



# The Green Box

## FILMSCRIPTS ON SOLID WASTE MANAGEMENT

This script is one of a series published to help lecturers, teachers, and group leaders prepare for viewing and discussion of solid waste management films. It is also intended for those in an audience who want a permanent record of the data presented in a film. It was written by Stuart Finley, Inc., the producer of the film, in close cooperation with staff of the Federal solid waste management program.

Titles and publication numbers of scripts for solid waste management films are shown below.

- ✓ *The Third Pollution* SW-39c.1
- ✓ *Burn, Bury, or What?* SW-39c.2
- ✓ *Recycling* SW-39c.3
- ✓ *5000 Dumps* SW-39c.4
- ✓ *In the Bag* SW-39c.5
- ✓ *The Green Box* SW-39c.6
- ✓ *The Stuff We Throw Away* SW-39c.7
- ✓ *What's New in Solid Waste Management?* SW-39c.8

Instructions for borrowing or purchasing these films are given with each script and are summarized in the brochure *Films Tell the Story*, available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 20402.

U.S. Environmental Protection Agency

1972

## THE GREEN BOX

17 minutes, 16-mm motion picture, sound, color, 1970. Order no. M-2097-X\*

**THE GREEN BOX** illustrates a novel rural solid waste collection and disposal system developed by Chilton County, Alabama, to serve its 26,000 predominantly rural residents scattered over a 700-square-mile area. Four-cubic-yard containers located throughout the county are emptied every other day by a specially equipped packer truck. The county's old rat-infested dumps were closed and roadside maintenance problems have been solved. The film is designed to interest the lay public and assist local officials to devise workable rural solid waste management systems.

**Charles C. Gay, Jr. recalls the Chilton County situation prior to "Clean and Green"**

"You wouldn't believe it, but at one time I got numerous complaints about this area. This was the city dump of Clanton, Alabama. It was loaded with garbage, rubbish, flies, rats, and other vermin . . . burning all the time, with smoke billowing from it. That situation has been eliminated now that we have our new sanitary landfill. We don't get the complaints that we used to get from this source. This old sign here served its purpose in its day—a very useful purpose. Now we are considering whether to take it to the sanitary landfill and bury it or up to the court house and hang it on the wall with a plaque under it saying, "RETIRED."

**Slides showing Chilton County dumps as they were**

Charlie Gay, the County Sanitarian, took these pictures, made up a slide show, showed it all over the County . . . and just raised hell.

**Coosa County dumps today; tilt from sky to roadside dump**

The summers are hot in Alabama and the garbage from 26,000 people just sat and simmered in the sun. This is how the dumps in the next county look today.

**Close up of dump showing flies, zooming out to show tires and then smouldering fire in background**

When Charlie made his "Let's Clean Up Chilton County" speeches, he'd mention: swarms of pesky flies, rats (it turned out there were 1,800 of them at the Clanton city dump), smoke and air pollution, and one other matter . . . self respect.

**Packer truck approaches on highway and camera pans to include the**

The problem was very difficult. Door-to-door pickup throughout Chilton County's sparsely settled 700 square miles would have been far too expensive. And so some civic leaders thought

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**container; packer truck picks up container and empties it**

up the idea of "the green box." Locate them at convenient places along highways so they would be as close or closer than the nearby open dump. Mechanically pick up the refuse every other day with a big packer truck. Then establish a carefully operated, centrally located sanitary landfill and close the County's 40 major unauthorized open dumps and the hundreds of smaller ones. The Bureau of Solid Waste Management of the Department of Health, Education and Welfare\* awarded a demonstration grant . . . the objective: to determine if such a container collection system would be a practical solution for rural solid waste management problems which exist all over the country.

#### **City collection in Clanton**

The town of Clanton, the Chilton County Seat, already had a good house-to-house collection system, as did the other three municipalities of Jemison, Maplesville, and Thorsby. These collection programs were continued unchanged but the refuse was no longer taken to their four dumps but rather to the new sanitary landfill. These communities approved of the new system because smoke and odor had always been a problem and all of their dumps were nearly full. County Sanitarian Gay discovered to his sorrow that there is no simple formula for assessing rat populations and exterminating them. With the help of the Alabama Department of Health and the United States Public Health Service, the rats were exterminated and the dumps covered with clean earth. During 1969, nearly every house in the four incorporated towns was visited one or more times to explain the new solid waste disposal program and potential benefits of rat and mosquito eradication both at the old dumps and in town.

#### **Chilton County Sanitary Landfill operation**

The key element of the Clean and Green Project is the new sanitary landfill located on County property near the intersection of two major highways. The use of a single, centrally located fill site would increase hauling costs somewhat, but proved to be much more economical than operating multiple landfills with duplicate equipment and personnel. The Project Director and the Project Consultant designed the landfill after taking borings, determining soil types and drainage conditions, and making a thorough study of the site. The new landfill manager attended the one week training course "Sanitary Landfill Principles" conducted by the Bureau of Solid Waste Management in Cincinnati.

**Judge Thomas A. Hayes, Probate Judge, Board of Revenue and Con-**

"Let's face it. After all, we were forced into the garbage collection business.

\*Now the Office of Solid Waste Management Programs U.S. Environmental Protection Agency.

**trol, Chilton County, discusses how the project originated**

"We were using the open pit system all over the county, which didn't work at all because the people weren't using the pit. So we decided that we would go to a countywide garbage system because we knew this was going to be a success. But we had to get the people in the county to use it. So with the help of the extension service, our Health Department, and other civic organizations, we started talking "Clean and Green" and you know, the funny thing was, when we first started putting out these cans the telephone would ring saying "Judge, get that can away from my place. I don't want a garbage place right at my front door." So we nearly wore out the first cans we got moving 'em from one place to the other. But you know after 6 months, the telephone quit ringing and for the next 3 months it went to ringing "Judge, bring a can over here to my place. We need one."

**Truck shot showing woman putting refuse into container from her car**

The novel part of the Project Clean and Green is the green box. Its use could convert an uncontrollable solid waste problem into an orderly system . . . if it worked.

**Packer truck empties container near cotton patch**

Because of the extensive mileage to be travelled, a large packer was selected, which, however, would not exceed highway load limits. It has a loading lift capacity of 4,500 pounds and a capacity of 30 cubic yards.

**Container by Coosa River recreation area**

The container collection system has proved so successful that there are now 90 boxes and each one is being emptied every other day.

**Container by side of road; packer pickup shot from inside cab of truck**

Most of the containers are situated along highways. It soon became apparent that during wet weather the packer truck and people using the containers were inconvenienced by mud. Thus, a paved area was provided to facilitate all-weather access.

**Lady disposing of garbage from her car to a container; another lady empties a can of garbage and returns can to trunk of her car**

There is no use having a system of containers if people don't use them. So, an intensive user education program was undertaken. The County Extension Chairman and the County Sanitarian gave talks to civic clubs and church groups. The new project was promoted by the local newspaper and radio station, and even on television. Many door-to-door visits were made.

**Walnut Creek Methodist Church sign; church with tree and clouds in the sky**

However, people don't always react favorably no matter how good the engineering proposals may be . . . or how intensive the salesmanship. Here is Cletice Ingram, pastor of the Walnut Creek United Methodist Church, with his comments.

**Pastor Ingram gives his views of the project; during and after**

"When I heard that the landfill was going to come to Clanton and be located right across the highway from the Walnut Creek United Methodist Parsonage and Church, I was very much opposed because I had seen the various dumps across the country, with all of the rats and the flies and the smell. But now that we have the landfill, we can see that it's cleaned Chilton County up and I'm very much in favor of it because it does keep us 'Clean and Green'."

**Project Director Robert Alexander at the landfill explaining its operation**

"After learning that it would be my responsibility to take care of the Clanton Landfill here in Chilton County, I decided that I would look at other landfills. I went to several across the State and out of the State also, and mostly what I saw was a combination landfill and dump. We were determined to try to have an ideal landfill here in Chilton County. As a result, we have what I think is one of the cleanest landfills in the country."

**Landfill covering operation continues**

Mr. Bob is the County Engineer and supervises the whole project which operates 7 days a week. He has hired four full-time men. The Landfill Manager weighs and records the loads brought for placement at the fill. The Landfill Tractor Operator is almost wholly occupied with the daily placement, compaction and covering of the wastes. The Rural Collection Truck Driver collects rural wastes and maintains his packer truck. And a Utility Operator substitutes for other personnel and is responsible for maintenance of wholesome environmental conditions at the sanitary landfill site.

**Pan of main street in Clanton**

Clanton, Alabama has a population of 5,800. It's what "damyankees" call a sleepy southern town. But Clanton is just like any community in one respect. If you look, there is always someone who doesn't relish the thought of higher taxes. Any new and improved public works system has to cost more than the inferior system it replaced. So, let's look at the politics of this situation and visit the Board of Commissioners in the Chilton County Courthouse.

**Deliberations of the Board of Revenue and Control with previous case concluding; Judge Hayes asks about Clean and Green; Jim Walters explains the project**

“Gentlemen:

The next order of business will be our Clean and Green Project. Jim, as you know, our Clean and Green Project is now 2 years old, and the Board would like to ask some questions pertaining to this project. Do you think it's doing a good job of cleaning up our right-of-ways? Also, could you compare our program with the other systems being used over the country? As concerns the cost of this project, are we getting our money's worth? And is there anything else that you might think of to bring us up to date on our Clean and Green Project?”

“Judge:

It's a real pleasure to give you a report on Project Clean and Green. The public acceptance of our project has been most encouraging. The job that has been done of cleaning up the county is phenomenal. The costs that have been incurred are reasonable and the real clincher is that there have been four other counties in the State of Alabama who have adopted the system after visiting our project. Now, during this 2-year period, we've implemented the system of containers for storage of rurally generated waste. We have operated the sanitary landfill in a way that is much better than any I've seen in operation anywhere. We have taken all of the solid waste from municipalities in the County and we have taken care of the solid waste generated by the industry in the County. The series of containers that I mentioned, these 4-cubic-yard containers that you are each very familiar with from having driven past so many times and having seen them in use, we had placed at about 43 container sites by November of last year. Now these 43 sites have on them 57 containers and they are arranged so that 50 percent of the county live nearer to one of these than 1.6 miles and 90 percent of the people live within 3.7 miles of a container. As a matter of fact, 95 percent of the people are nearer than 4.8 miles. So that these containers are located to serve the people and the people respect the containers. They use them and maintain them. Some clean-up is necessary at the container sites but not a large amount. The people appreciate the fact that there is a system for disposal of their waste.”

**Landfill weighing station**

If a public works system produces good results and is economical, it's a good system. But if it produces good results and is expensive, lots of people will say it's a poor system.

Accordingly, the project is being carefully evaluated. Every ton of refuse is weighed and functional unit costs are being compiled for the final report. While costs will vary widely in other parts of the country, this landfill is handling 800 tons a month at about \$2 per ton including equipment amortization. Project Consultant Dr. Jim Walters of the University of Alabama gives us more financial data.

**Jim Walters gives economic evaluation**

“Judge:

Responding specifically to your question on cost, it was April or May of last year before we got the entire operation to a point where we thought it was representative. During May of last year, in our rural collection system, we collected 116 tons at a unit cost of \$10.17 per ton. Now during May of this year, we collected 184 tons and the unit cost was down to \$6.75 per ton, a much more reasonable cost as the result of handling more waste during the same period. For the similar period this year, our sanitary landfill operations cost us \$2.06 per ton of waste disposed. This is within a reasonable cost figure.”

**Alexander looks at improved Coosa County container**

A few additional developments occurred during the project. The tendency of container lids to stand open proved objectionable. Nearby Coosa County, which is adopting the system, has procured boxes which are not as high and have a sure-close lid.

**Steam cleaning equipment being used to clean container**

Operating experience has indicated the need for periodic site and container cleanup. Regular personnel operate this steam cleaning equipment to sanitize the boxes which have drainage holes in the bottom. No sanitary problems have been experienced from steam cleanout. The County system of mobile radio communications is used to call prompt attention to trouble spots. The container system has replaced the expensive County program which previously cleaned up highway right-of-ways and stream channels. Rapid maintenance prevents a small nuisance from becoming a large one and psychologically reinforces the public's memory that the container sites are not dirty, disagreeable places.

**Packer truck approaches from the distance and picks up a container**

Will the green box work in your county? That depends on whether this is the right system for you . . . on your technical skills . . . and local leadership. If you're interested in reading



the project report, contact your regional office or the Office of Information of the Bureau of Solid Waste Management.

Clean and Green is not much physically . . . just 90 green boxes, a packer truck, a crawler tractor, a new landfill, four employees, and a lot of closed dumps and dead rats. Really, it's a state of mind . . . the determination to act and cooperate . . . the initiative to devise a new and effective system . . . the engineering skill to make it work . . . and the human relations ability to solicit the essential public support. Clean and Green is Sanitarian Charlie Gay who originally raised a rumpus, Judge Hayes who didn't cave in when people objected, Pastor Ingram who thought badly of it and then changed his mind, Jim Walters who worried about the technical details, Mister Bob who runs it and is proud of it, and many others. The green box promises to go to work all over the country . . . but it all started in Chilton County, Alabama.

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