# Tehran Refinery Fined For Polluting Water

Director general of Tehran Department of Environment, Mohammad Hassan Pirasteh, said Tehran Refinery was fined 208.97 billion rials for contaminating subterranean water reserves, ISNA wrote.

Pirasteh referred to Article 62 of the fourth plan law, and said, "Studies to decide whether or not the pollution had been caused by Tehran Refinery were conducted by the Japanese firm, Idemitsu. Latest results of the studies were discussed last week in a session attended by officials from the Oil Ministry and DoE."

He cited study findings based on which 1.44 million cubic meters of oil substances had infiltrated underground water reservoirs over the past few years.

Commenting on the possibilities of removing oil spills from subterranean reservoirs, he said, "It was decided that the water containing oil spills would be pumped out, refined and injected into the underground reserves once again."

He then referred to plans to further track down the source of oil leakage.

About 1.44 million cubic meters of oil substances have infiltrated underground water reservoirs in areas surrounding Tehran Refinery over the past few years.

"Given the recent close cooperation of the Oil Ministry, it is expected that up to 95 percent of the fines shall be waved provided effective action is taken to remove the pollution."

He added that the Regional Water Company was assigned to dig a deep well in an unpolluted area to supply Esamil-Abad, the affected region, with water for irrigation of farmlands.

The Agricultural Jihad Department was also assigned to examine local farm crops for oil pollution and report the results to the pollution inspection committee.

Pirasteh gave assurances that proper measures would be taken to reduce air pollution caused by Tehran Refinery in the area. Last year, the refinery was fined 130 billion rials for polluting the air, he recalled.

Earlier in February, Tehran Refinery was fined in excess of 114.7 billion rials as per the Third Plan Law for failing to eliminate harmful emissions from its furnaces and boilers.

# Tagging Persian Gulf Sea Turtles

Two species of Iranian marine turtles were for the first time tagged with an aim to track their migration path, an expert with the DoE said.

Amir Mohammad Elmi, head of DoE's Reptiles and Aquatics Department, told IRNA the tags were made of titanium with DoE address and serial numbers inscribed on them.

He named the two Iranian species as green turtles and hawksbills.

"The hawksbill turtles come on to the beach in May and June to make nests and lay eggs. This is the best time to tag the sea creatures," he said, explaining that the tags were placed on the turtles' front right flipper.

The tagging process has been started in the southern Persian Gulf islands, in Hormuzgan and Bushehr provinces.

He reiterated that tagging turtles in the hot southern areas is a strenuous task, and called on provincial departments to cooperate.

"The turtles are migratory species, but can be traced through the tagging system. The tags are used to study them biologically and trace their origins," he mentioned.

According to Elmi, sea turtles have separate feeding and nesting grounds and can migrate long distances, as far as thousands of kilometers and across oceans, to mate. Female sea turtles return to the same beach where they were born to lay eggs.

The turtles are migratory species, but can be traced through the tagging system.

Given their lifecycle and migratory behaviors, it is very difficult to preserve the endangered species. Cooperation between different countries is required to help conserve the sea turtles. This is where tagging can be used to identify the common population of turtles migrating between states and devise comprehensive plans to increase their survivability, he opined.

# Census on Preys of Asiatic Cheetah

Wildlife serving as preys of Asiatic cheetah are counted in a census underway in two major habitats of the species namely Darreh Anjir and Bafq sanctuaries, in Yazd province, a report by CHN said.

The census, sponsored by the Department of Environment, is being carried out by 40 wildlife specialists.

The experts use the two common methods for counting the sightings namely the transect and the point count methods. Popular preys of Asiatic cheetah, the fastest running animal on the Planet, including deer, ram, ewe and goat will be counted in the two protected zones so as to obtain updated information on the cheetahs' diet.

Animals are either counted from a suitable vantage point or while moving along a definite transect.

Director of the Conservation of the Asiatic Cheetah Project (CACP), Houshang Ziaei, said the participants in the census were trained in a one-day workshop on how to operate tele-cameras which automatically shoot pictures of wildlife passing in front of the sensors.

The census is aimed at gathering information about the food intake of and the threats to the species. Unfettered poaching of animals which serve as preys for cheetahs has further endangered the nearly extinct species.

Popular preys of the Asiatic cheetah will be counted to update information on the animal's diet.

The census was launched on June 2 and will last through June 10.

Ezra Pound (American poet, 1885-1972):

**The difference between a gun and a tree is a difference of tempo.**
**The tree explodes every spring.**

Yellow wild tulips on Damavand slopes (Photo by Oshin D. Zakarian)

# Lorestan Wildlife In Jeopardy

Lorestan's unique wildlife species including gazelle, sheep, ram, caracal, grey bear and otter are in danger of extinction due to environmental degradation emanated in unbridled pasturing, deforestation and excessive pollution, director general of Lorestan Department of Environment said.

Mohammad Karam-Elahi told CHN that some indigenous species in Lorestan such as Iranian fallow deer had already become extinct, while other species such as Caspian snowcock, falcons, reptiles and amphibians were pushed to the brink of extinction due to environmental degradation.

"Because of this, preserving Iran's biodiversity is not only a responsibility of an organization, but also the duty of people from all walks of life. Studies were carried out last year to help revive wildlife habitats and preserve endangered animals such as gazelles, sheep and rams in Lorestan which yielded positive results," he recalled.

Karam-Elahi stated that providing the environmental guards and patrol officers with necessary equipment and facilities as well as studying ways to revive wildlife could be positive steps to save animals from extinction.

Human interference in the ecosystems' natural lifecycle has been blamed for the extinction of various species of flora and fauna. According to environmental statistics, some eight species of animals vanish every hour, adding up to a total 70,000 species worldwide per annum.

# Gas From Home Garbage

A young Iranian inventor, Amir Hossein Vakili, has devised a mechanism for obtaining gas from household garbage.

Elaborating on the features of the system, Vakili told ISNA that the device, which is small enough for installation at the kitchen, is based on biotechnology. The system makes use of ferments and mechanical systems to transform garbage into gas usable in gas-burning home appliances including cookers, water heaters and lighting fixtures.

He explained that the obtained gas is compressed into a liquid state, can be stored, and has a good level of pressure.

Vakili noted that the environmentally-friendly device can generate energy at a low price, not to mention that it does not emit any fumes or poisonous substances. The waste material could be disposed of through the sewers.

Vakili, who won two medals at the 33rd International Exhibition of Inventions in Geneva, said the production capacity of the device varies depending on the size of the container and the quantity and quality of garbage.

Commenting on the economic justification of the system, he said, "The sample device with a 100-liter container can generate half a kilo of liquefied gas from 20 kilograms of garbage. Once it reaches mass production, it could sell for 200,000 to 300,000 rials which is a very reasonable price. The ferments are also inexpensive."

# Greener Cities Urged on World Environment Day

Big-city mayors from around the world signed a series of pacts on Sunday to improve the conditions of urban centers, capping a five-day UN World Environment conference in San Francisco, the city where the United Nations was founded in 1945.

The signing ceremony on World Environment Day in the ornate rotunda at City Hall committed more than 50 of the world's largest cities to "build an ecologically sustainable, economically dynamic, and socially equitable future for our urban citizens," organizers said.

The accords call for 21 actions aimed at putting cities on a path to greener, cleaner, healthier environments for their current residents and the estimated one million people moving to cities each week.

They covered energy, waste reduction, urban design, urban nature, transportation, environmental health, and water improvement programs to be implemented by mayors and delegates from cities like Jakarta, London, Seattle, Rio de Janeiro, Lausanne, and Calcutta.

Among the goals to develop global "Green Cities," the programs seek to reduce greenhouse gas emissions by 25 percent by 2030, set a policy of zero waste going to landfills and incinerators by 2040, ensure public parks within a half-mile of every city resident by 2015, and safe drinking water for all by 2015.

The San Francisco event wound up a day of conferences, concerts, art shows, tours, films, parades, tree plantings and cleanup drives in cities around the world, all focusing on building momentum for environmental change.

By 2030, more than 60 percent of the world's population will live in cities, up from almost half now and just a third in 1950, UN Secretary-General Kofi Annan said. Growth poses huge problems ranging from clean water supplies to trash collection.

"Already, one of every three urban dwellers lives in a slum," Annan said in a statement.

He added the UN goal of halving poverty by 2015 would not be met unless city planning was less haphazard.

Activists mark June 5, the date of the first environmental summit in Stockholm in 1972, as the UN's World Environment Day. The 2005 theme was "greener" planning for cities, many of them hit by air pollution, fouled rivers and poor sanitation.

Elsewhere, millions of people from Japan to Jamaica marked World Environment Day by planting trees or staging rallies as the United Nations urged better "green" city planning to cope with runaway urban growth.

In China, home to a fifth of humanity, the 2005 focus was to curb noise and clean up fouled water, air and rubbish in urban areas.

In Australia, green groups and local councils organized festivals to promote awareness of environmental issues from recycling to tree planting to cleaning up waterways.

In Greece, the port of Zakynthos banned cars for the day and allowed free public transport.

# Australian Plants Plague Indigenous Habitats

Native plants of Australia are spreading around the world and damaging environments in the United States, Africa, Europe and elsewhere, a leading weed expert says.

Dr. Rachel McFadyen said Australia's bush icons--eucalyptus trees, golden wattle bushes and paperbark trees or melaleucas--have been replanted globally and often pushed out native species.

"They've been planted around the world, a lot of them because they are good forestry plants," McFadyen, who is head of a research center for weed management in Queensland, told AFP. "Some of them become very invasive."

In one example, McFadyen said that the melaleucas planted in the Everglades in Florida had altered the habitat, forcing the United States government to ban their sale.

"Melaleucas were brought in to drain the swamps and they did it too successfully," she said.

Uprooted from their native soil, Australian plants were well-adapted to survive in harsh conditions and were often transplanted to parts of the world where their natural predators were missing, she said.

"They are certainly quite hardy things," McFadyen said. But the spread of 'exotic' plants is not all one-way. Australia also suffers from imported plants which are now considered pests.

Among the worst foreign offenders in Australia is the evergreen baccharis shrub from Florida, which has become a major plant in the tea tree forests of northern New South Wales, McFadyen said.

"The worst in terms of area are probably blackberry and lantana," she said. Blackberry was introduced for its fruit while lantana shrubs, which have small bright flowers, were brought in for ornamental reasons, she added.

A Koala bear climbs up a eucalyptus tree. (AFP File Photo)