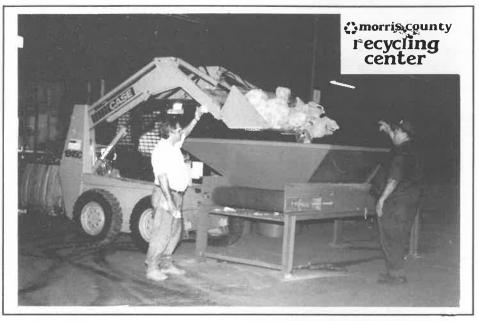


# RESOURCE RECOVERY REPORT

Vol. 10, No. 2

Summer 1991



A Sign of the Times - At the newly-opened Morris County Recycling Consolidation Center, John Ciaramella, manager, and Joe Florio, floor supervisor, watch as forklift operator Kevin Fagan dumps plastic milk jugs into the conveyor belt hopper.

## MORRIS COUNTY ON THE RISE

Morris County continues to be one of the leading counties in the State to recycle significant portions of its waste stream. As reported in "Morris County Solid Waste Management Planning -Waste Quantity Projections," prepared in April 1991 by the County's environmental consultants Weston/Alaimo, the County's documented recycling tonnage increased from 142,721 tons in 1988 to 175,856 tons in 1989. Estimates presented for 1990 show this tonnage increase to 196,270 or 34.4 percent of the documented waste stream. When including the industrial recycling tonnage provided by NJDEP, Morris County is presently recycling 48% of its total waste stream. Industrial tonnage includes auto and other ferrous scrap and construction and demolition materials.

The County is doing extremely well in its efforts to meet the new 60 percent

recycling goal. In addition to the opening of the Recycling Coordination Center, Morris County currently is re-evaluating its solid waste and recycling strategies and the need to develop new facilities and programs.

Weston/Alaimo's projections show the need to recycle a total of 472,199 tons (317,694 tons of which are documented, not industrial) in 1995 to meet the 60 percent rate. Of equal importance is that even with reaching the new State goal, Morris County will need to process or otherwise dispose of its remaining waste, or nearly 300,000 tons in 1995.

"Morris County has come a long way since introducing mandatory recycling in its Solid Waste Management Plan in 1985," says Glenn Schweizer, Solid Waste Coordinator for the MCMUA, "and the municipalities, residents and businesses are ready for the rising challenge."

# Recycling Consolidation Center Opens

Morris County's Recycling Consolidation Center is open for business!

Operated by the Morris County Municipal Utilities Authority, the center in Dover is accepting plastic containers, corrugated cardboard, magazines, junk mail and other paper from municipalities, and from small businesses and institutions. No material is accepted directly from residents.

Towns or businesses interested in bringing material to the center are urged to contact center manager John Ciaramella at 361-3665.

Municipalities executing contracts to regulate their use of the site are being offered an opportunity to share in the revenues generated by the sale of the materials recycled.

Center operations include sorting and baling of source separated materials, which are sold in truckload quantities to end-users or markets. Tonnage documentation is provided for all materials. The first truckload of baled corrugated cardboard was marketed the week of August 5th. It contained 28 bales or 15.75 tons.

### Contents

Recycling Consolidation Center 1
Morris County on the Rise 1
GrassCut It and Leave It2
Commercial Curbside Recycling 2
Municipal Update3
Recycle Oil-Don't Dump It 4
Recycling Coordinators to Help
Businesses4
Recycling Poetry 4
Mt. Lakes Teacher Receives
ANJEE Award4
Household Hazardous Waste 5
Star Sticker Discovered on a Bucket 5
M.O.R.E. Will Recycle More 6

# Grass...Cut it and Leave it!!

Most people like a beautiful, green lawn, often using more fertilizer and water than necessary. The result is more mowing, back-breaking work bagging grass clippings and higher water bills.

The volume of residential solid waste increases 20-50 percent between the months of March and September because of grass clippings. Since refuse disposal costs have risen dramatically and some landfills no longer accept grass clippings, alternative methods are being examined. Collected clippings become anaerobic rather quickly because of their high demand for oxygen. After becoming anaerobic they emit very unpleasant odors and therefore are difficult to handle and process in quantity.

Grass clippings are a valuable resource. They usually contain over four percent nitrogen, about two percent potassium and around half of one percent phosphorus, as well as lesser amounts of other essential plant nutrients. These clippings, which are between 20 percent and 30 percent protein, are rapidly attacked by bacteria and fungi which cause their fast decomposition. They do not contribute to thatch. While the thatch issue has always been associated with the return of clippings to the lawn, clippings and thatch are simply not connected. Thatch results from the abnormally fast growth of tissues high in



lignin such as roots, rhizomes, stolons, crowns and tree leaves. The return of grass clippings to the lawn is the same as giving it small amounts of fertilizer continuously with no risk of creating a thatch problem at all.

Ideally, lawns should be mowed frequently, at five day intervals, depending

# SPOTLIGHT ON: COMMERCIAL CURBSIDE RECYCLING PROGRAM



This pristine packer truck is the newest edition to the Morris County
Curbside Recycling Program (MCCRP) fleet; its arrival will allow MCCRP
to increase the collection of recyclables in business districts.

The Morris County Municipal-Utilities Authority (MCMUA) will soon be extending its commercial curbside recycling program to additional municipalities in the County. Currently the MCMUA collects recyclables in the downtown commercial district of Denville Township; a year ago a pilot program was initiated there to provide small commercial generators with a convenient and affordable recycling collection service.

Through this program, the MCMUA provides weekly collection of glass, aluminum, newspaper, office paper, and corrugated cardboard from 20 businesses participating in the program. With the exception of corrugated cardboard, all materials are unloaded at the municipal depot and become the property of the municipality. Until the Morris County Recycling Consolidation Center opened, the corrugated cardboard was directly marketed by the MCMUA. Now it is delivered to the Consolidation Center, where it is processed and then marketed.

Utilizing State recycling grant monies, the MCMUA recently acquired a compactor truck, which will allow greater volumes of material to be picked up, and in turn, serve more businesses and towns. The MCMUA is targeting municipalities with defined downtown districts and has proposed this service to Morristown, Chatham Borough, Chatham Township, and Madison.

Towns entering the program will be billed \$6.00 per business per pick-up and it will be each town's responsibility to recoup the costs from the individual businesses. At the municipality's request, the MCMUA will take the corrugated cardboard, office paper, and magazines/junk mail directly to the Recycling Consolidation Center.

This program offers a viable solution to a sector which has had difficulty complying with the recycling mandate, and by participating in the program, municipalities can significantly boost their recycling rate. Municipalities further benefit by being awarded additional State tonnage grant monies for the increase in recycling tonnage.

Municipalities interested in the commercial curbside recycling program can contact Nadine Antebi, Assistant Recycling Specialist, at 285-8392.<sup>II</sup>

# MUNICIPAL UPDATE



BOONTON - Kerry York is the new acting recycling coordinator. The town has added tin/steel cans to the list of recyclables being picked up by the Morris County Curbside Recycling Program.

CHATHAM TOWNSHIP - The township is adding magazines and plastics to the list of recyclables to be collected by the Morris County Curbside Recycling Program. Last March an inspection of the schools was conducted to assess progress with recycling since a meeting the previous year with school officials. The results were very disappointing to Joe Stauss, recycling coordinator. It appeared that not much effort had been made on the part of the schools to recycle the tons of office and other paper they generate.

CHESTER TOWNSHIP - Residents can now dispose of old car and truck tires and car batteries on Saturdays at the Public Works garage. Car tires will cost residents \$1/tire and \$5/tire for trucks. There will be no charge for car batteries.

DENVILLE - Metals (white goods, scrap metal) will be picked up curbside now in the township. No dropoffs of these materials will be allowed at the depot. Accepted at the depot, but not collected curbside, are magazines, junk mail, car batteries and used motor oil.

DOVER - Starting this spring residents now have to sort out their glass by color: clear, amber or green. Magazines, plastics and phone books are now being picked up curbside. There is a sticker program for tires and white goods. An ordinance passed in April will change the collection of garbage in town to a payper-bag type of collection. Each resident is allowed two 30 lbs. bags of garbage and anything over this must have a sticker on it at the cost of \$2.50 per bag.

KINNELON - Residents can bring a pick-up truck load of construction debris to the recycling depot. They must show either a building permit or letter of authorization for it and the load cannot include rock, stone, broken concrete or dirt

LINCOLN PARK - The Lincoln Park Recycling Program has been rated one of the top four in the country in recycling and will be listed in the 1991 Environmental Success Index as published by Renew America: Searching for Success. Congratulations to Rich Lovallo and Paul Sarames!

MADISON - Doug Smith, Recreation Director, has been named co-recycling coordinator. He is in the process of surveying the businesses in town in an effort to increase recycling rates in the commercial sector. He is also part of a Morris County Business Ad Hoc Committee, set up to address the

problems the different towns have in getting their businesses to recycle, to see where and how the County could help and to set up a database County-wide of information on businesses.

MENDHAM BOROUGH - The borough is now commingling recyclables and has added magazines, junk mail and office paper put out in paper bags, and plastics coded #1 and #2.

MONTVILLE - A new and innovative idea is being tried out in the township, that of a "waste exchange." Through the Montville Messenger, waste generators can be matched up with waste users to make maximum reuse of materials. If residents or businesses want to get rid of excess bricks, firewood, cement blocks, wooden pallets etc. they can contact the township through the "Waste Exchange" and this information will appear in the next issue of the Messenger. All names and addresses will be kept confidential. The "Waste Exchange" will forward inquiries to the applicant. If there is sufficient interest in this type of service, the "Exchange" will become a regular bulletin in each issue of the Montville Messenger which reaches over 6,500 homes and businesses.

MORRISTOWN - A townwide Litter Pickup Weekend was held April 19-21 in conjunction with the Clean Communities Program. The Morristown High School Key Club and Environmental Club, civic clubs and organizations, business owners and local residents, wearing bright yellow T-shirts, turned out to pick up six tons of litter. Since then, many of the groups have adopted a spot to continue to police litter in various parts of town. Morristown is the second community in the state to join Keep America Beautiful, Inc.

MORRIS PLAINS - The borough is now having the Morris County Curbside Recycling Program pick up recyclables twice a month, the second and fourth weeks. On April 10, the State Office of Recycling performed a field review of the 1989 Tonnage Grant Application, and based on that field review, no changes had to be made in the Application.

MORRIS TOWNSHIP - The Roads and Sanitation facility off West Hanover Ave. is making available Stak 'N Tie organizers to residents for tying newspapers into bundles. The cost is \$7.00.

PARSIPPANY - Residents can now bring junk mail, magazines and envelopes with and without windows, to the



Showing their delight at meeting "Recycle Pete" at the N.J. Recycling Forum Dinner on May 1 are (l. to r.) Henry Underhill, Chatham Borough recycling coordinator; Linda Slater, Morris County recycling coordinator; Judy Murphy, Morris County assistant recycling specialist, and; Penny Jones, Morris County recycling education specialist.

See UPDATE /page 6

# RECYCLE OIL! - DON'T DUMP IT

Did you know that 350 million gallons of used motor oil are generated each year in this country by "do-it yourself" oil changers? According to the American Petroleum Institute, New Jersey residents account for about 9 million gallons of that. Unfortunately, most of this is disposed of improperly — poured on the ground, down storm drains or into the trash can, ultimately to end up polluting the environment. In fact, the improper disposal of used oil is believed to be one of the leading contributors to the nonpoint source pollution of ground and surface water throughout the state.

Recycling all this could reduce petroleum imports by over a million barrels of oil annually. Most of the recycled oil is reprocessed into heating or fuel oil, at lower grades than lubricating oil, although re-refined motor oil also is available. The state maintains contracts for motor oil that contain 16 items made from re-refined lube oil stock. Local governments can purchase these items through the state contracts.

But why aren't "do-it-yourselfers" recycling their oil? Part of the problem is ignorance, which only can be combatted through constant educational efforts. The other part is lack of convenient drop-off sites.

New Jersey is one of three states in the nation that regulates used motor oil as a hazardous waste. This creates a regulatory environment that complicates recycling programs. Further, abuses of existing sites have forced many to close or discouraged others from advertising their tanks exist. Motor oil collection tanks are frequently contaminated with gasoline, antifreeze or solvents, making the entire tankful unusable. Spillage is

also a problem. Tank sites require supervision and monitored use.

The NJ Department of Environmental Protection has developed regulations for the recycling of used motor oil. Used oil cannot be disposed of in any solid waste facilities, and must be recycled. Any gas station or auto service center that provides oil changing services for its customers is required to accept up to two gallons of used oil per person per day from "do-it yourselfers," although a charge per gallon may be imposed. Many municipalities also maintain collection tanks for their residents.



Guidelines for siting used oil collection tanks and model programs for used oil recycling are available through the Morris County Office of Recycling. We also have a handout on the four simple steps of used oil recycling: collect and cap your oil in a plastic container; take it to a collection site; let the attendant transfer it to the tank; take your empty container home and reuse it.

Finally, the NJDEP Office of Recycling has made a limited number of oil funnels available to promote recycling by "do- it-yourselfers." Municipalities wishing to use them for promotions can contact County offices at 285-8390.¤

### **Recycling Coordinators to Help Businesses**

A new Business Ad Hoc Committee has met twice in recent months to discuss increasing recycling in the business community to help reach the new 60 percent reduction goal set by the State DEP. Recycling coordinators from different types of municipalities - rural, small town, large suburban township, have been discussing methods used for business recycling in their municipalities, exploring common problems and problems inherent to their communities alone. The discussions have also centered on how the MCMUA can help the towns to maximize business recycling.

Members of the committee are Joe Linfante, Parsippany-Troy Hills Township; Claire Robertson, Washington Township; Jean Reuter, Rockaway Borough; and Doug Smith, Borough of Madison.

The committee is in the process of developing a model program for businesses which would incorporate the needs of each type of community. The program would not only include how the municipal coordinator can help businesses set up a recycling program, but how and where the MCMUA can help.

The model is based on earlier programs developed by the MCMUA for the municipal coordinators and the commercial/institutional sectors and will update that material with input from coordinators on what has and has not worked, and any additional information they felt needed to be included.¤

### MT. LAKES TEACHER RECEIVES ANJEE AWARD

Jeff Keith, a teacher at Wildwood School, Mt. Lakes, received the Excellence Award from the Alliance for New Jersey Environmental Education (ANJEE) last winter for his long-term excellence in the field of environmental education. Jeff, a 17 year plus veteran at Wildwood, teaches environmental education to fourth and fifth graders. He incorporates environmental education into his curriculum and is active in getting other teachers and the community of Mt. Lakes itself involved in learning about the environment. Congratulations, Jeff!

# RECYCLING POETRY

Recycling is real great
This world needs it at its rate
Cans, bottles, paper, too When you recycle, they all become new
When you recycle, it saves the trees
Come on people, recycle, please!

Kristie Jones, Fourth Grade Milton Avenue School Chatham

As I walk along the shore, I feel free more and more, The sand slides between my toes, I feel the sand as it flows.

As I feel the wind across my face,
It feels like I'm floating around in Space,
As I see the waves splashing,
I hear the water against the rocks bashing,
As I see the beautiful environment dying,
I feel as though I could start crying,
If we don't help our environment soon,
In a couple of decades
We will not live to see the next moon.

So please help the world become clean, so that there will always be a pretty scene.

Kathleen Smith, Fourth Grade Washington Ave. School Chatham¤

# FROM CAN TO POT - FROM BEER TO FLOWERS

WANTED: All post-consumer plastic six-pack rings - the kind found on soda and beer cans. Can be turned into beautiful flowers (hyacinths, to be exact) by an ingenious method developed by Chris Murray of Denville. Call 625-0085.¤

## Household Hazardous Waste Disposal

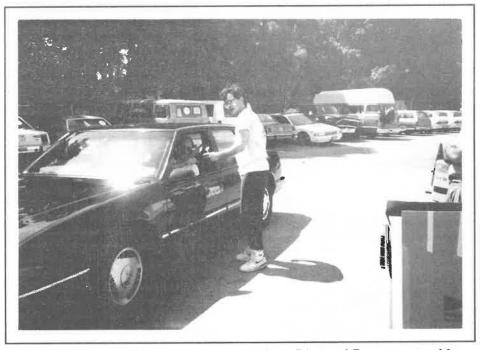
On Saturday, June 15th Morris County conducted the first of two scheduled household hazardous waste disposal days for the 1991 program. On that day, 276 County residents delivered their unwanted paints, pesticides, batteries and other assorted hazardous materials generated in the home to the Morris County Garage on Hanover Avenue in Cedar Knolls for safe disposal at appropriate facilities.

The second program is currently scheduled for Saturday, October 12, 1991 and it is also to take place at the Morris County Garage between the hours of 9:00 a.m. and 2:00 p.m. People interested in participating in this program are urged to call the Morris County Municipal Utilities Authority at (201) 285-8390 to be placed on a mailing list for the program. Approximately one month prior to

the program, flyers will be mailed to people on the mailing list with directions to the facility as well as instructions on how to participate.

Participation in the hazardous waste disposal program is limited to only households. Businesses and institutions are not eligible to participate in the program and must privately contract with a hazardous waste disposal firm in order to safely dispose of the hazardous materials they generate.

Propane tanks from gas grills will not be accepted at the program. To dispose of these tanks, the propane must all be used up and then the valve assembly must be removed from the tank body. This insures the tank is empty. At this point, the separated tank body and valve assembly can be placed at curbside for collection by the solid waste hauler.



At the June 15 Household Hazardous Waste Disposal Day sponsored by Morris County, Solid Waste Planner Larry Gindoff registers a participant and distributes a brochure about the proper recycling of used motor oil.

### ... GRASS

Continued from /page 2

on the weather, only cutting one third of the blade height, and allowing the clippings to biodegrade on the soil surface. Use of mulching mowers or retrofitting blade attachments on existing equipment may be helpful. If clippings have to be bagged, they can then be backyard composted at the home.

During the driest period of summer, lawns usually require one inch of water every five to six days. Most hose sprinklers put out one-fourth to one-third inch of water per hour. If water runs off the lawn before one inch is applied, the sprinkler should be turned off and the water allowed to soak in for about one hour, then the watering can be continued. The best time to water is early morning.

The golf course has always represented the "state of the art" in turfgrass management. Most of us admire the rich green fairways. The basic turfgrass management principles that were used to develop the great golf courses all across the country are exactly the same as those that should apply to the management of the home lawn. None of the textbooks or any of the research papers ever written about turfgrass maintenance suggest that bagging grass clippings is a necessary part of lawn care. The return of grass clippings to the lawn and eventually to the soil has always been considered to be a naturally accepted part of maintaining a lawn by the true turf experts.

The bagging of grass clippings probably started back before 1950 with the first powered rotary mowers with a catcher attachment. The evolution of the bagging device now has reached the point that non-bagging mowers are hard to sell and a true mulching mower is a very rare item in the marketplace because the public only wants bagging mowers. There are, however, mulching mowers on the market sold by Homelite and Toro.

The Morris County MUA and the State DEP are urging homeowners to practice this alternative to bagging grass clippings. Cut it and leave it!<sup>II</sup>

# STAR STICKER DISCOVERED ON A BUCKET

A star is born! The recycling office recently acquired bright yellow and green star-shaped decals (see at right) for use in the Morris County Curbside Recycling Program (MCCRP).

MCCRP crew members who discover cases of exceptional residential recycling (e.g., all recyclables properly prepared) will put a star decal on the



appropriate container(s) - just a "pat on the can" which should encourage starryeyed recyclers to continue their good work!

If any municipality is interested in giving out stars to extra good recyclers, we will be happy to supply you with some! (stars, that is).

### M.O.R.E. Will Recycle More

The Morris County Office Recycling Exists (M.O.R.E.) in-house recycling program for County government offices will see a few changes in the next few months. With the opening of the MCMUA's Recycling Consolidation Center in Dover, more marketing opportunities are available for the program. Since the Center will be marketing some of the recyclables that are currently picked up from County offices, additional materials will be added to the list already collected, such as magazines, junk mail and envelopes.

M.O.R.E. coordinator Judy Murphy said every County department that now participates in the recycling program will be receiving a letter outlining the new recycling requirements and will also receive a visit from recycling staff to explain the new methods to employees. She cautions employees to wait until the letter is received to start these new materials because of separation requirements which will need to be implemented.

### **Municipal Utilities Authority**

James Souders
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Anthony R. Bucco
Michael Dedio
Edward H. Eppel
Frank Markewicz
Carol J. Murphy

Dr. Arthur Nusbaum Peter J. O'Hagan John C. O'Keeffe

Alex A. Slavin Executive Director

### ... UPDATE

Continued from /page 3

Recycling Depot on Pumphouse Road. These materials will not yet be picked up curbside. Joe Linfante, recycling coordinator is a member of the Morris County Business Ad Hoc Committee.

PASSAIC TOWNSHIP - A Clean Communities clean up day was held May 4. Each organization, business or group of friends was asked to adopt a work area. The 120 volunteers who showed up were issued bags, gloves and T-shirts with the motto: "Our Goal is Litter Control." They picked up 800 lbs. of recyclables and 2,248 lbs. of garbage.

PEQUANNOCK - The township started a commingled curbside recycling program last fall. Previously, residents brought their recyclables to the Recycling Depot, which is now closed.

RANDOLPH - A prototype minirecycling center has been invented by a township employee for use by apartment dwellers. It contains a row of plastic garbage receptacles locked into place on a wooden and steel platform. Apartment residents will be able to toss three colors of glass, aluminum cans, several types of plastic, newspapers, magazines and corrugated cardboard into the receptacles. The mini-center will cost \$700 and once in place, the township recycling crews periodically will empty them.

RIVERDALE - In January the town added tin/steel cans to the recyclables collected curbside. Residents and businesses can bring their corrugated cardboard to a specially marked dumpster behind Borough Hall.

ROCKAWAY BOROUGH - Jean Reuter and Jackie Koury, long-time volunteer recycling co-coordinators for the borough have retired from that position. Through the years they have set up and run an excellent, award-winning program and they will be sorely missed! Jean was also a member of the Morris County Business Ad Hoc Committee.

ROCKAWAY TOWNSHIP - The township started recycling plastics last winter. They are not picked up curbside yet, but must be brought to the Recycling Depot, where they are baled for market.

WASHINGTON TOWNSHIP - Claire Robertson, recycling coordinator, is a member of the Morris County Business Ad Hoc Committee.

### Recycling Coordinator Leaving County

Linda Torres-Slater, Morris County District Recycling Coordinator, is resigning her position the end of August to become recycling coordinator for Charlston County, South Carolina.

Since she became coordinator in 1989, the county recycling rate has risen from 24 percent to 36 percent. Her staff has grown to 20 employees with the expansion of the Morris County Curbside Recycling Program and the recent opening of the Recycling Consolidation Center in Dover.

### **Board of Chosen Freeholders**

John C. O'Keeffe
Director

John R. Sette Deputy Director

Anthony R. Bucco Michael Dedio Patric J. Hyland Carol J. Murphy Peter J. O'Hagan



### Morris County Municipal Utilities Authority Office of Solid Waste Management

Courthouse, P.O. Box 900, Morristown, NJ 07963-0900 (201) 285-8390

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### Solid Waste Management Staff

Glenn Schweizer
Solid Waste Coordinator
Linda Slater
District Recycling Coordinator

Larry Gindoff
Solid Waste Planner

Penny Jones
Recycling Education Specialist

Judy Murphy
Assistant Recycling Specialist

Nadine Antebi Assistant Recycling Specialist Office Located at: 380 West Hanover Ave., Morris Township, NJ

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