of Health and Human Services and the West Virginia Department of Environmental Protection coordinate work with the Director of the Kanawha-Charleston Health Department to ensure the successful planning, fee collection, and implementation of the Hazardous Chemical Release Prevention Program as described in the CSB final report, including the provision of services to all eligible facilities in the State.

d. Kanawha-Putnam Emergency Planning Committee, in coordination with the Kanawha and Putnam counties Emergency Response Directors, prepares and issues a revision to the Kanawha Putnam County Emergency Response Plan and Annexes to address facility emergency response and Incident Command when such functions are provided by the facility owner.

e. West Virginia State Fire Commission revise the Fire Department Evaluation Administrative Section Matrix to address the periodic inspection of local fire departments, including a requirement for inspectors to examine and identify the status of National Incident Management System fire department personnel training.

f. Occupational Safety and Health Administration, in light of the findings of the CSB report and the serious potential hazards to workers and the public from chemicals used and stored at the Bayer Institute site (such as phosgene, MIC, and methomyl), conduct a comprehensive Process Safety Management (PSM) inspection of the complex in coordination

with the Environmental Protection Agency.

g. Occupational Safety and Health Administration revises the Chemical National Emphasis Program and the targeting criteria to:

- i. Expand the coverage to all 10 OSHA regions,
- ii. Include in the targeting criteria from which potential inspections are selected all establishments that have submitted certifications of completions of actions in response to previous PSM citations;
- iii. Require NEP inspections to examine the status of compliance of all previously cited PSM program items for which the company has submitted certifications of completion to OSHA.

h. Environmental Protection Agency, in light of the findings of the CSB report and the serious potential hazards to workers and the public from chemicals used and stored at the Bayer Institute site (such as phosgene, MIC, and methomyl), conduct a comprehensive Risk Management Program (RMP) inspection of the complex in coordination with the Occupational Safety and Health Administration.

29. Plaintiffs request, as appropriate under applicable law, reasonable attorneys fees, and the plaintiffs' costs of this litigation, including expert witness fees.

30. Plaintiffs request such other and further relief as the evidence supports, the facts warrant and the interests of justice compel.

Respectfully submitted,



William V. DePaulo, Esq. #995  
179 Summers Street, Suite 232  
Charleston, WV 25301  
Tel: 304-342-5588  
Fax: 304-342-5588  
[william.depaulo@gmail.com](mailto:william.depaulo@gmail.com)

Counsel for Plaintiffs

