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E1-146

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June 12, 2003

Ms. Victoria Rutson
Chief, Section of Environmental Analysis
Surface Transportation Board
Washington, DC 20423

Re: List of Potential Environmental Issues for Southwest Gulf Railroad Company, Medina County, Texas

Dear Ms. Rutson:

The Medina Environmental Action Association (MEAA) asked me to compile a list of potential issues involved with the construction and operation of the Southwest Gulf Railroad Company. Please find attached a list of the issues that the MEAA and I prepared for your review. The list is not meant to be "all inclusive", but should serve as a starting point for preparation of the EA or EIS. We hope that you will be open to further additions if they are discovered during the NEPA process. We would sincerely appreciate the transportation board carefully considering the impacts imposed by all four alternative routes of the railroad on each of the listed issues.

Thank you so much for your time and consideration. Feel free to call me if you have any questions or need further information.

Sincerely,

Lynn M. Kitchen, Ph.D.
Vice President

POTENTIAL ENVIRONMENTAL ISSUES IMPOSED BY VULCAN MATERIALS' PLAN TO CONSTRUCT A RAILROAD IN MEDINA COUNTY

Physical Factors

1. Geologic Factors
 - a. Sensitive recharge features
 - i. May be filled, destroyed or impacted by construction of the rail
 - ii. Compromise the structural integrity of the rail
 - iii. Susceptible to spills or leaks of fuels and fugitive dust
 - iv. Impacted by vibrations, etc. from rail use.
 - b. Karst features and faults: May be altered by blasting and earth moving operations causing loss of artesian springs in and around the project area. These springs currently provide the majority of the flow of Quihi Creek.
 - c. Impacts to artesian springs associated with the Edwards Aquifer. These springs have created wetlands and other surface waters that are unique in plant community development and composition.
2. Soils:
 - a. Loss of farmland soils currently used for crop production
 - b. High potential for soil erosion caused by changes in drainage as a result of rail construction. Proper erosion control devices must be put in place to mitigate for impacts along the railroad.
3. Agriculture:
 - a. Splitting of pastures by the rail: Ranchers will not have current, easy access to rotate livestock to pastures due to the rail, unless underpasses or safe crossings are constructed. Underpasses will allow livestock to move freely throughout pastures with the rail in place. Some ranchers are concerned that the railroad will cut their livestock off from water sources, making some pastures unusable.
 - b. Splitting of croplands making access by farm equipment extremely difficult. Again, underpasses or safe crossings need to be constructed to allow free access by farmers at various locations on their property.
 - c. Noise from trains may be disruptive to livestock.
4. Mineral Resources:
 - a. Oil and gas pipelines are known to be in the area of the new rail. There is potential for damage to pipelines running through the area stemming from vibrations caused by rail use. Proper measures must be used to prevent damage and subsequent releases from these pipelines. This is especially important because the northern portion area is located on the recharge zone and in the upper watershed of Quihi Creek.
5. Visual Resources
 - a. The rail and associated development will cause significant impacts to the rural and natural landscape of the area.

- b. Lighting and associated features will decrease the visibility of the sky at night. The area is currently being used for astronomy studies and star mapping because of its unusually low level of light at night.
 - c. Very significant impact to the historic vernacular of the area.
6. Cultural Resources
- a. Rail runs directly through or nearby many historic structures that are currently registered or will be registered as national historic landmarks. These structures are considered important examples of the architecture of the area's past history.
 - b. Potential impacts to family graveyards
 - c. Potential impacts to archeological features that may require archiving and further study. The site is known to be rich in archeological features dating back to 10,000 BC.
7. Surface Water Resources
- a. Dust associated with cargo and train movement can impact wetlands and other surface waters in the area.
 - b. Potential for the release of fuels and lubricants, which could eventually impact surface waters by runoff, etc.
 - c. Culverts and bridges should be required to prevent changes in drainage and flow patterns for all ephemeral, intermittent, and perennial streams in the area.
 - d. Wetlands may be filled by construction of the rail. These wetlands are especially unique because of their association with artesian springs in the area and their connectivity with Quihi Creek.
8. Groundwater Resources
- a. Rail could impact groundwater recharge features by filling or destroying the structural integrity of the features. Sinkholes and caves are known to exist in the northern area near the proposed quarry and could be impacted by vibrations of the train or earth moving during construction of the railroad.
 - b. Potential for release of fuel and lubricants from the train into recharge structures causing contamination of the water
 - c. Potential for release of fuel and lubricants from construction equipment into recharge structures causing contamination of the water.
 - d. Past history has shown that the groundwater is very sensitive to vibrations, causing the water to become cloudy with sediments (caused by earthquakes as far away as Mexico). Potential for this to occur from train operation should be addressed. Mitigation for decreased water quality should be included as part of the recommendations.
 - e. If gravel is washed prior to transport, potential for sediments from wash water to impact ground water by draining into recharge features in and around the quarry
9. Floodplains
- a. Site is already susceptible to extensive flooding. Rail would create berms across floodplains that would significantly change flood flow and cause flooding of homes and historic structures. Bridges should be required where the rail crosses any stream or floodplain. The bridges should be in place for the full extent of the floodplain.

- b. Many areas may be developed in the future, changing the flood flow significantly. Bridges will ensure that even heavier flood levels can be accommodated. Flood studies should include a comparison of flows with and without bridges and should be projected for industrial and residential development associated with the rail. An increase in flood flows would be expected because of increases in impermeable surfaces and construction of rechanneled, concrete lined ditches and streams in developed areas.

10. Air Quality

- a. Fugitive dust emissions from train movement
- b. Fugitive dust emissions from cargo
- c. Release of carbon from train engine (visual impacts)
- d. Dust and emissions caused by construction equipment
- e. Proximity to sensitive receptors and residents in the area that have health problems exacerbated by dust and other particulates

11. Noise

- a. Significant impacts would be expected to any receptors within 1000 ft. of the rail caused by vibrations, engine noise, and track noises.
- b. Significant impacts to receptors by train whistle at crossings
- c. Significant disruption to livestock and other farm animals causing abnormal behavior and impeding breeding.
- d. Impact to quiet, rural environment now enjoyed by residents.

12. Land Use

- a. Splitting of pastures, farmland, and rangelands, making movement of equipment and livestock extremely difficult. Need network of underpasses to allow for safe movement of livestock and equipment across the railroad.
- b. Access to areas will be changed and will be more difficult and dangerous. Driveways across railroad may be blocked for long time periods, especially near the quarry and other loading and unloading areas.
- c. Rail will essentially change the area to industrial/commercial use if Vulcan predictions are true. Much of the farmland in the area will be lost.

13. Roads

- a. Railroad crossings will stop traffic movement for long periods of time, especially if the train is 1 mile long and travels at 10 – 20 mph. Also, the train will be stopped at loading and unloading areas where traffic will be stopped for even longer periods of time.
- b. Railroad crossings will be especially dangerous for school buses and use should be scheduled around school bus transport times.
- c. County feels that above grade crossing should be constructed for all county and state road crossings.
- d. Rail company should be responsible for maintaining minor crossings in safe condition that will not damage vehicles or equipment (not owner's responsibility). Underpasses are preferred where possible. For farm equipment, these underpasses or crossings must be a minimum of 50 ft. wide to accommodate farm equipment.
- e. How long will minor crossings be blocked by the train?

14. Utility lines: Must be accommodated when they cross under or over the rail.

15. Vegetation

- a. Potential impacts to sensitive species
 - b. Potential spread of noxious weeds by rail cars
16. Wildlife
- a. Wildlife mortality along the railroad
 - b. Major impact to hunting along and near the railroad
 - i. Decrease in interest of hunters paying for leases
 - ii. Increase in poaching along railroad ROW
 - c. Disruption of wildlife movement (dissection of current trails and movements)
 - d. Disruption of wildlife nesting and breeding caused by train noise
 - e. Loss of aquatic and terrestrial wildlife habitat
17. Endangered Species
- a. Golden-cheek warbler habitat and black-capped vireo habitat should be evaluated on the northern end of the rail for 1000 ft. on each side of the track (noise impacts). Live bird studies for 3 years should be required to ensure that the birds are not in the area.
 - b. Karst invertebrate habitat should be evaluated on the northern end of the rail. Caves and sinkholes have been reported in that area.
 - c. Site should be reviewed for potential impacts to state listed species of concern.
18. Socioeconomics
- a. A detailed comparison of benefits and losses associated with each alternative, including the No Action Alternative. Costs to the county need to be assessed, such as increased road use, development of infrastructure for the rail, quarry, and new development associated with the new industry.
 - b. Significant decrease in land value due to railroad (no longer valuable as residential property or ranchette developments).
 - c. Potential dislocation of some residences
 - d. Future change in the overall community from rural to industrial/commercial—loss of farming jobs and careers
 - e. Increase in potential for major accidents at crossings
19. Indirect Impacts
- a. Industrial or commercial development of area and all impacts to the rural/natural environment associated with that change
 - b. Construction and use of the quarry (reason for the rail) and impacts associated with it
20. Hazardous Materials
- a. If the area becomes developed as Vulcan predicts, potential for release of hazardous materials used by industry increases. Special concern in the recharge area.
21. Potential permits required for rail:
- a. Water Pollution Abatement Plan (recharge zone)
 - b. TPDES permit for construction and use of the rail
 - c. Section 404 Permit (probably Nationwide Permit 14)
 - d. FEMA coordination and possible permitting
 - e. Consultation with U.S. Fish and Wildlife Service on northern end of rail

- f. Coordination with State Historic Preservation Officer and Texas Historical Commission
- g. Surface Transportation Board Permit
- h. Texas Department of Transportation approval for state highway crossings
- i. Air and Noise Permit (at least coordination with the TCEQ)
- j. Local permits and approvals