

ENVIRONMENT

ITALY AND THE ECO-MAFIA

Billions are made by illegally dumping toxic waste—with little public outcry

First, the pond went black. Then, the fish started to die. Finally, the authorities condemned the land.

Stefano Galli sweeps a trembling hand over his poisoned acres and tells the tale of a deal too good to be true. After buying seed at a local agricultural-supply store on a spring day in 1999, the stout, 67-year old farmer from Umbria (Galli is a pseudonym) was approached in the parking lot by a sales agent who persuaded him to test a new fertilizer. The deal: 1,200 pounds for free, with a handshake to purchase more in the future if he was satisfied. Unbeknownst to Galli, the black mulch he then spread across his wheat, corn, and vegetable fields was untreated, highly toxic industrial waste. After the first heavy rains, fish started floating belly-up on the surface of a pond that catches runoff. "I feel my land is dying before my eyes," says Galli, who fears that the farm held by his family for generations is now worthless.

The damage spreads far beyond Galli's rolling fields. Italian magistrates confirm, based on wiretaps, that criminal groups won bids to haul off toxic sludge

from factories in the north but never treated the waste, as promised. Instead, they dumped their poisonous cargo on some 25,000 acres of farmland in Umbria, one of Italy's most beautiful and productive regions. The Environment Ministry estimates the cleanup cost at \$1.5 billion.

A three-year police investigation, dubbed Operation Greenland, has recently yielded a formal request for indictments against 28 of Umbria's alleged despoilers. Suspect No. 1 is Alberto Paggi, the owner of Ecoverde, a waste-disposal company near the town of Trevi. He is accused by the public prosecutor of waste trafficking, a felony punishable by up to eight years in prison. Prosecutors say Paggi hawked toxic sludge in the guise of fertilizer and dumped industrial poisons illegally in national parklands in the south. Paggi's lawyer, Donatella Tesei, says the state to date has not produced any proof of wrongdoing by her client.

The Greenland/Ecoverde case, now in pretrial proceedings, marks a new, aggressive stage in Italy's struggle against one of the biggest environmental crimes



of the 21st century so far. Italian officials have known for more than a decade that mob-linked businesses were charging manufacturers cut-rate prices to haul away mercury, lead, battery acid, and other byproducts of industry. They would then dump it—untreated—in the countryside. But weak environmental laws and powerful industrial lobbies have thwarted change. Now, the business takes in an estimated \$7 billion a year and involves 22 criminal groups, according to parliamentary commissioners and law-enforcement officials. With minimal operating costs, traffickers gross from \$2,000 to \$10,000 a truckload. "Mafia clans consider waste [trafficking] a real business—one that approaches the size of some government budgets," says Senator Paolo Russo, president of the parliamentary commission on waste trafficking.

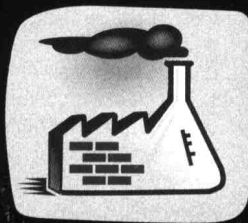
In the past year, Italy has struck its first serious blows against traffickers. Legislation passed in 2001 finally makes trafficking in waste a felony (it was a

PHOTOGRAPH BY GUIDO FUA; ILLUSTRATIONS BY RAY VELLA/BW

HOW CRIMINALS INFILTRATE THE BUSINESS OF WASTE

CREATING THE WASTE:

• Factories in northern Italy produce industrial byproducts, including highly toxic sludge and ash. By law, toxic waste must be identified and treated before disposal.



CAPTURING CUSTOMERS:

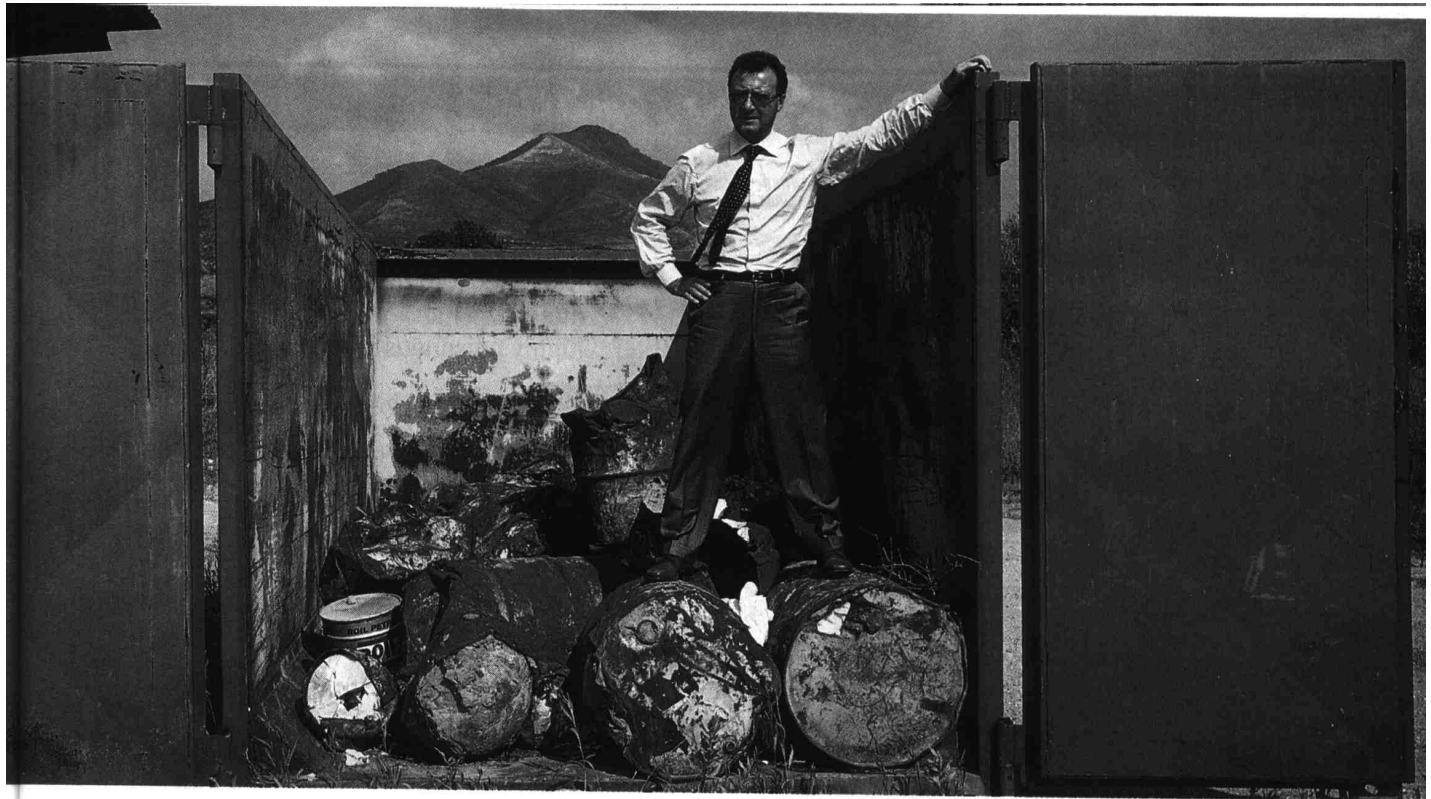
• Criminal gangs create shell companies that win waste-hauling and disposal contracts by underbidding legitimate competitors by as much as 90%.



COVERING THE TRAIL:

• They send rental trucks to haul the sludge to warehouses, where false documents are issued stating that the poisonous cargo is not dangerous.





simple misdemeanor before) and permits wiretapping of suspected criminals. Armed with the new law, prosecutors arrested more than 29 individuals last year and charged them with waste-related crimes. Current investigations could produce dozens more arrests. "Until now, [these] criminals didn't believe there would be repercussions for their acts. Now, they're getting the picture," says Major Antonio Menga, head of Italy's six-year-old environmental police force.

The question is whether Italy's tardy offensive can combat an industry that has grown to such frightening proportions. "Italy is way behind [the rest of Europe] in dealing with refuse," says Anacleto Busá, a chemist who was consulted for a parliamentary commission investigating trafficking.

Law-enforcement officials battling traffickers testify to the daunting dimensions of the problem. In October, the forestry police released the results of an aerial survey identifying 705 high-

ly toxic illegal dump sites, from the verdant farmlands north of Naples to the hills of Umbria to the Adriatic coast near Bari. The number of illegal dumps, including all types of waste, tops 4,000.

Medical experts, meanwhile, are trying to figure out just how deadly the sites are. On Mar. 28, the public prosecutor's office in Santa Maria Capua Vetere near Caserta in Campania will host a national conference to present preliminary evidence of health problems linked to toxic waste. "There is no doubt about the connection between illegal toxic dump sites run by the eco-Mafia and the increase in fatal illnesses" in the Caserta region, says Carmine Antropoli, a surgeon and cancer specialist at southern Italy's largest hospital, Cardarelli, in Naples. Antropoli has studied the sharp increase in leukemia, colon cancer, and stomach tumors in patients living in the area between Naples and Caserta. Physicians and investigators worry that illegal dumps containing toxins such as heavy

RUINED BEAUTY

Magistrates such as Ceglie (above) fear that toxic sludge has already seeped into Italy's groundwater

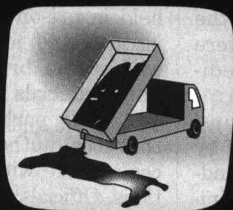
metals are polluting groundwater and farmland. "We are pressuring health authorities to place a permanent observatory here to monitor the rate of tumors," says Donato Ceglie, a magistrate from Santa Maria Capo Vetere and a leader in Italy's battle against waste trafficking.

The estimated costs of cleaning up all of these sites range into the hundreds of billions of dollars. "What we have discovered is a fraction of what's out there," says Renato Nitti, investigating magistrate in Bari, who arrested six businessmen in April on charges of trafficking and dumping more than 110,000 tons of untreated waste. What's "out there" is enough to give health officials nightmares. Roughly 12 million tons of industrial waste in Italy disappear every year,

MANAGEMENT

WHERE THE POISON GOES:

1 Truckers haul most of it south to regions controlled by organized-crime gangs and dump it in pits, caves, or bodies of water. Some untreated sludge is delivered to sites approved for the dumping of nondangerous waste.



poisonous waste is even dumped in national parklands in southern Italy.

2 Businesses controlled by criminals sell toxic industrial sludge to farmers, telling them it's fertilizer, thus polluting some of Italy's most productive agricultural regions, such as Umbria and Campania. Some of the

3 Toxic and radioactive waste is loaded onto a boat and sunk or shipped to poor or developing countries. The Italian Mafia also ships waste from northern Europe or the former Soviet Union into Italy for disposal or routing elsewhere. Some criminal clans bid on and win lucrative government cleanup contracts to haul toxic waste from illegal dumps.

according to Italy's Waste Industry Employers' Association (FISE). That's the amount produced by factories but whose waste disposal is not accounted for by legitimate handlers. Some 330,000 tons of this missing refuse are highly toxic, FISE says. "This is the type of damage you start to pay for 20 to 30 years later," says Asti investigating magistrate Luciano Tarditi,

who uncovered the infamous Pitelli dump near La Spezia.

Every country in Europe can point to cases of illegal dumping, but Italy stands out. "It's the direct control of organized crime that makes Italy different," says Roberto Ferrigno, EU Policy Director at the European Environmental Bureau in Brussels, who has worked as an adviser to Italy's National Association for the Protection of the Environment (ANPA). Criminal groups control up to 30% of the country's waste-management business, according to Italy's highly respected Antimafia Commission. All of the country's notorious names have a hand in the trade: the Sicilian Mafia; the Camorra from Naples; the 'Ndrangheta, which dominates in Calabria; and the Sacra Corona in Apulia, says Pier Luigi Vigna, head of the Antimafia Commission.

Industry is part of the problem. The price for environmentally responsible disposal of the most dangerous industrial waste averages roughly 50¢ a pound, say managers of legitimate waste companies, while traffickers may bid as low as 5¢ per pound. "If industry wants to reduce its costs, it just closes its eyes," says Luciano Morelli, general manager of Ecobat, a \$500 million Milan-based business that disposes of used batteries. Corrado Scapino, vice-president of FISE and president of Barricalla, a waste-disposal company outside Turin, says illegal traffickers siphon off the business needed to justify investment in modern waste-management facilities.

That's why, in the



PITELLI DISASTER

One resident who asked questions was threatened and beaten

TOXIC TIME BOMB

Italy's 4,000-plus illegal dumps include 705 highly poisonous sites

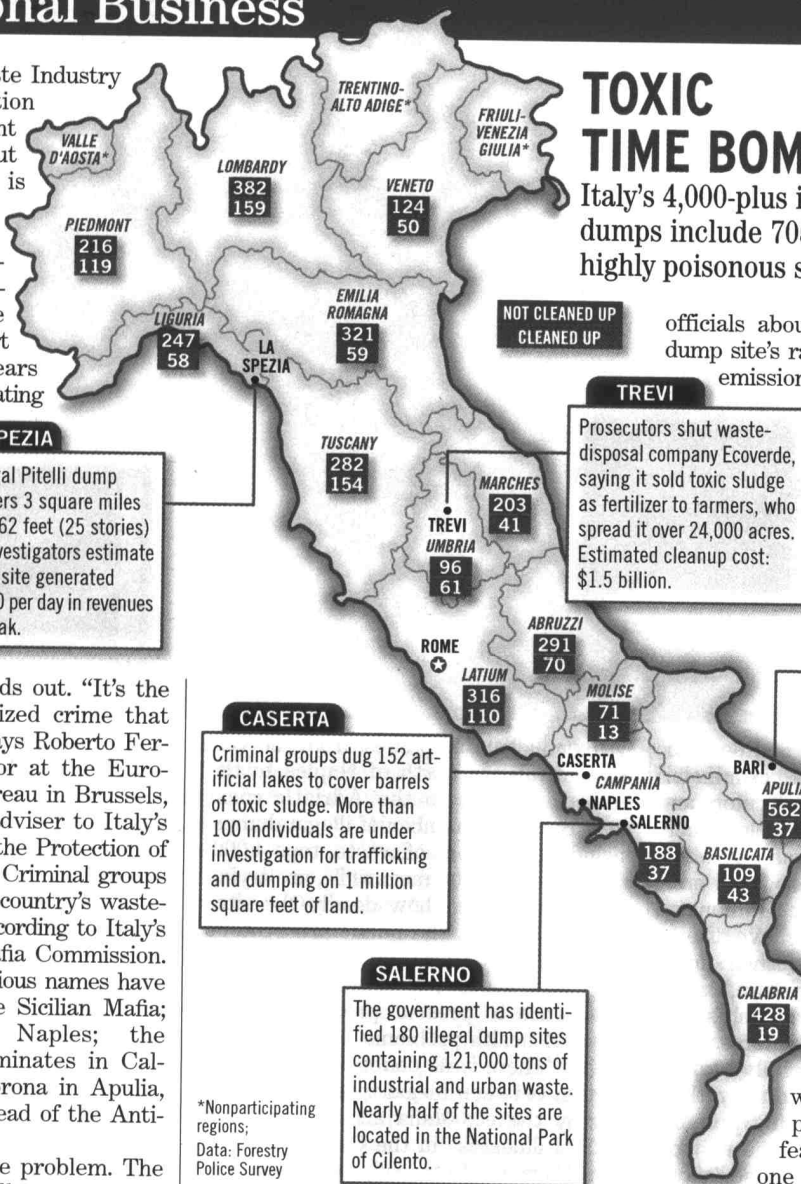
gangs started dumping in the 1980s. In 1995, Roberto Zanelli (not his real name), a resident of nearby Ruffino, struggled to obtain information from

officials about the health hazards of a dump site's rancid odors and eye-stinging emissions. Ignored, Zanelli had his own tests done on soil samples and went public with the results: dense concentrations of heavy metals, dioxins, and poisonous pharmaceutical residues.

After receiving anonymous threats, Zanelli's home was shot at by unknown assailants. He shot back with a hunting rifle. Several weeks later, he was beaten badly and hospitalized, and he remains fearful of retribution. "Anyone daring to speak out was silenced, sidelined, or bought off," Zanelli says. Then, in 1996, police unearthed mountains of lethal waste at Pitelli, including antiradar paint residues from military equipment.

Prosecutors say Pitelli—now declared a national disaster area—was a key end station for criminal waste trafficking, probably for gangs linked to the Camorra. More than 40 local officials were eventually charged by prosecutors with complicity in the disaster, and 10 were held in prison after investigating magistrates and forestry police unearthed evidence of bribery and collusion with public officials and politicians.

A 1998 parliamentary report states that local authorities were not clear or cooperative with magistrates' investigations. Officials in Pitelli didn't respond to requests for comment from *BusinessWeek* but have told the Italian press that the dump's owner and the prime defendant, Orazio Duvia, is responsible



*Nonparticipating regions;
Data: Forestry Police Survey

CASERTA
Criminal groups dug 152 artificial lakes to cover barrels of toxic sludge. More than 100 individuals are under investigation for trafficking and dumping on 1 million square feet of land.

SALERNO
The government has identified 180 illegal dump sites containing 121,000 tons of industrial and urban waste. Nearly half of the sites are located in the National Park of Cilento.

NOT CLEANED UP
CLEANED UP

TREVI
Prosecutors shut waste-disposal company Ecoverde, saying it sold toxic sludge as fertilizer to farmers, who spread it over 24,000 acres. Estimated cleanup cost: \$1.5 billion.

BARI
More than 110,000 tons of industrial waste have been trafficked and dumped in various sites throughout the region. Six men were arrested and charged with trafficking on Apr. 23, 2002.

International Busin

for the wrongdoing. Andrea Corradino, Duvia's lawyer, didn't respond to requests from *BusinessWeek* for comment. But he has stated publicly that his client is "absolutely innocent of all charges and operated according to regulations." Duvia blames previous owners of the site for any toxic waste it contains.

The Pitelli investigation looked like the start of a crusade. Yet seven years later, because of the notoriously slow judicial system and a transfer of the case to another venue, the trial hasn't even begun—and 80 of the 100 accused individuals can no longer be tried because the statute of limitations has expired. "The atmosphere is degrading and disheartening," says a member of the citizens' committee in Pitelli.

Meanwhile, cleanup costs keep mounting. In the tiny Umbria hamlet of Montone, the town's mayor, Franco Carpecci, spent \$200,000, or 25% of his town's annual budget, to haul away waste from one farm after its owner received 80 truckloads of "mulch" from Ecoverde. When the cash-strapped farmer refused to pay to remove the stuff, the town was legally responsible to protect residents from health hazards.

Police and magistrates say tougher laws and penalties are vital to prevent disasters like that in Umbria from happening again. Environment Minister Altero Matteoli counters that current laws have plenty of bite, but he does want all waste to be treated locally. That would block the transport of waste to mob-influenced areas. Matteoli also wants to boost the number of incinerators. And the National Waste Observatory, a unit of the Environment Ministry, points to tests of computer chips that identify waste as it leaves the factory. That would eliminate the need for paper documents, which are easily falsified. "Better controls have to be carried out at the place of origin," says Massimo Ferlini, the observatory's president.

Italy's beleaguered magistrates, carabinieri, and forest police toil on, even as the odds remain stacked against them and activists warn of dire consequences. "A country that can't manage to outlaw toxic dumping has no future—not for itself and not for investors," says Enrico Fontana, national secretary at Rome-based Legambiente, an environmental group. In Italy, that message is only starting to sink in.