Rachel's Environment & Health News
#164 - The Landfillers' New Plan: Megafills
January 16, 1990

As long as there have been humans, there have been garbage dumps. Archaeologists call dumps "midden heaps" and sift through them meticulously, searching for the meaning of life--or at least trying to understand what it means to be human.

For thousands upon thousand of years, humans have thrown their detritus into holes in the ground not far from home. And for thousands of years, this made sense. Soil contains an immense number of tiny creatures who spend their time breaking down organic materials into their original constituents. (These creatures make up the "detritus food chain" and they are essential to the wellbeing of the planet, though we rarely hear much about them--after all they are so small they are invisible, and who likes to discuss detritus-eaters anyway?) Bury a banana peel or a dead squirrel for a month or two and they begin to lose form and substance, recycled by members of the detritus food chain back into their original inorganic constituents (oxygen, nitrogen, calcium and so forth). Ashes to ashes, dust to dust. Yes, shallow land burial (a dump) makes good sense for nontoxic materials.

But now dumps have become dangerous because many of the things we throw into them are toxic. Starting about the time of World War II, the nature of our economy changed. We began to turn our backs on the old raw materials--cotton, wood, paper, leather, glass, and iron--and we began substituting new raw materials. Many of the new materials are toxic. Because many of these materials do not occur in nature, the detritus food chain has never developed any members who lunch on them, so the new materials persist in the environment, unable to be broken down efficiently.

As a consequence, if you expose a modern dump (called a landfill) to rain, then collect the rain water that has filtered through the garbage (it's now called "leachate"), you will find that the leachate from a solid waste landfill has about the same toxicity as the leachate from a landfill specially designated for toxic industrial chemicals (a "hazardous waste" landfill). (See RHWN #90.) This should not surprise us. There is one stream of raw materials coming in the front door of a factory. Inside the factory, manufacturing occurs. Two streams of materials leave the factory--one is "hazardous waste" and one is "product," but they are both made from the same stream of raw materials that came in the front door. After the "products" are used, they are discarded into a "municipal solid waste landfill." Leachate from each type of dump--municipal waste vs. hazardous waste--is about equally toxic; no surprise.

For nearly 40 years after World War II, people buried toxic materials in the ground. Make no mistake--industrial chemists knew what they were doing; they knew it was dangerous (see RHWN #97), but it was cheap, and America was on a blind binge of growth and affluence. The modern formula for success became, "Haste plus waste makes profit." And let the devil take the hindmost. Then Love Canal occurred. Suddenly within about five years everyone with a shred of sense came to realize that landfilling the byproducts of the modern economy is certain to cause enormous environmental damage and human misery.

In 1980, Congress passed the Superfund law to begin to clean up the past 40 years' abuse. Then Congress began to ban landfilling of the most dangerous materials. U.S. Environmental Protection Agency (EPA) funded studies showing that 86% of all the landfills they studied had actually contaminated groundwater. (See RHWN #71.) Combining these studies with the fundamental principles that underpin physics and chemistry (for example, gravity and the second law of thermodynamics), EPA began saying in the FEDERAL REGISTER that there is good reason to believe that, sooner or later, all landfills will leak, and will contaminate the local environment. (See RHWN #37.) Even more importantly, citizens across the nation took to the streets to prevent the siting of new landfills. The movement for environmental justice was born.

While this scientific and common sense opposition to landfilling was growing, a counter-current was developing among those who make billions of dollars burying poisons in the ground--the waste hauling industry.

During the '70s and '80s, the waste hauling industry was being transformed from thousands of unorganized local haulers into a nationwide network dominated by a few corporations who learned their business techniques from organized crime. (See RHWN #40.) A few visionary and ruthless business leaders saw that citizen opposition to new landfills created a fabulous opportunity. Their initial tactic was to purchase every landfill in sight. The fact that these landfills were leaking dangerous materials into the local environment might seem to be a serious liability, but the waste haulers saw that this was actually an opportunity. The large firms organized themselves into hundreds of small subsidiary corporations, no one of them holding much capital. Then each small firm bought one or two leaking landfills, went to local government, and said, "We own this landfill, which is leaking poisons into your water supplies. If you allow us to expand it, we will be able to make money and we will use part of the money to contain the poisons and do our best to clean up past damage. If you will not allow us to expand it, we will be forced to declare bankruptcy and leave you to clean up the poisons." The federal Superfund cleanup program has shown that the average cost of cleaning up a leaking landfill is $25 million, so most local governments can't think about financing a cleanup themselves. Never mind that the expanded landfill will eventually leak, making the local problem much worse, and that the owner of the landfill will then declare bankruptcy and skip town; for people worried about the short term only (i.e., politicians), the proposal to clean up the site in return for a license to expand is an offer they can't refuse. Once the giant waste haulers had hundreds of landfills under their control, they began to form alliances with garbage incinerator companies; the incinerators can be sited on, or very near, the landfill sites, thus avoiding the troublesome problem of siting a new landfill to handle all that incinerator ash, which is laced with toxic metals (see RHWN #92). It's perfect--especially if the Washingtonbased environmental groups and Congress will cooperate to strip incinerator ash of its "hazardous" label. (See RHWN #85.) Then the toxic ash can be put into the local landfill and no one has any grounds for objection.

Thus the country now finds itself in the throes of a major struggle that will play itself during the 1990s. Those scientists and regulatory officials who haven't been bought by the giant waste haulers plainly state that all landfills leak and can be expected to poison local water supplies. Yet the waste haulers have developed what amounts to a political movement to a maintain landfilling as the nation's principal means of waste disposal.

Local people are tipping the balance in this struggle. The nationwide movement opposing new landfills continues to gain strength, and it is taking a terrible toll on the waste haulers' profits. The waste haulers are having to defend themselves at every turn; this is expensive, it creates bad publicity, and it's a nuisance. Their goal is to make money by burying dangerous wastes in the ground, not to fight with citizens. So now they have developed a new strategy designed to minimize siting battles. They have formed an alliance with the nation's railroads to develop a few giant landfills, each covering one thousand to 40,000 acres, which will accept wastes from cities a thousand (or more) miles away. The term being used to describe these giant new landfills is "megafill."

Only one megafill is operating today--BFI's 880-acre dump near Poland, Ohio. Another megafill on the drawing boards is the 8,300-acre Eagle Mountain Project, currently seeking permits to operate in the desert 200 miles east of Los Angeles. It is designed to accept 20,000 tons of trash each day for 100 years. If successful, it's owner will only have to fight a siting battle once every century.

The 2782-acre Gallatin National landfill in Fairview, Illinois, and the 1200-acre site near Edgemont, South Dakota, are other examples of burgeoning megafills. The two largest proposals are near Lordsburg, New Mexico (23,480 acres), and in Schuyler

County, Missouri (40,000 acres). Railroads are involved in each proposal.

Trains make sense for large garbage operations. One train can carry 4000 tons, about the same amount carried by 400 18-wheel semi-trailer trucks. Conrail now hauls about 700 tons of garbage a day, earning roughly $4 million per year. Within 10 years they expect their earnings from this source to hit $100 million.

Soon the deserts of the southwest and prairie hillocks of the midwest may be graced by megafills yawning open to swallow the toxic residues of New Jersey and New York. After all, it's got to go somewhere, doesn't it? Or does it? That's the central question, and we'll have an answer during the 1990s.

--Peter Montague

=====

Descriptor terms: landfilling; megafills;

Rachel's Environment & Health News is a publication of the Environmental Research Foundation, P.O. Box 160, New Brunswick, NJ 08903-0160; Phone: (732) 828-9995; Fax (732) 791-4603; E-mail: erf@rachel.org; http://www.rachel.org. Unless otherwise indicated, Rachel's is written by Peter Montague.