

2

Severe Weather ...and Your Community

Getting Started

Thunderstorms, tornadoes, or floods can happen almost anywhere. In some regions, these events occur very often, whereas in others they are unusual. However, at some time in your life you will probably experience some form of severe weather.

- What severe weather events are most common in your community?
- How do those events compare with severe weather events in other parts of the country?

What do you think? Write down your answers to these questions in your *EarthComm* notebook. Be prepared to discuss your descriptions with your small group and the class.

Scenario

An entertainment company wants to build a public arena in or near your community. The company proposes a circular arena that will seat 25,000 people. The arena will have a retractable roof that will allow for open-air rock concerts in good weather. Closing the roof will keep the company from having to cancel concerts in bad weather. Local government officials will approve the proposed arena if a plan is in place to ensure the safety of concert-goers. Of special concern is safety in severe weather. It takes an hour to close the roof of the building. Before and after concerts, roads leading to and



from the arena will be clogged with cars. Some of the roads may cross streams that may flood in severe weather. Will people be safe if severe weather develops? What warning signs will help the company decide whether to close the roof or cancel a concert? The entertainment company has asked the *EarthComm* students in your school to help them evaluate the potential for severe weather hazards in your community. Can you use your understanding of weather to explain how to recognize when severe weather threatens your region? You will also need to explain what to do during a weather-related emergency.

Chapter Challenge

Your challenge is to develop a report that will explain to the entertainment company how to recognize when severe weather hazards may be approaching, and what to do in case of such hazards. Your report will help the company to complete their final plans for the proposed arena. Without your report, the arena project will be dropped. Your report should address:

- The weather-related hazards that are likely to occur in your community.
- How often the hazards are likely to occur, and at what times of the year.

- How dangerous these hazards are and what kind of damage they can produce.
- What conditions might contribute to the development of these hazards.
- The warning signs that indicate when severe weather is developing.
- How citizens can be informed on short notice (in less than one hour) when weather-related hazards are expected.
- How citizens can prepare in advance for specific weather hazards.
- What safety procedures citizens should follow during and after severe weather events.

Assessment Criteria

Think about what you have been asked to do. Scan ahead through the chapter activities to see how they might help you to meet the challenge. Work with your classmates and your teacher to define the criteria for assessing your work. Devise a grading sheet for the assessment of the challenge. Record all this information.

Make sure that you understand the criteria and the grading scheme as well as you can. Your teacher may provide you with a sample rubric to help you get started.