

Preventing Accidents

Hazard Mapping

Activity: Hazard Mapping

Purposes:

To examine the hazards in our industries.

To learn how to develop a Hazard Map that workers can use to identify and locate hazards so that those hazards can be targeted for elimination.

To learn the importance of making Hazard Mapping a participatory process that involves as many coworkers as possible.

Task 1

In your groups choose a scribe and review the factsheets on pages 4 – 12. The factsheets will help you learn about Hazard Mapping and how it can be used to help you identify the areas in your facility where the risks of accidents and injuries are greatest.

Then, based on your own experience and the factsheets, use the sheet of paper and markers and follow steps 1 - 5 below to help you create your Hazard Map. Write large and use the entire sheet of paper for your map. Use the factsheets to help you label and describe the specific hazard areas.

Step 1:

Make a drawing on the sheet of paper that shows the basic layout of your facility. (See factsheet 6 for examples of what a hazard map looks like.)

Step 2:

Identify the hazards in each area of the facility using a color-coded circle on the map. (See factsheets 3 - 4)

Step 3:

Rate each hazard on a scale of 1 to 4 (See factsheets 3 - 4)

Step 4:

Label each hazard with a name or brief description. (See factsheets 5 - 6)

Step 5:

Based on your map make a list of the hazards that concern you the most and be ready to tell us why these hazards are a concern for your group.

Factsheet #1

Using Hazard Mapping to Identify Possible Risks

A Hazard Map is a visual representation of the workplace where there are hazards that could cause injuries or illness.

The Hazard Mapping method draws on what workers know from on the job experience. The Hazard Mapping approach is best when conducted with a small group of workers with some similarity in their work. For example, a group of workers from the same building or a group of maintenance workers who all worked in several buildings but do the same kind of work.

For example these maps might target:

- Physical hazards;
- Frequency of exposure;
- Level of exposure;
- A specific chemical or agent; or
- Workers or job titles most likely to be exposed.

Factsheet #2

Using Hazard Mapping to Identify Facility-wide Hazards or Hazards in Specific Areas of Work

The Hazard Mapping process can be used to identify risks at an entire facility and to specify hazards associated with an **AREA, BUILDING, JOB CLASSIFICATION or PROCESS**.

The facility map can be used to show at a glance the major hazards throughout the facility.

After completing the facility map, it may be obvious that a more detailed map of certain buildings would be helpful in “narrowing down” the processes, areas or jobs that have more dangerous hazards or where worker exposures to hazards are greatest.

To get more specific information you can conduct another Hazard Mapping session to focus on a specific area, building, job classification or process. These **area-specific Hazard Maps** can be used to get more detailed information.

Factsheet #3

Why Hazard Map?

Hazard Mapping is only one method for identifying occupational safety and health hazards. If your workplace has other systems for identifying hazards, those results can be included on your Hazard Map.

The point of Hazard Mapping is to pool the knowledge about hazards from all of your coworkers so that you can organize to eliminate the hazards. In the next Activity you will discuss how to organize effective involvement in the process. In additional Activities you will discuss how to assess ways to fix the hazards you have identified.

We use the same principles in Hazard Mapping as we use in the Small Group Activity Method of learning:






- Respect;
- Working Collectively; and
- Sharing the Power.

Hazard Mapping **respects** the vast array of skill, experience and know-how that workers have about their jobs and their dangers.

Hazard Mapping requires **working collectively** to more completely and creatively pool our knowledge and prioritize what problems to eliminate. Both Systems of Safety and Hazard Mapping **share the power** by involving all our coworkers in organizing for safer workplaces.

Factsheet #4

Hazard Mapping Labels

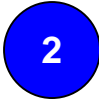




Hazard Code Key		
	Blue	Electrical Hazards
	Green	Chemical Hazards
	Orange	Physical Hazards (heat, noise, air quality, slippery floors, poor lighting, poorly designed work stations, etc.)
	Brown	Flammable/Explosive Hazards
	Black	Other Hazards (specify)

Level of Hazard	
1	Low Hazard
2	Medium Hazard
3	High Hazard
4	Very High Hazard

NOTE: Definitions of the four hazard levels vary from industry to industry and site to site. Each workplace should develop their own guidelines.

Factsheet #5

Examples of Hazard Mapping Labels

Hazard Codes and Levels of Hazards	
	A number "2" inside a Blue Circle indicates "Class 2, Medium Hazard, Electrical."
	A number "3" inside a Green Circle indicates "Class 3, High Hazard, Chemical."
	A number "1" inside an Orange Circle Indicates "Class 1, Low Hazard, Physical."
	A number "4" inside a Brown Circle indicates "Class 4, Very High Hazard, Flammable/ Explosive."
	A number "2" inside a Black Circle indicates "Class 2, Medium Hazard, Other Hazard."

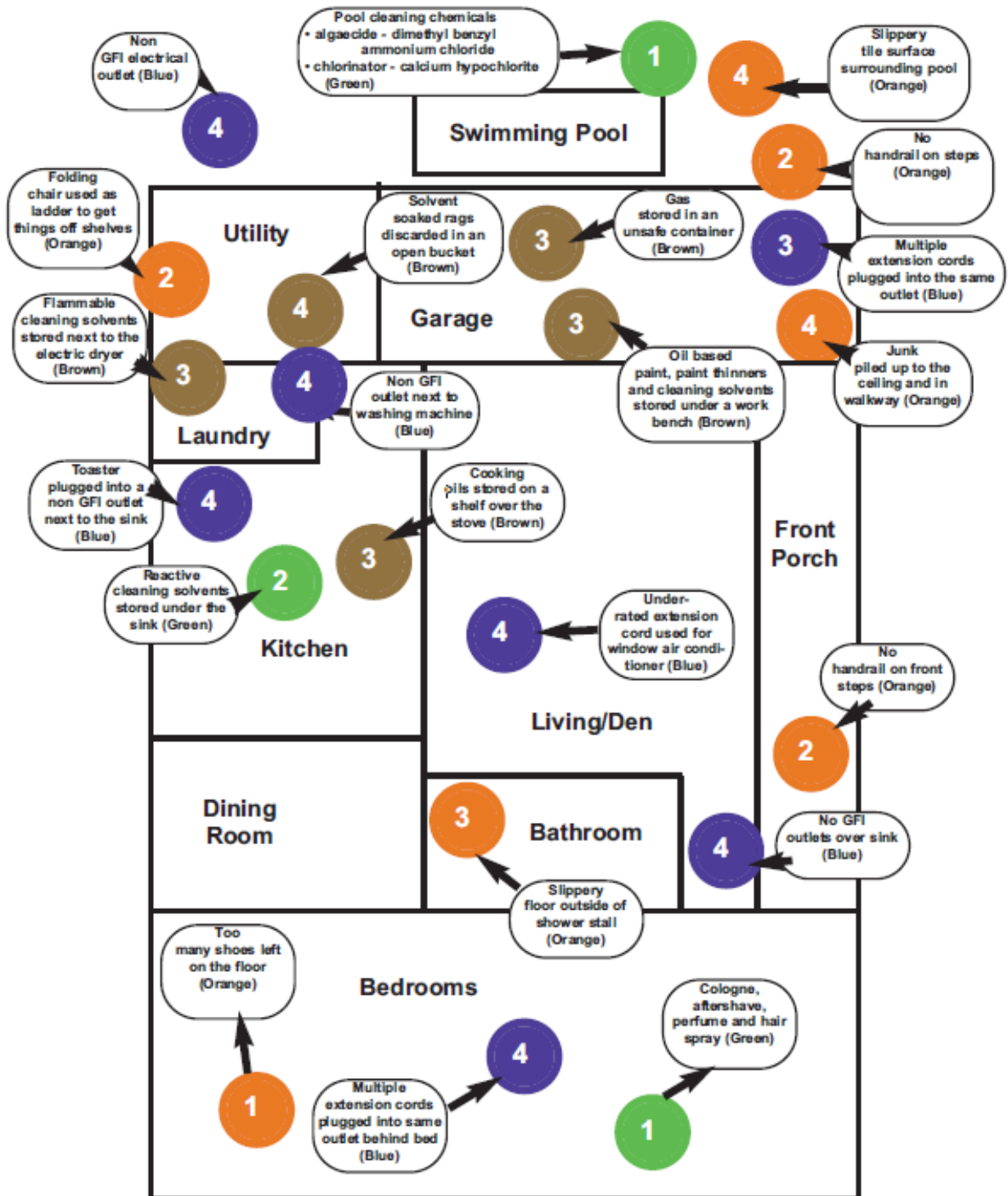
Factsheet #6

Some Examples of Hazard Maps

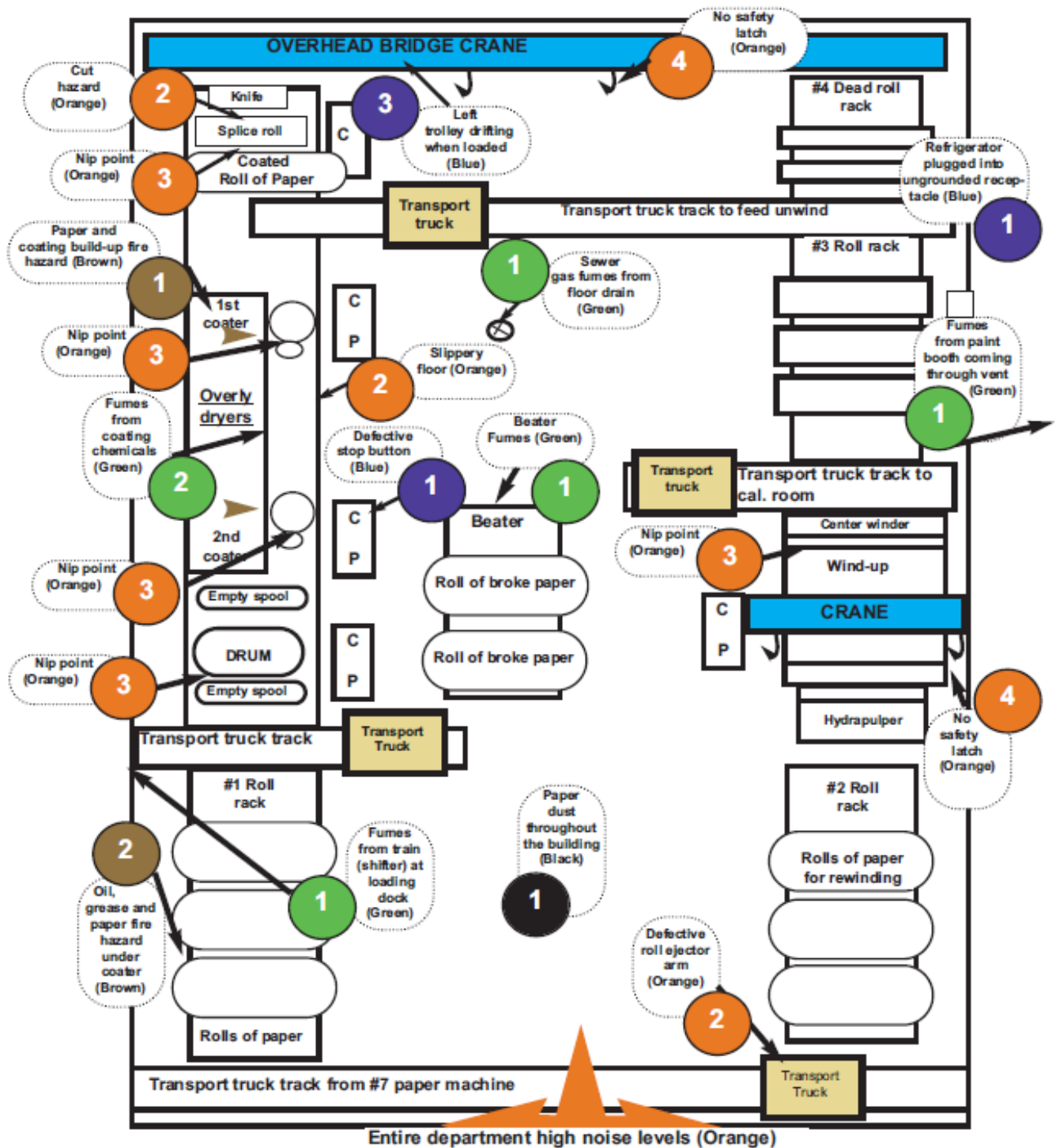
On the next three pages are examples of Hazard Maps. These are included to:

- Show how a home would appear when you identify present hazards and assign them a level of severity (6a);
- Show how a workplace would appear when you identify present hazards and assign them a level of severity. The two examples shown are from a paper plant and a chemical plant (6b and 6c);
- Allow workers to begin to view their workplace with hazards in mind; and
- Begin to think about how to create a Hazard Map of an area in your workplace.

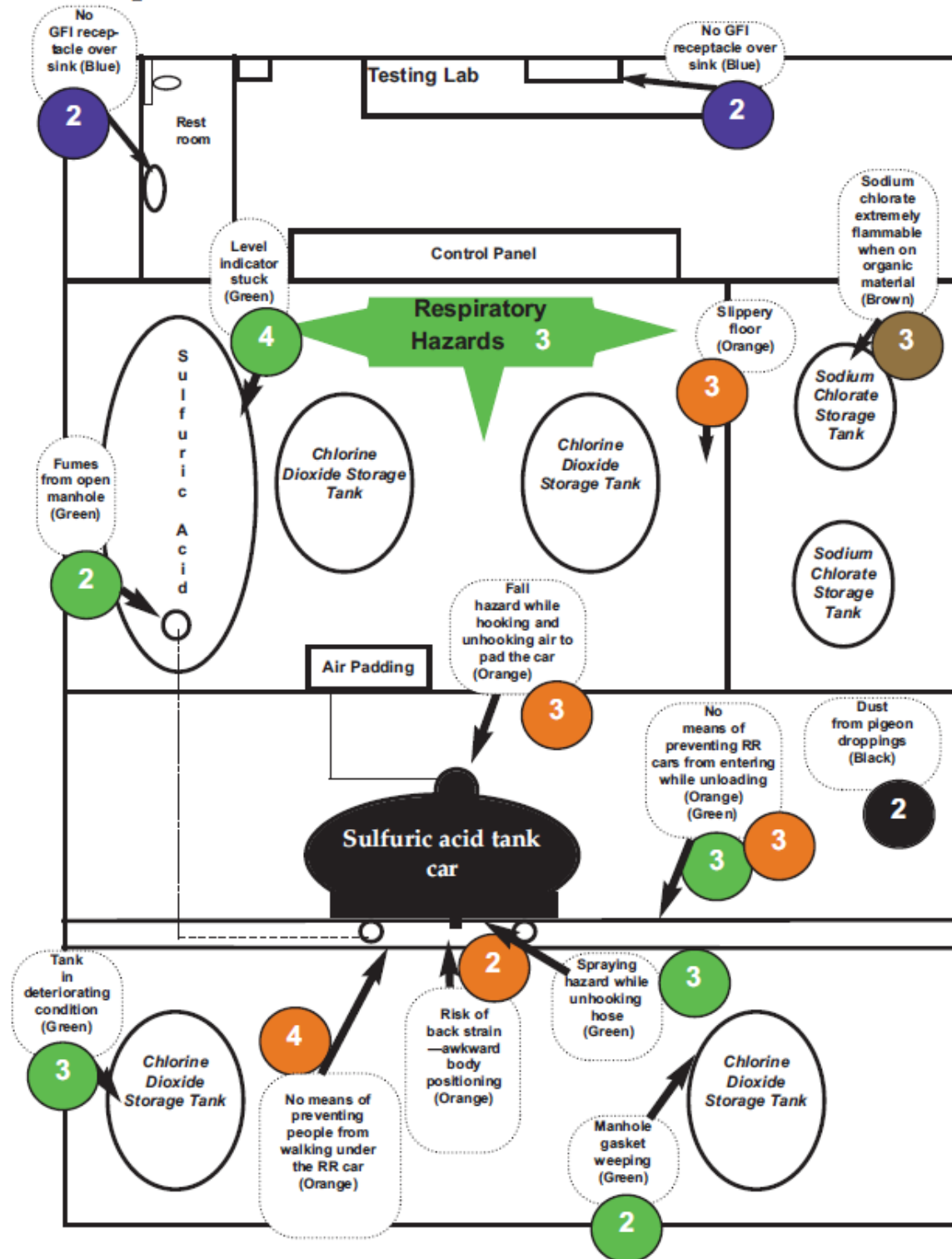
6a. Home Diagram (Entire House)



6b. In a Paper Coating Room in a Paper Plant (One Small Area of Plant)



6c. Chlorine Dioxide Generator (One Small Area of the Workplace)



Summary: Hazard Mapping

1. A Hazard Map is a visual representation of the workplace where there are hazards that could cause injuries.
2. Hazard mapping can help you identify occupational safety and health hazards.
3. The point of Hazard Mapping is to gather the knowledge about hazards from your coworkers so you can work together to eliminate and/or reduce the risks of accidents and injuries.