

Contingency Planning and Crisis Management

A Workbook for Certified Pesticide Applicators

To accompany the VHS tape "DETAIL™ 4: Contingency Planning and Crisis Management"

Based on materials developed by: Monsanto Company

Reviewed by: P.M. Horton, N.S. Ogg, & M.A. Purschwitz, Clemson University

Developed for South Carolina by:

Rachel C. Rowe & Robert G. Bellinger

Pesticide Information Program, Department of Entomology, Soils, and Plant Sciences
R.G. Bellinger, Ph.D., Extension Pesticide Coordinator
Extension Entomology, 114 Long Hall, Clemson, South Carolina 29634-0315
Telephone (864) 656-3111



The Clemson University Cooperative Extension Service offers its programs to people of all ages, regardless of race, color, sex, national origin, or disability and is an equal opportunity employer. Clemson University Cooperating with U.S. Department of Agriculture and South Carolina Counties. Issued in Furtherance of Cooperative Extension Work in Agriculture and Home Economics, Acts of May 8 and June 30, 1914.

Public Service Activities

Contingency Planning and Crisis Management

A Workbook for Certified Pesticide Applicators

Contingency Planning: Your Key to Crisis Management

It always seems to happen without warning: a tornado, flood, fire, an explosion, equipment failure...even vandalism. One moment, you have a safe, environmentally responsible operation, and the next, you've got to deal with a chemical spill or storage building fire.

You may not be able to prevent a chemical release or fire from happening, but you can control the way you respond.

The fear of chemicals (*chemophobia*) is strong in our society for a variety of reasons. Most people take the benefits of chemicals for granted; they only pay attention when the risks become a possibility.

Chemical companies have recognized this. Many chemical plants now work closely with the community to develop emergency response plans in case of problems. Not only have chemical companies made our plants and our communities safer, we are enjoying better relationships...

relationships built on mutual trust and cooperation with our neighbors, and important factor in today's world. Corporations know that the right to operate is granted by the people who live and work near facilities. That right is given by the public, and it can be taken away -- if we abuse the public's trust.

It's no less important for you. How you respond to a crisis not only determines the severity, cost and long-term environmental damage, it also determines how the community will respond. For, as you well know, when there is a chemical accident, the public will respond -- with anger and calls for reform, if they believe that their interests have not been taken into account -- or with trust and approval, *if* they or their representatives have been part of the process.

Responding correctly in an emergency depends in large part on how well you are prepared, and that requires the development of a Contingency Plan.

Whether your operation is large or small, a carefully thought out and thoroughly rehearsed contingency plan is the most effective tool you can have to prevent an emergency situation from becoming a catastrophe. It can help you protect the health and welfare of you and your family as well as your community. It can help you minimize environmental damage. And, it can potentially reduce your liability.

The importance of preplanning for emergencies cannot be over-stressed. Developing a contingency plan may be one of the most important business decisions you will ever make.

When dealing with agricultural chemicals, there are nine essential parts of a contingency plan. Each covers an issue that is bound to arise when an emergency occurs. These steps are:

Nine Essential Parts of Any Contingency Plan

1. Designation of an emergency coordinator and alternates.
2. Identification of response agencies.
3. Details of response agreements.
4. Creation of a detailed facility map.
5. Creation of an area map in which your facility is located.
6. Product inventory.
7. Emergency equipment inventory.
8. Emergency procedures.
9. Making sure your plans are on file with appropriate agencies.

Contingency Planning and Crisis Management

Directions: Circle the letter of the best answer

1. The reason for developing a contingency plan is to _____.
 - A. prevent hazardous chemical emergencies
 - B. control the way in which you will respond to an emergency involving the release of hazardous chemicals
 - C. comply with federal and state regulations concerning the handling and use of hazardous chemicals
 - D. All of the above

2. Preplanning for a future emergency situation is most important for _____.
 - A. agricultural chemical dealers
 - B. large farm enterprise managers who use large amounts of agricultural chemicals
 - C. small farm owners who use some agricultural chemicals
 - D. anyone who handles or uses agricultural chemicals in any capacity

3. A well thought out emergency plan will be _____.
 - A. rehearsed several times
 - B. available to all employees
 - C. changing on a daily basis, and therefore should not be written down
 - D. prepared for you by local fire, police and emergency preparedness personnel

4. Which of the following is not an emergency response agency?
 - A. local paramedics and area hospitals
 - B. appropriate chemical manufacturers
 - C. local area Chamber of Commerce
 - D. local radio and television stations and newspapers

5. Which of the following should be included in your response agreements with local response agencies, contractors and neighboring facilities?
 1. evacuation routes
 2. command locations
 3. radio frequencies
 4. samples of ag chemical products
 - A. 1 and 2
 - B. 1, 2 and 3
 - C. 2, 3 and 4
 - D. All of the above

6. What facts should be included in the information given to each contact person at the outset of the emergency?
- A. Name and call-back number of the person reporting and location of the incident**
 - B. A general description of the emergency, extent of injuries and potential danger to the environment and the neighboring population**
 - C. The exact name, quantity and hazard class of the chemicals involved in the accident, if known**
 - D. All of the above**
7. Why is a contingency plan so important?
- A. Because it is required by law.**
 - B. Because you want to prevent accidents from happening.**
 - C. Because you want to have an alibi in case you are to blame for the accident.**
 - D. Because there will be no time to think or give specific instructions to employees or emergency response agencies during an actual emergency; You will be too busy dealing with regulatory agencies and the media.**
8. Why is location of drainage patterns on the facility map important?
- A. To know where to tap into a fresh water supply for cleanup;**
 - B. To determine where to build dikes and dams to contain contaminated runoff;**
 - C. To know where to place catch basins to recover spilled chemical;**
 - D. To determine where to lay pipe to drain contaminated runoff away from the site;**
9. Which items would NOT be necessary to pinpoint on a facility map?
- A. Areas where hazardous materials are stored**
 - B. Fire extinguishers, protective clothing and equipment for fire fighting and spill neutralization**
 - C. Phones, restrooms and designated smoking areas**
 - D. Shutoffs for water, electricity, gas and other utilities**
10. Who should be the designated Emergency Coordinator in your contingency plan?
- A. Someone who has the knowledge and the authority to represent your enterprise and manage your employee response**
 - B. Someone who has knowledge of the chemical materials on the site**
 - C. Someone who has the ability to coordinate the efforts of local agencies**
 - D. All of the above**

11. Why should you show distances from your operation to nearby towns or residences on your area map?
- A. So you will know exactly how many miles emergency response contractors have driven, since you pay them on a per mile basis for their assistance**
 - B. So you can notify the population within a given distance from your facility in case they need to evacuate**
 - C. So you will know how far the smoke or chemical fumes have drifted when you start hearing reports from these different locations**
 - D. So you can decide where will be the best place to dump unused chemicals without injuring the local population**
12. In case of a large scale disaster, you will need to locate on your area map _____.
- A. climate controlled storage buildings made of metal or concrete**
 - B. evacuation routes and shelters**
 - C. underground bomb shelters**
 - D. airports and bus stations**
13. Besides a daily inventory of all the chemicals you have in storage, you should have a _____ included in your contingency plan.
- A. monthly inventory**
 - B. yearly inventory**
 - C. peak season inventory**
 - D. list of all your flammable chemicals**
14. Your product inventory list should contain:
- 1. product names
 - 2. container volumes
 - 3. location and potential hazard (i.e., flammable, corrosive)
 - 4. literature on each chemical (i.e., label, MSDS)
- A. 1 and 2**
 - B. 1, 2 and 3**
 - C. 1, 3 and 4**
 - D. All of the above**
15. Your Emergency Equipment Supplies Inventory should contain exact types, amounts and locations of all _____.
- A. automatic sprinklers and smoke detectors**
 - B. spray equipment, airplanes and helicopters**
 - C. safety gear, machinery for hauling, digging or trenching and special materials for containment and cleanup**
 - D. office and janitorial supplies**

16. When outlining what your exact emergency procedures should be, who would you consult?
- A. Your employees**
 - B. Local response agencies**
 - C. Your insurance agent**
 - D. All of the above**
17. In the event of a fire in a chemical storage area, local fire departments should be informed that they will be required to handle the situation differently than they normally would. Why?
- A. Special permits must be obtained from state environmental agencies before a chemical warehouse fire can be put out.**
 - B. Water should not be used except under special circumstances, because the runoff may be a bigger problem than the fire.**
 - C. Chemical storage areas are usually made of highly flammable materials that may cause the fire to spread rapidly.**
 - D. All of the above**
18. Why should you have copies of your contingency plan on file with local response authorities and at several additional locations listed in the plan?
- A. In case you cannot be reached or your files are inaccessible or destroyed;**
 - B. In case you spill coffee on your copy and cannot read it any more;**
 - C. In case you cannot remember where you filed your copy;**
 - D. In case you need proof that you had a contingency plan on file;**
19. How can you prepare yourself to respond to the media?
- A. Prepare a written statement and read from it; Do not answer informal questions.**
 - B. Determine ahead of time what the community needs to know and decide how you want to word it.**
 - C. Give the reporters a list of the questions you will answer; Respond to all others with "No comment".**
 - D. If you know your stuff, wing it.**
20. If a reporter asks you to speculate about a situation other than the one you are involved with, how should you respond?
- A. Look directly at the reporter and say "No comment".**
 - B. Change the subject and use this time to plug the ag chemical industry.**
 - C. Advise the reporter that you cannot speculate; Be brief and honest, then get back on track.**
 - D. Ignore the question all together.**

21. What is the most important thing to remember when dealing with the media and the public?
- A. How you look and sound is as important as what you say.**
 - B. Use all the correct chemical terminology.**
 - C. Keep the interview short because you are busy.**
 - D. Make sure your operation is absolved of all blame.**

Answer Key: Contingency Planning and Crisis Management

1. **Answer B is correct.** Correct response to an emergency depends on how well you are prepared. You cannot always prevent a chemical release or fire from happening, but you can control the way in which you respond.
2. **Answer D is correct.** No matter how large or small your operation, the importance of preplanning for emergencies cannot be over-stressed. A contingency plan will help protect the health and welfare of you and your family, your employees and your community, and help minimize environmental damage, thus potentially reducing your liability.
3. **Answer A is correct.** Contingency planning takes time. Once developed, it takes many rehearsals before everyone in your operation and in the surrounding community learns to react quickly, safely and effectively.
4. **Answer C is correct.** Your list of response agencies should be all inclusive and should include the names and telephone numbers of any and all persons who can be called upon to aid in an emergency. The list should include local emergency preparedness groups, police and fire units, paramedics and area hospitals, appropriate chemical manufacturers, containment and cleanup specialists, the local media and an attorney to protect your rights and the rights of others. You should also check for any additional local, state and federal notification requirements.
5. **Answer B is correct.** Agreements with response agencies and cleanup contractors should be made in advance to clarify roles and responsibilities. Your agreements should include: notification procedures, evacuation routes, preestablished command locations, radio frequencies to be used in emergencies and capabilities of response contractors such as equipment available and time needed for response.
6. **Answer D is correct.** During the initial moments of an emergency, the situation is often hectic. Therefore, it is a good idea to include with your calling list an outline of the information that should be passed along during an emergency notification call.
7. **Answer D is correct.** With careful preplanning, the response teams will already know what they are supposed to do and will work together with very little supervision. You can then do your job as coordinator without having to make minute-to-minute decisions. How you respond to a crisis not only determines the severity, cost and long-term environmental damage, it also determines how the community will respond to you. Community relationships should be built on mutual trust and cooperation. In today's world, the right to operate is, in essence, granted by the people who live and work near your operation.

8. **Answer B is correct.** The facility map should include an aerial layout of all buildings, roads, waterways, sewer lines, tanks, loading facilities, containment features and other fixed equipment. A separate drawing should be included indicating drainage both to and from the site with instructions detailing where dikes and dams can be built to block contaminated runoff.
9. **Answer C is correct.** All facility maps should include a distance scale and a north arrow. Also, be sure to pinpoint main shut-offs for electricity, water and gas, areas where hazardous materials are stored, location of fire alarms, fire fighting equipment and protective clothing and location of any perimeter fencing that could hinder access.
10. **Answer D is correct.** Besides all the above qualities, emergency coordinators should be accessible by telephone or two-way radio on a 24-hour basis. Alternates should be identified in a priority order of command, and in the absence of the Coordinator, should be granted the same authority as the Coordinator.
11. **Answer B is correct.** An area map is important for locating your facility in relation to the surrounding area. You can use a blow-up of a highway map or a USGS topographic survey that shows major roads, rivers and other landmarks. Distances to nearby residences and towns will be used to determine the need to evacuate.
12. **Answer B is correct.** Evacuation routes and shelters as well as alternate routes and shelters in case of wind shift should be included on every area map.
13. **Answer C is correct.** In order to be useful in a worst-case scenario, the types of chemicals and quantities listed in your plan should reflect peak season storage. However, exact daily inventories should always be available, and a copy of these records should be kept at a site away from your storage area.
14. **Answer D is correct.** In addition to Name, Container Volume, Location of Containers, Potential Hazards, Pesticide Labels, Manufacturer's Literature and MSDS, your Product Inventory section should include a description of protective clothing, containment methods and special handling procedures that may be required for each material.
15. **Answer C is correct.** The Emergency Equipment Inventory should contain a listing of all the emergency equipment and supplies you have available on site as well as off site. This list should include: equipment that can be used for diking, trenching, pumping, hauling and vacuuming; containment and cleanup materials, such as absorbent bags and neutralizing agents; safety gear, such as fire extinguishers, gas masks, protective clothing, boots, gloves, goggles, hard hats, etc. with the date last serviced on each item; and a list of any highly specialized equipment, such as self-contained breathing apparatus, should be obtained from your local response teams.

16. **Answer D is correct.** Before writing up the Emergency Procedures section of your contingency plan you should 1) meet with key employees to assess capabilities within your own operation; 2) after establishing internal emergency procedures, invite local response personnel to tour your facility, tell them of your capabilities and discuss how to work together most effectively; 3) contact state environmental protection agencies and other regulatory officials, who can be an additional source of knowledgeable support; and 4) consult a representative from your insurance carrier to address such issues as cost liability and the mechanisms needed to access funds during emergency situations.
17. **Answer B is correct.** The potential hazard created by large volumes of contaminated runoff water may be a more difficult problem to handle than the fire itself.
18. **Answer A is correct.** Make sure all response agencies outside your operation have a copy of your contingency plan. Rather than meeting with them periodically, you can mail them periodic updates or changes to the plan, insuring that these agencies will be prepared in the event of an emergency.
19. **Answer B is correct.** The public's perception of an incident will be determined by how effectively you communicate with reporters. The information should be both timely and accurate. Establish in advance a designated spokesperson who is articulate, low key and credible to reporters. Direct all press inquiries to this designated spokesperson. As the spokesperson, you should never talk to reporters without knowing exactly what you want to say, and exactly how you plan to say it. Write down all the basic information.
20. **Answer C is correct.** Never speculate, never lie and never say "No comment". If you are asked questions about things you cannot discuss, such as legal liability or unconfirmed information, tell reporters you cannot respond and why. Understand that you have rights, too. You do not have to answer inappropriate questions. In a patient and firm way, steer away from controversy.
21. **Answer A is correct.** You cannot control the way the press reports a story, but a calm, confident and honest presentation of the facts from a well-prepared media spokesperson will go along way toward making sure the public receives an accurate accounting.

Contingency Planning and Crisis Management

Pesticide Applicator Training Evaluation

Circle one response for each item.

SD Strongly Disagree
 D Disagree
 N Neither Agree nor Disagree
 A Agree
 SA Strongly Agree
 NA Not Applicable

If you have already been active in this behavior, circle

As a result of this training...

- | | | | | | | |
|---|----|---|---|---|----|----|
| 1. I am more aware of the importance of having a contingency plan prepared, practiced and ready to use. | SD | D | N | A | SA | NA |
| 2. I have learned what I should include in my contingency plan. | SD | D | N | A | SA | NA |
| 3. I intend to develop a contingency plan for my business or review the one that I now have. | SD | D | N | A | SA | NA |
| 4. I better understand the problems associated with delayed response to a chemical emergency. | SD | D | N | A | SA | NA |
| 5. I am better prepared to respond to the media in an emergency situation. | SD | D | N | A | SA | NA |
| 6. I feel that Clemson Extension is helping me to be better prepared to face chemical emergencies. | SD | D | N | A | SA | |

Overall, I think this recertification training video was: (circle one)

Poor Fair Good Very Good Excellent

Overall, I think this recertification training workbook was: (circle one)

Poor Fair Good Very Good Excellent

What could be done to improve this training?