

Report says coal emissions alter soil

By PAUL WILLIAMSON
Of the Emerald

America's need for energy self-efficiency and its ability to generate it have once more come to loggerheads.

A recently released federal report on coal plant emissions says effluence from these plants alter stabilization and decomposition elements in the soil. Additionally, the report suggests that emissions may affect the content of

rainwater and the amount of solar radiation that the area surrounding plants receives.

All of which is a problem for America as it builds its ability to generate electrical power from coal fired plants.

Although clean air standards and pollution control equipment has reduced the overall toxicity of coal plant emissions, more recent research shows some negative long-range side effects.

Perhaps the largest of those is the acid rain phenomena, which occurs when sulfur and nitrogen dioxide combine with moisture. Acid rains are currently turning higher elevation lakes in the Northeast into vinegar-like solutions, reports indicate.

Recent evidence turned up by the Corvallis Environmental Research laboratory suggests that the environmental degradation associated with acid rains can occur from amounts of sulfur dioxide previously thought to be harmless.

The group is sponsored by the Environmental Protection Agency and has been conducting studies on Northern wheatgrass ecosystems located around large coal deposits in Montana.

The area provides cattle grazing and is a source of grain crops

and was chosen due to its proximity to several large coal-fired plants that operate close to the coal beds.

The Corvallis researchers used simulated plots of grassland vegetation to study the effects of "chronic low level exposure to sulfur dioxide."

The three-year study has found a number of other side effects, including:

- decreased protein content and digestibility of western wheatgrass.
- decimation of lichen populations important in stabilizing the soil.
- reduced populations of beetles important to decomposition.
- decreased activity among some soil micro-organisms.

Besides affecting the content of rainwater, the heat and water

vapor associated with coal plant emissions also alters the whole water cycle of the ecosystem. Additionally emissions alter the rate at which clouds form, necessarily altering the amount of solar radiation to a given area.

Coal plant emissions consist primarily of particulate matter, sulfur dioxide, nitrogen dioxide, fluoride, and a lot of hot air. The immediate toxicity of these substances has produced clean air standards that require plants to carry pollution control devices to remove much of the harmful emissions.

Oregon currently has no coal-fired plant in operation although one located near Boardman on the Columbia River, is under construction. The plant is scheduled for completion and operation in 1980.

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all my children

Since human-performed abortions aren't groovy in Pine Valley, decent women who get pregnant have little choice but to carry the child to term. No way one can just not be pregnant anymore—unless the good lord decides a miscarriage is in order. Thursday's closing scene hinted that Deven might be in luck.

It was a slight hint—Deven just doesn't feel so hot—but her request to be taken to the doctor implies there'll be no baby for Mark and Ellen to adopt. Just as well. The plan is beginning to disintegrate.

Practically no one besides Mark, Ellen, Deven and Wally thinks the adoption is a good idea. Including me.

The problems inherent in the situation are obvious. The kid would have more problems than Charlie when it came to his or her parentage. Might work if Deven agreed to split once the baby popped out, but she plans to live in the same house.

Problems with the situation caused Paul to drop by the Boutique to warn Ellen of the entanglements that waited for the Shepards.

Ellen's response to his concern was to tell him to take his advice and hit the road, which he did after precisely elucidating Ellen's ingratitude and essentially telling her to shove it.

That is exactly what Ruth was fixing to tell Tara, but she's so good looking that people wanting to shove it is nothing new. No, No, hey, pulling my mind out of the gutter, I have to tell you Ruth was upset. Dr. Joe laid it out about how Chuck and Tara are making goo-goo eyes at each other and Ruth's ready to come to Phil's aid.

A smile crossed Ruth's face when Tara allowed as how she thought about Erica's dinner invitation and had decided to renege. Maybe there's a chance for Phil and Tara after all.

If the two get back together, it will just be part of Chuck's problems. His wife's about to go back on the stroll. And she's dressed for it. Donna probably had to squeeze a little to get her broad behind in those shiny silver pants but are they sharp.

Not that Donna's unaided in her decision to go back on the street. Actually, she'd like to go straight, but that sleazy Billy Clyde wants to make some dough off her. He'll have to do it that way 'cause Stell got wise to his arrangement with Phoebe (he was getting paid to keep Donna on Locust Street, away from Pine Valley and Chuck) and forced him to give Phoebe back her bucks.

Getting hard to make a dishonest dollar anymore.

emu

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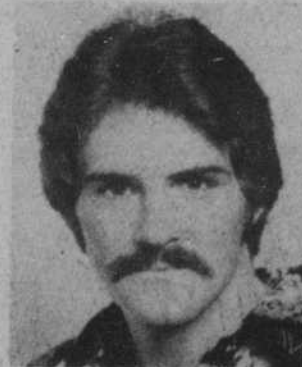
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