## ES473 – Introductory Video Exercise

## Short Answer Review Questions from Video

## Video 1: La Loma Prieta Earthquake

- 1. Where was the earthquake and how large was it?
- 2. The tectonics of what two plates was the Loma Prieta Quake a result of?
- 3. What was the magnitude of the Earthquake?
- 4. Where was the epicenter of the earthquake located?
- 5. How far below the ground was the fault movement?
- 6. How far was the damage felt from the epicenter?
- 7. Why must geologists get out and explore the surrounding areas of land quickly after and earthquake?
- 8. What is the most important information to get out to the public after an earthquake?
- 9. Describe the movement of the plates that caused the earthquakes.
- 10. Why was the shaking in the "marina area" much worse than other places?
- 11. Why was the Bay Area so susceptible to damage from an earthquake?
- 12. What can we do to make old and new buildings safe?
- 13. What can we do to prepare for earthquakes?

## Video 2: Hanford Nuclear Cleanup

- 1. What was the nuclear plant built for?
- 2. Why was Hanford such an ideal place to build this nuclear facility?
- 3. What does the "Deadly Mile" refer to?
- 4. Did the government know what the long term effects would be to the area?
- 5. How many radioactive reactors are there?
- 6. How many tons of possibly lethal fuel is sitting in the basins?
- 7. What is the major issue that still poses a threat to the water table?
- 8. What are downwinders?
- 9. Describe the Hanford site. Include the 100 zone, 200 zone, and buffer zones.
- 10. Are there effects on the Columbia River <sup>1</sup>/<sub>4</sub> mile away from the plant? Explain.
- 11. Why can't we just leave the waste there and lock up the area?
- 12. Who is involved in the decision of cleaning up? What are researchers doing in order to attempt to clean up this highly contaminated area?

## Long Answer Essay Questions

# A. How do each of the video presentations relate to humans, and their respective ecosystem, to geologic principles and processes?

**B.** Compare and contrast the video clips to one another. How are humans and the Earth interacting with one another in each case study?