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INDONESIA

CONSUMER INSTITUTE BLAMES DETERGENT COMPANIES, GOVERNMENT FOR WATER POLLUTION

Jakarta KOMPAS in Indonesian 13 Sep 77 p 2

[Article: "Pollution: Responsibility of Producers and Government"]

[Text] Pollution from industrial factories or industrial by-products which the consumer discards is the responsibility of the producer and the government's Department of Industrialization or Industrial Service.

This statement was made to KOMPAS last Saturday by Permadi, SH, the secretary of the Consumer Institute [YLK], who believes that Jakarta's drinking water is being polluted by non-biodegradeable detergents.

He further stated that up until now the government did not realize that pollution could result in disaster. This is evident from the fact that the government is still in the seminar and discussion stage and has yet to reach the implementation stage.

According to Permadi, the government of DKI Jaya [Greater Capital Area] has actually issued a local regulation on pollution of the capital's water and off-shore area. Although issued in 1971, this regulation does not seem to have been carried out.

The Consumer Institute is of this opinion because it has been proven that Jakarta's drinking water can be polluted by the detergent companies.

Rules of the Game

Permadi disagrees with the Dino and Rinso (Unilever) detergent companies who claim that pollution exists because there are no regulations. Permadi contends, "These are multinational companies, so they must follow the rules of the game just like companies in other countries."

The YLK cannot accept the producer's excuse that it is very expensive to install anti-pollution equipment. If this equipment is actually installed, it is the consumer who will bear the cost in the end. By not installing

anti-pollution equipment, the two detergent companies are failing to comply with international law and are disregarding the consequences for which they are to blame. Permadi says, "The detergent companies should be banned, if necessary." The YLK is upset by the response of Ir. Martono, the head of DKI Jaya Industrial Service, who stated that the water pollution was not caused by the two detergent companies but by the consumers who are discarding waste detergent indiscriminately.

According to the ULK secretary, Ir. Martono's statement is not based on fact. "The producers themselves," Permadi says, "have already admitted that their businesses caused the water pollution. The Industrial Service is used to saying the opposite."

That the consumers are responsible is absolutely unacceptable. The consumers were never told that the detergent was dangerous if discarded randomly. Even in the advertisements, Rinso and Dino are always said to be white, clean, safe.

The YLK will therefore demand that the companies put labels on their products with instructions on how to dispose of the detergent.

It is the opinion of Permadi, SH, that at the very least the factories which have harmed society (such as the leather factory which polluted the Brantas River) should be made to make restitution for the pollution damage.

He also stated that regulations on pollution must be drafted immediately and implemented firmly. He added that there are still many industries that cause pollution; for example, air pollution caused by the gravel industry which results in lung poisoning, air pollution caused by the carbon black industry and other such industries.

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MAJOR RIVERS POLLUTED BY FACTORIES

Kuala Lumpur BUSINESS TIMES in English 17 Sep 77 p 12

[Text]

INDUSTRIALISATION in Indonesia has brought about its own misfortunes in the form of pollution, it was reported here yesterday.

Major rivers in Jakarta, Semarang and Surabaya (Java) and Palembang (South Sumatra) are polluted daily by industrial wastes dumped by factories and chemical plants which now threatens the lives of millions of people who depend on rivers as their main source of water.

According to the official Antara News Agency the mayor of Semarang has formed a special team to make a serious study of the pollution problem facing the city.

The director of the city's drinking water plant, Mr Subiyanto, recently admitted that the problem has reached to an alarming level and effective steps are being taken to remedy the situation.

He said the water now

contains large amounts of chromium and quiksilver dumped by factories.

Of the 37 factories and plants in Semarang only five have their own water treatment plants while the rest use the river for their waste disposal, he said.

The drinking water in Jakarta was said to be containing "undisclosed particles" of strong alkaline, the main ingredient for making detergents.

The big fertiliser

plants in Palembang, South Sumatra, are not only causing air pollution but also endangering the aquatic life of the Musi River which flows through the centre of the city.

In Surabaya the waste water dumped by a food seasoning factory and a leather tanning works into the river have forced the authorities to close down the city's only drinking water installations. AFP.

SEMINAR ON ENVIRONMENTAL IMPACT OF DEVELOPMENT

Kuala Lumpur BUSINESS TIMES in English 27 Sep 77 p 4

[Article by Lai Wai Kuan]

[Text]

THE IMPACT of development on the environment should be assessed at the planning stage so that problems may be anticipated and provisions made to cope with them.

This will in the long-term view, be cheaper and more practical, said Tan Sri Ong Kee Hui, the Minister of Science, Technology and Environment, when he opened the seminar on *Environmental impact assessment* yesterday.

The short-term objectives of the seminar is to examine the current trends, practices, methodologies in environmental impact assessment, current procedures for project evaluation as well as guidelines for environmental impact assessment.

The long-term objectives involve documentation of background materials for the formulation and establishment of an environmental impact assessment procedure in Malaysia. This will ensure that the impact of major economic development and industrial projects on the environment are assessed and evaluated properly.

The process of environmental impact assessment covers administrative and technical aspects. The former involves economic planning and decision making procedures including the allocation of funds for carrying out projects and terms and conditions of project approval.

The latter involves the assessment of the impact of a project on the

environment and the evaluation of alternatives available.

Malaysia's rapid industrialisation and development in the past has led to many problems of pollution. For example, effluents discharged into the rivers by the oil palm industry has resulted in serious pollution of many of our rivers. Air pollution has also increased.

Because of that rules and regulations governing the standards of effluents for oil palm factories have been submitted to the Environmental Quality Council and clean air regulations have also been submitted and approved by the council. Other regulations for controlling discharge of effluents and pollutants from various industries are also being studied and prepared.

As land is under the control of the State Government, Tan Sri Ong emphasised the need for cooperation of the states to ensure the success of any environmental control measures.

He added that the objective of the Third Malaysia Plan is to ensure that the twin aims of development to raise the standard of living and to improve the quality of life are not negated by pollution of water and air. Malaysia among the developing countries is considered to be quite advanced in the field of environmental management.

"This seminar demonstrates the seriousness of purpose and foresight with which we are tackling our environment problems," he said.

EFFLUENT DISCHARGE, CLEAN AIR REGULATIONS TO TAKE EFFECT

Kuala Lumpur BUSINESS TIMES in English 27 Sep 77 p 4

[Article by Charles Chan]

[Text]

REGULATIONS to control the discharge of palm oil effluents will be gazetted in two weeks, the Minister of Science, Technology and Environment, Tan Sri Ong Kee Hul, announced yesterday.

This will be followed a month later by the clean air regulations, he added.

Tan Sri Ong told reporters that the regulations, which will make it compulsory for palm oil factories to take measures to reduce the discharge of effluents from their premises, were necessary as pollution of rivers and streams had become very serious.

He said in some cases, river and stream pollution had killed all marine life.

He said his ministry had received the green light from the Treasury to increase its staff to enforce the regulations.

The enforcement officers will monitor the palm oil factories and make periodic checks. They have powers to enter the premises without any warrants.

He said the measures to control pollution would become more stringent in future but at the initial stage the Government would not want to be unduly harsh on the factories.

He said factories would have no difficulties in getting the equipment to control the discharge of effluents as they involve mainly the digging of ponds and construction of tanks to hold the water discharged from the factories and enable the effluents to sink to the bottom. Eventually they will be broken up through bacterial action and other processes before the water is discharged to the rivers and streams.

"The construction of such tanks and the digging of wells will not entail much expenditure," he said.

Tan Sri Ong said the measures drawn up under the regulations were the result of consultations with the private sector.

The clean air regulations will prescribe the limits on discharge of pollutants in the air by factories, especially those with chimneys, e.g. sawmills and cement plants, and quarries.

Enforcement staff who are specialists in air pollution will be monitoring the factories to see that the regulations are observed.

On the Chemists Act which has been amended, he said the purpose was to enable those with pass degrees to register with the institute of chemists as licentiates. Previously the minimum qualification was an honours degree.

The minister said the Government, while ensuring high standards to protect the people, was afraid there might be a shortage of chemists.

FARMLAND POLLUTED BY COPPER MINE

Kuala Belait BORNEO BULLETIN in English 17 Sep 77 p 1

[Text]

Developers of the Mamut copper mine on the slopes of Mt Kinabalu near Ranau are starting to pay heavily for damage being done to surrounding land because of the company's open pit mining.

Overseas Mineral Resources Development Berhad has paid out about \$360,000 to half of the 455 families whose padi land has been invaded by silt, sand and waste oil washed down from the mine's dumping site.

Kampungs up to 12 miles from the mine have had their land hit by the pollution, which has clogged irrigation channels after being swept down by the fast-flowing Mamut and Lohan Rivers.

The polluted rivers are also depriving villages of sources of water for use by the people — and fish have also been starving to death because of mud saturation.

About 1944 acres of padi land in Kampung Narawang, Napong, Tongis Perancangan, Bongkud, Perancangan, Porong and the Lohan Settlement Scheme have been rendered useless for cultivation.

On some farms the muck is a foot deep.

Mr George Yapp, OMRD's assistant manager, said the compensation is for expected production this year (from past performances, the accumulated yield would probably have been more than 383,000 gantangs of rice).

The production had been calculated at \$910 an acre by the Agriculture Department.

To control new waste drain-off from the mine, the company is building a \$3 million high retaining wall on the steep upper gradient of the Lohan River. Two large settling ponds to catch the waste are also on the design board; the first built will cost about \$70,000.

While some of the padi land is feared to have been permanently damaged, tests indicate that some other parts could be cultivated again, if the material which has been washed over it is removed and the soil is chemically treated.

The adverse impact of the mining had not been expected when the company went into production.

Mamut currently produces five million tons of crude copper ore a year, which is processed into 112,000 tons of 25 percent copper concentrate for export to Japan via a loading point at Usukan Bay, near Kota Belud.

OMRD is a joint venture between Japanese and local interests.

EXPORT BAN ON LOGS FROM PROPOSED PARK AREA

Kuala Lumpur NEW STRAITS TIMES in English 30 Sep 77 p 1

[Text]

The Federal Government has imposed a ban on the export of logs from the Endau-Rompin area, including the proposed National Park, it was learnt here today.

Bernama quoted official sources as saying the Ministry of Primary Industries had refused to entertain export quota applications for logs from the controversial logging companies involved.

This followed calls by various organisations, including the Environmental Protection and Nature Societies, for the Federal Government to act to put a halt to logging in the proposed National Park area.

It is understood that the ban would affect applications to export several thousand tons of various types of logs.

The move is believed to be part of the continuing pressure being applied by the Federal Government.

Federal officials hoped that the State Government would not is-

sue any more logging permits in the Endau-Rompin area.

They also hoped that the State Government would stop current logging by withdrawing the permits already issued and providing alternative sites.

The effectiveness of the ban was, however, doubted by timber industry sources in Kuantan as most of the species of timber from the area had already been covered by an export ban on 11 timber species by the Ministry.

Most of the timber from the Endau-Rompin area find their way into the local markets like Johore, Negri Sembilan and Selangor, they said.

Therefore to be effective, the ban should also be extended to the local sawmills.

What the State could do, they added, was to stop the issuing of new licences.

It was learnt today that Mentri Besar Datuk Muhammad bin Jusoh paid a visit to the Endau-Rompin area last Monday to see for himself the extent of the damage done to the area.

POWER PROJECT SHOULD BE DROPPED DUE TO ENVIRONMENTAL IMPACT

Kuala Lumpur BUSINESS TIMES in English 29 Sep 77 p 3

[Article by Charles Chan]

[Text]

THE DEPARTMENT of Wildlife and National Parks has urged the Government to abandon the proposed Tembeling hydro-electric project as its implementation would cause severe, extensive and irreparable damage to the environment.

In making the call, the department suggested that investigations be carried out with a view to find alternative sites for similar projects.

The department's appeal was made in a confidential report submitted to the Government. Extracts from the report, which analysed the environmental and sociological consequences of the project, especially to the National Park, were submitted by Mr Ken Rubeli, an official of the department, in to a seminar on *Environmental impact assessment* which ended in Kuala Lumpur yesterday.

Among the reasons cited for its appeal to abandon the Tembeling project is that it would pose grave consequences

to wilderness qualities, lowland forest, wildlife and recreational usage.

The effect of these impacts is intensified because much of the land flooded by the implementation of the project is dedicated as a National Park area.

In addition, Mr Rubeli said, there is possible danger to human health.

On the plus side, the project would boost employment for local residents, lead to higher standard of living for people who have to be resettled, create a reservoir for recreational use, provide road access to the National Park and, lastly, to provide major flood mitigation benefits.

Mr Rubeli said modification of the method of project implementation would not significantly reduce adverse environmental impacts overall. However, alternative sites have been suggested.

They are the Tekai and Telcom-Jelai Kecil sites as outlined in the Pahang River basin study report.

The Department of

Wildlife and National Parks, formerly known as the Game Department, has recommended that a preliminary field investigation be carried out to confirm the feasibility of siting hydro-electric schemes in these areas.

It also suggested a preliminary assessment of environmental and sociological impact of hydro-electric project implementation at the Tekai and Telcom-Jelai Kecil sites and have its results weighed against those of a similar assessment on the Tembeling scheme.

"If the Tekai and Telcom-Jelai Kecil sites appear favourable after these studies, initiation of pre-investment studies at these sites should be carried out."

The Government should consider other sites if the Tekai and Telcom-Jelai Kecil sites were not favourable, or consider other power generation schemes like thermal plants, nuclear plants, etc.

PEOPLE'S REPUBLIC OF CHINA

WANG EN-MAO ATTENDS KIRIN CONFERENCE ON POLLUTION OF TUMEN RIVER

Changchun Kirin Provincial Service in Mandarin 0420 GMT 28 Oct 77 SK

[Excerpts] The Kirin Provincial Revolutionary Committee recently held a conference in Changchun on preventing pollution of the Tumen River. The conference reviewed the important directives issued by great leader Chairman Mao, wise leader Chairman Hua and esteemed and beloved Premier Chou on environmental protection, studied the documents concerned of some departments of the State Council and government, conscientiously discussed how to implement the minutes of the talks on preventing pollution of Tumen River held between China's Kirin provincial delegation and the Korean North Hamgyong provincial delegation, and the questions of the proper handling and multipurpose utilization of industrial wastes in gas, liquid and solid forms and doing a good job in Kirin's environmental protection work.

Comrade Wang En-mao, first secretary of the Kirin Provincial CCP Committee and chairman of Kirin Provincial Revolutionary Committee, Juan Po-sheng, secretary of Kirin provincial party committee and vice chairman of Kirin Provincial Revolutionary Committee, and Tsung Hsi-yun, member of the Standing Committee of Kirin provincial party committee and vice chairman of Kirin Provincial Revolutionary Committee, attended the conference. Comrade Juan Po-sheng and Tsung Hsi-yun delivered speeches.

The Tumen River is a major source of water for the Chinese and Korean people along the river in their livelihood and production. Therefore, preventing and remedying river pollution is a matter involving not only the immediate interests of the Chinese and Korean people living along the river but also the consolidation and development of the militant friendship, cemented in blood, of the Chinese and Korean people. Friendly talks were conducted at China's Yenching Municipality from late 1976 to early 1977 between China's Kirin provincial delegation and Korea's North Hamgyong provincial delegation on the question of preventing and remedying pollution of the Tumen River in areas under each other's respective jurisdictions, and agreement was reached.

At this conference, the Kirin Provincial Revolutionary Committee conscientiously discussed ways and means to carry out the aforementioned minutes, and was determined to adopt effective measures to quickly do a good job in properly disposing of the pollutants affecting the Tumen River so as to improve the welfare of the Chinese and Korean people. It was demanded at the conference that it is necessary to carry out the minutes, step up prevention and remedy the pollution of the Tumen River and strive to do a good job in properly disposing of the major pollutants of our side. It is necessary that all industrial and mining enterprises and scientific research projects under construction, reconstruction and expansion must adopt effective measures to

prevent the occurrence of new pollution, and that Tumen River pollution observation stations must make great efforts to do a good job in pollution observation work, exercise strict supervision and examination in the disposal of pollutants in China along the river, strengthen the curbing of pollution of the Tumen River Reservoir, and carry out scientific research on resources protection and related standards. The conference conscientiously discussed questions concerning the disposal and multipurpose utilization of industrial wastes and doing a good job in Kirin's environmental protection.

To prevent the occurrence of new pollutants, all projects of construction, reconstruction expansion and renovation for increasing productive capacities through technical measures which result in discharge of industrial waste or cause environmental pollution must be undertaken strictly in conformance with regulations governing the disposal of industrial wastes. It must be insured that waste disposal facilities are designed, built and put into operation in pace with the progress of the construction projects themselves; otherwise, the starting of construction and operation cannot be approved.

It is imperative to strengthen party leadership over environmental protection, to establish and improve environmental protection work at the various levels, to conscientiously discuss and improve the control systems and rules and regulations which detract from multipurpose utilization of industrial waste, and to include the control of industrial waste in processing operation regulations and the system of personal responsibility so as to coordinate production and environmental protection and insure that environmental protection work is carried forward.

CSO: 5000

HUNGARY

LAND RECLAMATION EFFORTS AT AJKA, DEVECSER

Budapest UJ TUKOR in Hungarian 23 Oct 77 pp 36, 37

[Article by Peter Kadar]

[Text] Every year Ajka receives 34,000 tons of dust from the power plant. The slag hills in town run for kilometers, and the unbound dust is carried by the winds to the residential area. Farther away, toward Devecser, a huge red streak extends along the horizon; this is red mud from the alumina production plant. The trains in this area are followed for a long time by the gray and the red of the slag and refuse dumps. The shades of these two colors prevail over the lifeless area which expands from year to year.

Several years ago, some high-ranking visitors came to Ajka. Of course, they were not shown the dumps, but they could not be avoided either. Someone remarked: "These are so ugly, something ought to be done!" But what?

It would be an exaggeration, of course, to assert that the matter of the refuse dumps was put on the agenda in this way. Prior to that, they had already purchased a foreign process by which grass and binding material were implanted in the slopes with water guns. But the process was expensive, and the results minor. Years later the stark slopes of the slag hills were still bare for the most part, the seeds were borne away by the winds; here, unfortunately, even weeds could not take root.

And what of the top of the hills? At a height of 15-20 meters the place was lunar and the slightest breath of wind would create a veil of dust and lay it on the town. It has been so for decades, until the waste lands met the man in Gyula Horvath, the forestry manager at Ajka.

The Winds Blow Toward the Houses

"Did anyone ask you to try to grow trees on the refuse dump and slag area?"

"Well no, that is of course! I was elected town council member 7 years ago, I know all of Ajka's sore spots, and I am a forest engineer."

We tour the inner town. Although the weather is hot, all windows are closed, the walls of the storied houses are more gray, more dark than the others, for

they catch more dust. A fast turn, and in a minute we are rolling on the lower levels of the slag area.

"This separates the power plant and the alumina plant from the residential area," the engineer said, "and mostly the wind blows toward the houses."

There are about 300 garages on top of the slag hill, all recently built and with that the vehicle storage shortage at Ajka was solved. The neighboring larger slag range towered threateningly above us.

"Where is the experimental area?" I risked the question behind the garages.

"We're on it!"

I looked about in disappointment. The weedy area did not resemble a desert any more, but neither was it a forest! Dwarf shrubs, here and there brown little trees, a few locusts about 2-3 meters tall.

"Is this all?"

Gyula Horvath did not even seem aware of the belittling nature of the question. He knew his subject. The otherwise silent, reserved man explained enthusiastically:

"Four years ago I noticed that a few weeds clung to the slag hills. That meant there was nothing here so poisonous as would exclude life. I pored over the specialized literature to find what are the least demanding plants. How can the slag be most cheaply improved? I questioned everyone, but they merely waved a hand and said I should save myself the trouble for the sky would be green before this sludge turned green."

"There are two deadly enemies of plants: the hardened layer of slag at a depth of several centimeters where there is no nourishment, and the fluorine and sulphur from the factory chimneys. It is true that the locusts and poplars can withstand the poisonous gases, but they too are incapable of living in slag where there is no soil. The layer of arable land is thin everywhere in our country, and to bring some here from elsewhere to this dump consisting of a hundred hectares or so is inconceivable, for then the land may become barren at the other site."

"The Ajka forest service strips bark from the trees they lumber like most forest services elsewhere in the country. The stripping takes place not far from the dump. The bark is inflammable waste which is transported for 30 forints per cubic meter to the woods. It costs only 15 forints to the dump."

"Well, what about the bark...?"

"It is not so easy. First of all, we plowed up the hardened slag to a depth of 2-25 centimeters with road breaking equipment, spread the bark, and then covered it again. Only the silver pine was from the nursery. The rest came from the woods. Between the rows we planted acorns."

The Acorns Sprouted

Within a year most of the saplings were living, weeds appeared on 5 percent of the area. In 2 years, 80 percent of the saplings were green, the oaks were 8-10 centimeters high, and the roots had penetrated to 50-100 centimeters in the rock-hard slag. Now more than a half of the area is covered with green. The weeds are thriving."

"It was my luck," the engineer said as if it had been his own gain, "that they pump in the slag mixed with water in stages, and thus it hardened in layers. There is space between the cemented strata. The rain water gathers here as in basins. Do you hear how the ground rumbles?"

"One of my friends suggested that we chemicalize it to get rid of the weeds!" The forester still shakes his head when he thinks back on this, for he is made happy by the hogweed, Bokhara clover, hair-grass, mugwort, and wild carrot; it makes him as happy as if he himself had created something.

And on this earth he did create it, and he keeps account of every little shrub.

"Two hundred and twenty-six trees and 216 oaks planted from acorns are living on this hill. Look at that black pine: it seems to say 'no matter what, I'm here.' The other pines died out, but it has held out."

The linden, too, is fighting. It is already 2 meters tall. The birch is yellowish, it is branching, but also struggling ineradicably downward. The locusts could not care less about the poisonous gases, the limed ashes. The juniper is a fresh green, the privet grows as though it always wanted to be here. The goat willow is at least 3 meters. In autumn the leaves fall, the trees produce more and more nourishing soil, and in 5 years there will be a jungle in place of the desert."

We stoop down by a tiny shrub: "Look, this is the most recent, greatest success. It has grown here naturally, the seeds of the trees are held in the soil."

The Academy Comes Out

The fame of the experiment spread. The Academy committee at Veszprem held a session at Ajka: the subject, the afforestation of dumps; the speaker, Gyula Horvath.

"There is processing of wood near most of the slag producing enterprises, but even where there is none it is possible to find large volumes of organic waste. If we search, we shall find other undemanding types of trees. I have also thought that we could mix bast into the watered down slime, and the upper layer of the slag hills would come out enriched. With my method you can afforest a hectare of dump land for 40,000-60,000 forints, and this is less expensive than a grass cover."

We leave and look back on the growing woods. A Bokhara clover brushes against my trousers, and from this one weed I am covered with enough dust to look like a miller. How much dust will a whole belt of trees hold?

BRAZIL

AMMONIA IN JAGUARI RIVER LEAVES AMERICANA WITHOUT WATER

Seasoning Factory Responsible

Sao Paulo FOLHA DE SAO PAULO in Portuguese 19 Oct 77 p 12

[Text] After it had discharged a large quantity of ammonia into the Jaguari River (a tributary of the Piracicaba) and thereby caused an interruption in the supply of water to the residents of Americana, the Aji-No-Moto factory was shut down yesterday by the Environmental Sanitation Technology Company (CETESB). The closing of the factory was ordered at noon yesterday by the secretary of public works and the environment, Francisco de Barros, who transmitted from Brasilia (where he spent the day) the instructions for halting the operations of the company that had caused the pollution.

The supply of treated water to the city of Americana was cut off at 1400 hours on Monday as soon as the technicians who operate the local water treatment plant discovered the presence of a heavy concentration of organic matter and ammonia in the water--a condition that resulted in the death of thousands of fish. Despite an investigation carried out by officials of the city's Water and Sewer Department [DAE], however, it was not possible that same day to determine the source of pollution. It was not until yesterday morning that a determination was made to the effect that the mass killing of the fish--together with the contamination that had compelled interruption of the water supply to the city--had been caused "by operational problems in connection with the industrial process at the Aji-No-Moto plant," to quote the explanation offered late that afternoon by Nelson Nefussi, a CETESB director,

Molasses and Ammonia

Nefussi further explained that "the liquid residues of molasses--residues that contain ammonia--are supposed to be used in the production of fertilizers but through mechanical failure of some kind were instead diverted into the river." The raw material used by Aji-No-Moto is molasses, which contains nitrogenated ingredients and ultimately produces ammonia at the conclusion of the manufacturing process.

In the opinion of this technical expert, however, "the city did not run the risk of more serious consequences, inasmuch as the presence of ammonia in the water is capable only of causing gastric disturbances. It is very unlikely," he added, "that anyone would actually drink the water, inasmuch as in this condition it is greatly altered both in taste and in odor." He also ruled out the possibility that the effluents would eventually affect the water supply of other cities of the region "because," he said, "the pollutant will gradually be diluted in the waters of the river."

Plant Opened 1 Month Ago

The Aji-No-Moto plant was opened a little over a month ago under a "provisional" permit granted by CETESB--a type of permit that is issued for a maximum period of 6 months. According to the CETESB director, an analysis of the waste from the plant had been made on a continuing basis--inasmuch as the company is under observation during the period the permit is in force--and the effluents from the treatment equipment had been rated as "satisfactory."

The seasoning factory will be allowed to resume operations only after it has taken the necessary protective measures based on instructions from CETESB, which promises to "maintain surveillance in order that the problem will not arise again." In the event of another "accident," Nelson Nefussi added, "we could even close the plant permanently."

The Aji-No-Moto management shut down the company's operations and announced that "the situation will be back to normal within 2 days." Restoration of the supply of treated water to the residents of Americana had been expected as early as this morning, but as of late yesterday afternoon the liquid arriving at the DAE treatment tanks was yellowish in color and covered on the surface with a white foam.

Outmoded Technology the Cause

Sao Paulo FOLHA DE SAO PAULO in Portuguese 21 Oct 77 p 13

[Text] "The accident that took place at the Aji-No-Moto factory in Americana--an accident that resulted in the discharge of a large quantity of ammonia into the Jaguari River (a tributary of the Piracicaba) and in the death of thousands of fish--could have been avoided if the plant had adopted a more advanced technology." This statement was made yesterday by the German professor F. Korte, one of the international experts on pollution who took part in the seminar on Environmental Chemistry and Ecotoxicology at the offices of CETESB.

According to F. Korte, who spoke on "Routes Followed by Chemical Substances in the Environment: Industrial and Household Waste," what happened was nothing more than an accident--an accident such as could occur anywhere in the world, even in Germany, where the most sophisticated methods are used to combat pollution.

The speaker recalled that some time ago a barge carrying a cargo of pesticide sank in one of Germany's rivers and caused harm to the fauna. He emphasized that "in the majority of cases, all control procedures--which should be preventive in character--that are taken are put into effect only after the accident has happened. What is needed in all countries," he said, "is greater mastery of the methods for controlling the operation of the antipollution equipment."

In the opinion of F. Korte everything possible that can be done to prevent environmental pollution should be done. He insists that industrial plants should not discharge waste into the rivers but instead either recycle the used material or burn it before releasing it into the environment. He acknowledges, however, that these methods of recycling or burning the material cannot be used in all plants, inasmuch as many of these plants were built years ago and cannot accommodate modern equipment.

The professor began his presentation yesterday by establishing the parameters for pollutants and then discussed the ecotoxicological effects on the environment. He said, for example, that the majority of additives used for the purpose of improving the performance of lubricants contain "triorthocresyl phosphate" (TOCP). He explained that "if a food contaminated with this substance is ingested it causes irreversible paralysis, among other disorders. In 1950," he said, "more than 4,000 cases of this type of contamination were recorded."

10,992
CSO: 5000

BRAZIL

FIVE COUNTRIES PLAN TO CONTAIN PLATE BASIN POLLUTION

Sao Paulo O ESTADO DE SAO PAULO in Portuguese 18 Oct 77 p 6

[Text] (From local bureau and correspondent)--Concerned about the current indices of pollution of the rivers of the Plate Basin, 60 experts from Brazil, Argentina, Paraguay, Uruguay and Bolivia decided yesterday--during a meeting at the foreign ministry in Brasilia--on establishment of a number of "parameters" to be used in an effort to measure the quality of the water in these rivers. This decision was taken at the second meeting (which began yesterday) of the Working Group on Water Resources and Other Natural Resources of the Countries of the Plate Basin. After it is formalized into a draft resolution, the proposal will be submitted for consideration to the Ninth Meeting of the Foreign Ministers of the Plate Basin, to be held from 5 December to 8 December in Asuncion.

The meeting at the foreign ministry--which will continue throughout the week--will also discuss matters relating to navigation, ichthyology and hydrometeorology. As in the case of the discussion regarding pollution, all conclusions reached will be transmitted to the meeting of the foreign ministers in the form of a draft agenda.

The report approved concerning pollution--which affects mainly the Parana, Paraguay and Uruguay Rivers--recommends the creation, in the various regions, of sampling stations at those points where the problem is the most serious. The collection of water for analysis from the various rivers should be carried out simultaneously, in order that comparisons may be made.

The draft resolution states that evaluation of the samples obtained should take into account the temperature and turbidity of the water, the pH, the conductivity, the chlorides, the dissolved oxygen and other "parameters" which could indicate changes that are detrimental from the standpoint of public health, the ecology and/or the economy.

Another continuing subject on the agenda of the current meeting--a subject that should arouse great interest--is that of navigation. The demand for data concerning the present status of the projects for improvement of the navigable waterways of the basin could, in the opinion of one observer, enliven the meetings to a considerable extent.

10,992

CSO: 5000

VENEZUELA

NATIONAL GUARD PUTS TEETH INTO ENVIRONMENTAL LAW ENFORCEMENT

Caracas EL NACIONAL in Spanish 20 Sep 77 Sec C p 11

/Text/ The National Guard has joined the Ministry of Environment and Renewable Natural Resources as an armed branch. In one of its first actions, it ordered the police arrest of three builders who were constructing in "green" zones. It also drew up legal files against 18 violators of the conservation laws, announced General Enerio Gonzalez Medici, Region 5 commander of the FAC /Armed Forces of National Cooperation/, yesterday.

The high-level official, considered a pragmatic conservationist, a dedicated and hard-handed man since his days as a second lieutenant, yesterday stated his intention to confront all traffic in influence and use of illegal permits and licenses to violate legal provisions that preserve the environment and renewable natural resources.

During the past two weeks, various proceedings have been noted in a report on the actions of Regional Command 5, Post 56, in the Service of Guarding, Defense and Protection of the Environment and Renewable Natural Resources, in the Federal District jurisdiction, states of Miranda and part of Aragua.

--A fine of 50,000 bolivares was imposed by MARNR /Ministry of Environment and Renewable Natural Resources/ on persons responsible for a Corpomercadeo construction project in the Tazon area, considered a "green" zone.

--Detention of the project's resident engineer for non-payment of the fine and for continuing work.

--Halting building projects in the environs of Pan American Park, Roraima and Tazon on the Caracas-Los Teques highway.

--Drawing up 4 legal files for violations of the Forest Soil and Water Law and the Organic Environment Law.

--Carried out 39 proceedings in fulfillment of presidential instructive No 28 of 29 January 1977.

--Drew up 12 administrative files for violations of the Forestry Law.

--Preventive detention of 21 citizens for violations of the Forest Soils and Water Law and the Organic Environment Law.

--Halted eight earth-moving projects with heavy equipment for violation of provisions of the Law.

--Halted two barges loaded with earth that lacked permits and the necessary studies.

The Armed Branch of the Environment

General Gonzalez Medici stated that one of the functions of the National Guard has always been the preservation of the environment, based on the law, but now it is coordinating this task jointly with the Ministry of the Environment and Renewable Natural Resources, a recently created agency.

Based on this new administrative structure, Post 56, which is a division of Regional Command 5, has been organizing new mechanisms that have recently been implemented.

General Gonzalez Medici explains it this way: "We have formed technical teams composed of a forestry engineer with a grade of assimilated lieutenant, and three veteran FAC master engineers who are forestry experts. They are supervised by Lieutenant Colonel Jose del Carmen Barrios Dulcey, commander of Post 56, with the exclusive function of environmental protection and defense and protection of renewable natural resources in Region 5's jurisdiction, that is, the Federal District, state of Miranda and Colonia Tovar."

Post 56 has headquarters in La Mariposa, a company in La Mariposa, another in Ocumare del Tuy and a company command in Higuerote, with intensive guard posts and extensive mobile guard services.

The National Guard's intensive guards, explained General Gonzalez Medici, provide permanent vigilance of environmental and forestry matters in the areas to which they are detached. One of them is in Colonia Tovar.

The extensive guards are commissions under the supervision of officials and are specialists who have been mobilized from La Mariposa, Cotiza, Guarenas, Higuerote and Ocumare del Tuy.

The Region 5 commander says that the creation of new intensive guards was sought to avoid the deterioration of the environment. In due time, the objectives will be more preventive than repressive.

The speaker revealed, in the words of Minister Gabaldon, that the civilian branch in matters of environmental conservation and conservation of renewable natural resources is the Ministry of which he is in charge, and the educational part corresponds to the Ministry of Education, scientific agencies, communications media and defense and protection boards.

Technical Teams

The armed branch for conservation of the environment and renewable natural resources has headquarters in La Mariposa and air and land units, nearly 400 regulars and 21 officers, 1 engineer and 3 experts. This team is part of the team belonging to Post 1 of the old Ministry of Agriculture and Livestock, today part of MARNR.

Says General Gonzalez Medici, "It is a question of personnel specialized in extensive guard duty. This technical team will continually and permanently supervise permits and authorizations issued by MARNR's Zone 1. In this work of control, inspection and prosecution, we will join technical personnel from MARNR Zone 1, which is headed by Hector Silva Brito and Colonel and Attorney Ali Soto Vargas."

"Based on this," he adds, "a structure of mixed commissions has been planned so that the clauses and limitations of these permits be observed to the letter of the law, without exception or interference of any kind, so as not to fall again into the sad and painful "permisology" that for decades characterized the period without mixed commissions.

The general emphasized that with these procedures of intensive mixed commissions, "carnetophilia"--characterized by the use of licenses to avoid legal provisions regarding renewable natural resources--will be combatted without respite.

"Licenses never helped to put out a forest fire," he says, "and in our opinion, Venezuela's best civilian forest warden needs only conscientiousness, a mystique and a current identification card."

Innumerable Problems

Further on he notes that numerous problems exist in this area. Construction of real estate developments that turn out to be larger than anticipated in the plans submitted when permits were

sought. Destruction of the soil and subsoil by the illegal removal of non-renewable natural resources. Construction of shanties in "green" zones. Illegal dumping of garbage. Forest fires.

"In view of this," he indicates, "we are drawing up precise, brief and clear instructions that should be placed in the intensive guard service, with orders to halt and prevent these illegal acts. We have one example of this in the Corpomercadeo case in Tazon. An instructive was issued with orders to halt construction and a fine of 50,000 bolivares was levied. The fine was not paid, and the work continued. A new instructive was issued, with orders for a 48-hour police arrest of the resident engineer. The fine remained due, and watch is being kept so that the work will not continue."

He adds, "I have given final instructions that whenever work is ordered to be halted and the builders continue their activities, sanctions of a penal nature be imposed along with the administrative ones. This would include trials in regular courts and arrests of from one to eight days. Payment of the fines would still be required.

The Region 5 commander says that instructions have been issued to pursue "permisology," which he defines as the granting of permits without basic economic studies, that is, technical studies of soils, water, vegetation, stream beds, and correction of grades or slopes, that will guarantee that subsequent damage will not be caused.

"The mixed technical teams," he concluded, "seek to erradicate definitively this 'permisology' in urban developments, earth moving, logging, burning and, deforestation and irrational use of non-renewable natural resources."

Beyond this, he said that official, class and national guard personnel that will perform these functions will be reclassified to create a team with mystique, based on the vocation for service and aptitudes.

"For this job," he said, "we need people who are not afraid of snakes, hunger, cold, sun or rain, 'permisologists,' nor 'carnetophiles. Training will begin soon, with the support of three posts from Regional Command 5, which will perform the functions of detecting and reporting but will not act."

8631
CSO: 5000

VENEZUELA

ENVIRONMENT MINISTRY ANNOUNCES 15 BASIC PROGRAMS FOR 1977-78

Caracas ULTIMAS NOTICIAS in Spanish 17 Sep 77 p 63

Text Upon initiating its activities, the Ministry of Environment and Renewable Natural Resources has established basic programs that are reflected in 100 priority actions in accordance with national priorities in environmental matters, and with rational use of renewable natural resources. Its objective is the necessary research, planning, infrastructure projects and citizen participation so that the socio-economic development of Venezuela may be realized in balance with nature, the health of the people and the preservation of these resources.

Forest Resource Management
Control of Logging and Deforestation
Forest and Continental Aquatic Fauna Management
Environmental Education and Citizen Participation
Professional Development and Environmental Technical Training
Water Projects: Drainage and Integral Development
National Parks and Intensive Outdoor Recreation Areas
Flood Prevention and Control
Regional Aqueducts
Ordered Settlement of National Territory
Collection and Final Disposal of Garbage and Other Solid Wastes
Air Pollution Control in Important Cities and Industrial Development Areas
Water Pollution Control
Waste Water Treatment Plants
Integral Administration of Water Resources
Prevention and Control of Forest and Grass Fires
Conservation of River Basins

8631
CSO: 5000

VENEZUELA

1976 CARACAS AIR POLLUTION DAMAGE TOTALS \$140 MILLION

Caracas EL NACIONAL in Spanish 13 Oct 77 Sec 2 p 2

[Excerpts]Caracas is suffocating from pollution. Figures from the Venezuelan Institute of Scientific Investigations [IVIC] state that vehicles and factories pour four million kilograms of pollutants over the valley.

The results are alarming. The Minister of Health gave his estimates. He estimates that by next year the amount of damage caused by pollution of the atmosphere will reach 6 billion bolivars.

The foregoing amount was broken like this: health, 2,405,000,000; housing, 2,061,000,000; materials and vegetation, 1,060,000,000 bolivars. [figures as published]

Jose Luis La Cruz, electronic technician and a specialist in internal combustion engines, is concerned by the IVIC and Ministry of Health figures. He is also worried by his own figures: of the half million automobiles which travel in the capital, almost 60 percent emit high levels of carbon monoxide.

La Cruz talks of poor carburetion of vehicles, which contributes to aggravating the problem of pollution.

Carbon hydroxide is poisonous. Carbon monoxide is poisonous. That is why he repeated that the better the work done on a carburetor, the smaller the quantity of carbon monoxide produced, and it pollutes less.

And La Cruz shows us a chemical analyzer he has with him and which is of the type used by technicians to determine whether a carburetor is operating well or not. This is the most simple one. Through its use the percentages of poisonous gases emitted by internal combustion engines can be estimated.

To him the ideal minimum levels of monoxide are: four-barrel carburetors, 1.5 percent; two-barrel, 2.5 percent; and single-barrel carburetors, 3.75 percent, provided they are operating under normal conditions. If they go beyond these levels, they are polluting the environment.

Jose Luis La Cruz makes a proposal, which could be put into effect, in his opinion, at a government level. It is the installation in different places of the city of offices for the chemical analysis of automobile carburetors.

8908

CSO: 5000

VENEZUELA

ENVIRONMENTAL DESTRUCTION THREATENS PUBLIC HEALTH IN BARINAS

Caracas EL UNIVERSAL in Spanish 19 Oct 77 Sec 2 p 22

[Text]Barinas (INNAC)--(Exclusive for EL UNIVERSAL)--The environment in Barinas has reached critical states of destruction due to the effects of pollution resulting from various factors such as gas emissions from vehicles, noises, the accumulation and burning of trash, oil spills which are falling into the rivers, cutting of trees, use of pesticides, and so forth.

This warning is issued by the Board of Directors for the Conservation, Protection and Improvement of the Environment and Renewable Natural Resources through some of its members, Ramon Coronado, president; Carmen de Materan, secretary; and Baudilio Mendoza.

This organization, which operates in the Barinas Municipality, is preparing a report which contains alarming information on the progress this evil is making in the city of Barinas and the rural areas.

At this time, they say, a plan is being prepared for cleaning up Barinas of the rubbish, weeds and pastures polluting the city.

The accumulation of rubbish and the proliferation of lots covered with weeds are contributing greatly to increasing pollution, which is aggravated by the lack of an adequate garbage dump. The present dump contributes serious polluting elements because garbage is burned and the smoke enters parts of the city, and because of the clouds of flies which proliferate there.

Likewise, the sewage that runs through the streets and lots is an extremely harmful agent despite an increase in the construction of sewers during the past year.

Other polluting sources are the automobiles and scooters, which emit poisonous gases and are increasing in a city which is not capable of handling a high volume of traffic and lacks sufficient arteries for greater fluidity and speed of traffic.

Damage From Pesticides

While Secretary Carmen de Materan listed the most serious problems faced by the city in this respect, Drs Mendoza and Coronado had a wealth of details on certain subjects.

For example, in the opinion of Dr Coronado, a state is being reached in Barinas which cannot be considered other than critical with respect to pollution, but he believes that through the proper control measures very favorable and effective results may be reached.

The case of pesticides is pointed out by him and by Dr Mendoza as being very serious because their use is causing damage to flora, fauna, rivers, and of course, to urban, suburban and rural dwellers.

In this respect, a proper application of existing regulations could resolve the problem in part, eliminating a harmful factor which in other regions has already caused real disasters in the ecology and among the human and animal population as well as in vegetation.

Oil Spills Fall Into Rivers

Engineer Baudillo Mendoza indicates that in Barinas there is pollution in streams because of oil spills falling into them in the region of El Toreno.

He mentions the case of the El Barro sewer into which flow pollutants from the oxidation ponds into which are poured the wastes from pumping and refining stations.

This sewer flows into the Santo Domingo River, whose waters are finally contaminated by this harmful polluting agent.

[First portion of paragraph missing] to pass them through and no green areas are being established as is expressly stated in existing regulations.

On the other hand, the way in which regulations on urbanism are violated with respect to the location of buildings, contributes to making the problem more serious.

The Problem of Santo Domingo River Very Serious

The problem of pollution of the Santo Domingo River is described as extremely serious. Senora de Materan points out that there are no measures for the protection, conservation and preservation of the Santo Domingo River. She indicates that there is contamination of its waters by sewage from the city, particularly from sewers draining into it; by garbage which is thrown into its waters at various points along its course, by oil residues and other materials from various plants and by pesticides.

In this respect, it is reiterated that the water level of the Santo Domingo has undergone a serious drop because of the cutting of trees and the burning of undergrowth, and that it is necessary to increase forestry work and its protection.

Likewise, the board insists on the urgent need for an increase in protective measures in the wooded areas of the city and throughout the state because the deterioration being suffered by them is causing very serious damage to the environment.

Industrial Zone

Dr Mendoza makes serious criticism about the destruction of trees which are felled to make way for the Industrial Zone, saying that in the same region there are areas of plains which could be used for this purpose without the need for the zone to be located in this area where there are more than 3,000 trees, which make up the true vegetable lungs of Barinas, since all the mountain breezes converge there, cooling the hot Barinas climate.

8908

CSO: 5000

VENEZUELA

HIGH INCIDENCE OF PESTICIDE, HERBICIDE POISONINGS REPORTED

Caracas EL UNIVERSAL in Spanish 27 Sep 77 Sec 2 p 17

[Text]Coro, 26 Sep (INNAC)--The high incidence of poisonings and toxic reactions caused by the indiscriminate use of herbicides and pesticides is deeply worrying the Venezuelan Pharmaceutical Federation, declared its president, Dr Andres Guitian, moments before the beginning of the Fourteenth National Assembly of this institution here.

The foregoing, he added, not only pollute agricultural products but also the land and water, upsetting the ecological balance and placing the future of mankind in danger.

Dr Guitian was accompanied by his colleagues Yulia Domingo, president of the College of Pharmacy of the state of Falcon; Antonio Van Grieken, Dean of the School of Pharmacy of the University of the Andes, and Felix Beaujon of the Central University of Venezuela, during his talks with newsmen.

The pharmacist said at the beginning of the conversation: "We play a great role in the preparation of medicines and in the development of new products, which are more and more effective for the treatment of various illnesses, and in their distribution, which is a primary and most important factor in the recovery of health."

He continued: "Besides this, there are a number of new perspectives such as hospital pharmacy, the increasing competence of pharmacists, and their participation in the problems of doctors prescriptions.

"The Federation," he concluded, "as is natural to think, is against self-medication, but it is necessary that the state expand its radius of action with respect to medical attention because many people self-prescribe for their illnesses because of the inconvenience of having to stand in the huge lines at the care centers."

8908
CSO: 5000

VENEZUELA

TOXIC AGRICULTURAL PESTICIDES CONTAMINATE RIVER

Caracas EL NACIONAL in Spanish 13 Sep 77 Sec C p 5

[Text]Cucuta, 12 (Special, L. Lossada Roa)--The government of the northern department of Santander and the Division of Environmental Recovery, warned all the inhabitants of the banks of the Pamplonita River to refrain from consuming the water because it is polluted.

The aforementioned Colombian river starts in the upper part of the city of Pamplona, which is some two hours from Cucuta. In its course of some 120 kilometers, it crosses the department from the north to the south and joins the Tachira River on the Colombia-Venezuela border. The Pamplonita River borders the northern part of Cucuta and then joins the Tachira River, which passes near the cities of San Antonio del Tachira and Urena. It also borders a number of Venezuelan border towns.

Colombian authorities today made a call to prevent a tragedy because in its course through Colombian territory, it serves some 100,000 people, who live on its banks.

It was learned that the waters were polluted due to a concentration of poisonous substances used for spraying large agricultural zones. The source indicated that the death of thousands of fish, which washed up on the banks, has been noted.

At the same time that the authorities are taking steps to prevent any tragedy, an investigation for establishing responsibilities has begun.

The Tachira River goes on to join the Zulia River and the latter joins the Catatumbo, which flows into Lake Maracaibo.

8908

CSO: 5000

IRAN

COOPERATION WITH USSR ON CASPIAN POLLUTION NOTED

Teheran Domestic Service in Persian 1000 GMT 29 Oct 77 LD

[Excerpt] An agreement aimed at combating pollution in the Caspian Sea was signed in Teheran at the end of a meeting of Iranian and Soviet experts on environmental protection. The Soviet experts, who have come to Iran to plan and coordinate the operation of the reconnaissance ship "Rodon" and Iran's reconnaissance aircraft, discussed the situation over the past week in Teheran and Bandar-E Pahlavi. These meetings follow operations begun 2 years ago to prevent pollution of the Caspian Sea. At the conclusion of the present meeting it was decided to begin operation of the Iranian aircraft and the Soviet ship at the beginning of the next year.

CSO: 5000

SOUTH AFRICA

MINISTER REPORTS ON DRIVE TO REDUCE SMOKE POLLUTION

Johannesburg THE STAR in English 17 Nov 77 p 13

[Article by John Patten]

[Text]

The Minister of the Environment, Dr van der Merwe, said today it would take at least 20 years to reduce smoke pollution meaningfully in the black residential areas at the present rate of replacement of obsolete coal stoves.

Addressing a stocktaking symposium in Kemp-ton Park on air pollution, Dr van der Merwe said the Government had considered a plan to replace such stoves within five years, but the project would have cost R80-million, and at that stage there was still insufficient proof that the minimum-smoke equipment would fulfil expectations.

Further shortcomings had since shown themselves.

The Minister claimed the greatest concentration of domestic smoke pollution was in the urban black residential areas, because bituminous coal was the traditional — and till recently the cheapest — energy source for the blacks.

The Department of Health had encouraged the use of minimum-smoke stoves and at present such stoves were being freely marketed.

The manufacture or importation of the conventional stoves had been banned in South Africa since April 1975.

CSO: 500

SOUTH AFRICA

RECYCLING OF SOLID WASTE URGED

Johannesburg THE STAR in English 9 Nov 77 p 9

[Text]

Own Correspondent

DURBAN — South Africa could gain more than R40-million worth of useful material if just part of the 2½ million tons of solid waste buried here each year could be recovered.

This was said in Durban by Mr Dudley Fraser, manager of Recycling and Environmental Affairs.

He said in a statement: "What we lack in South Africa is the necessary government authority to deal with the overall question of solid waste on a national basis."

Mr Fraser, who has just returned from a trip to Europe, where he saw developments in recycling and environmental control, said there was no regional planning in Natal. As a result there was no encouragement for compacting of waste or recycling on an individual basis.

He said there was a need for national policies which would encourage

regional planning of solid waste practices and co-ordination between local authorities.

It would pay larger producers of solid waste and local authorities, if such waste was compacted and its volume reduced.

"In many instances there is a very real need for incentives to shred waste for reduction of transport costs and to facilitate recycling," Mr Fraser said.

He felt the packaging industry could play a major role in helping to shape waste management policy in South Africa.

CSO: 4420

SOUTH AFRICA

BRIEFS

OFFICIAL SCORES CONTAINER EXTRAVAGANCE --South Africa will spend R15 million this year in keeping the country clean, Mr Punt Jansen, deputy minister of planning and the environment, said today. Opening the Solid Waste Disposal Symposium in Ferndale, Randburg, he told about 200 delegates from local authorities in southern Africa, that each year 2 million tons of waste had to be disposed of in the Pretoria Witwatersrand, Vereeniging complex alone. This would amount to 12 million tons by the year 2000. Mr Jansen said "container extravagance" was an unnecessary menace that promoted the litter evil." To fight the litter problem, local authorities should strive for uniform laws and enforcement throughout South Africa," he said. [Text] [Johannesburg THE STAR in English 9 Nov 77 p 9]

CSO: 4420

RESEARCHERS TO EXAMINE LOWERING OF WATER LEVEL IN NAMIB

Windhoek THE WINDHOEK ADVERTISER in English 1 Nov 77 p 7

[Text]

WINDHOEK: Mr Adolf Brinkman MEC has issued the following press statement concerning research on the results of water extraction from the Kuiseb River in the Namib Desert.

Water supply to consumers along the Western coast has since 1976 resulted in an increased water extraction from the dry sand bed of the Kuiseb River between Gobabeb and Rooibank. This source has supplied Walvis Bay and Swakopmund with water for many years. The present and planned extraction exceeds the estimated approximate annual replenishment and consequently an inevitable lowering of the ground water level will occur.

It is realised that this lowering of the water level may have a noticeable influence on the environment, on the vegetation in the river bed and the related animal life in particular, the possible dune movements over the Kuiseb River as well as several other aspects of the ecological system.

Several Government departments, branches of the South West African Administration as well as other instances such as the Namib Research Institute, have for years given consideration to the results of the above-mentioned activities. Because the work which has been done and must still be done is regarded as also being of international importance, it has been decided to continue the research as extensively

as possible. Consequently, a Steering Committee under the auspices of the National Committee for Environmental Sciences was instituted. All interested Government departments and organisations which are concerned with the Kuiseb River, or make a contribution, serve on this Committee.

As an initial phase of the research which must be carried out, the Guide Committee has decided to monitor all aspects of ecology, geomorphology and geohydrology which may be subject to change as a result of the lowering of the water level.

Intensive research will be undertaken as a second phase as further problems develop and it becomes clear which aspects deserve more attention.

The Department of Water Affairs will look after all aspects of hydrology and geohydrology. Ecological aspects will be jointly undertaken by the Department of Nature Conservation and Tourism and the State Museum, while several universities will undertake a variety of projects on a remunerative basis. Monitoring of the movements of sand-dunes will be taken over by the Department of Geological Survey and certain universities. For 1977, a grant of R30 000 has been made by the National Committee of Environmental Sciences for projects which will be carried out by the universities.

The Guide Committee has already met several times and all monitoring should be in operation before a noticeable lowering of the water level occurs.

THE LAW AND NATURE: DEPUTY CHAIRMAN, USSR SUPREME COURT

Moscow KHOZYAYSTVO I PRAVO in Russian No 9, Sep 77 pp 77-83

[Article by V. Kulikov, deputy chairman, USSR Supreme Court]

[Text] Our age is characterized by the fact that people in many lands have begun pondering how to preserve their environment. And there is every reason in the world, as it turns out, for their reflections. The source of all that exists on earth is nature and its resources. Objects in nature are interrelated and develop successfully in ecological equilibrium. But, sadly, this equilibrium is sometimes tipped one way or the other. Our country's natural wealth is vast, but, unfortunately, not unbounded. But in fact utilization of natural resources in the economy and their consumption by man are growing year by year. Thus there sprang up the problem of conserving the environment, or protecting nature.

Certainly, then, it makes sense to recall that particular attention has always been paid to this problem in our country.

Here, for example, are three documents from Lenin's time. The Decree on the Land, 8 Nov 17; the Law on Forests, 27 May 1918; the resolution of the Sovnarkhom [Council of People's Commissariats], "Hunting Seasons and the Right to Bear Hunting Arms," 27 May 19. Displaying concern over nature, V. I. Lenin pointed out the following: "To preserve the sources of our raw materials, we must see to it that scientific-technical regulations are carried out and enforced"¹. The Soviet government has adhered precisely to this attitude in conservation. Typical in this respect are several recent laws.

Between 1957 and 1963, laws on conservation were passed in most union republics. These, like all subsequent resolutions of the party and government, provided for measures of more intense conservation of land, forests, water, atmospheric air, fish resources and wild prey. Additionally, there is a series of laws whose norms provide for criminal or administrative accountability for the illegal pursuit of fishing and other aquatic gathering enterprises, timber-rafting or blasting operations with the violation of laws on the conservation of

¹ V. I. Lenin, "Poln. sobr. soch." [Complete Collected Works], Vol. 43, p 174.

fish reserves and pollution of inland waters and air. Other violations of conservation laws, if they were made by responsible persons, can fall under the articles of criminal codes on malfeasance (criminal breach of trust, criminal negligence and so on).

Remarkably, in recent years unionwide attention toward conservation has swelled immeasurably. On 20 Sep 72 the USSR Supreme Soviet passed the resolution, "On Measures for Further Improvement of Conservation and Rational Use of Natural Resources," in which mention is made of its special significance in a setting of scientific-technical progress, rapid expansion of industry, transportation and agriculture, in manifesting the constant concern for the life and health of Soviet people. Norms regulating compensation for damage inflicted by the violations of conservation rules were improved.

The 25th Party Congress paid close attention to conservation of the environment. Stressing that the rational use of natural resources is a vital part of our national-economic plans, the party congress outlined a specific program for carrying out measures in conservation and multiplication of nature's wealth. All we need say is that 11 billion rubles was allocated to these ends in the current five-year plan alone.

General Secretary of the CPSU CC, L. I. Brezhnev stated the following in his report to the congress: "We have brought juridical norms to correspond to the new level our society has attained. Legislation has been framed that touches on such spheres of life that earlier remained outside the scope of juridical regulation, such as protection of the environment, including inland waters, air basin and so on. It is very good that today we have well-founded juridical norms underwriting purposeful activity in defending the environment."

And actually, this is what is shown by the fact that just in the past several years the Fundamentals of Land Legislation of the USSR and the Union Republics was adopted, along with the Fundamentals of Legislation of the USSR and the Union Republics on Public Health, Fundamentals of Water Legislation of the USSR and Union Republics on Mineral Wealth and the Fundamentals of Forest Legislation of the USSR and the Union Republics. They, like the laws (codexes) of the union republics already published on the basis of these fundamental laws, along with the decisions adopted by the party and government dealing with questions linked to the rational use of natural resources and protection of the environment against destruction and pollution, have provided conditions for the most effective, scientifically based use of these resources and their reproduction.

We have done a fair amount of work in improving socialist utilization of natural resources and strengthening of environmental protection: underway on a wide scale is the reclamation of land and reproduction of natural resources; there is closer monitoring of the environment, particularly so in regard to the operation of purification units; nonwaste technologies are being introduced at enterprises, in addition to closed-cycle water use and so on. However, this does not mean that all goals have been won in protecting the environment or that violations of technical rules in tapping natural

resources have been ended: we still encounter violations of these rules. One reason for these violations is a mindless, at times disdainful attitude toward rule compliance. Another is the deliberate, self-interested nature of encroachments on elements of the environment. Getting yours, while the getting is good. Both factors are harmful.

Take such a valuable element of nature like land, which the people call, figuratively, the breadwinner. And how is earth-as-breadwinner treated at times? Here, sadly, is one of many examples. The Perm' kolkhozes Pobeda, Bol'shevik and Krasnyy pakhar' requested that the Chermoz Timber-Rafting Unit clear kolkhoz land of trees and make up for costs in restoring soil fertility. The argument was over 107 hectares of land arbitrarily seized by the timber-rafting organizations for storing timber, including areas in the bottomland shore zone, which could be used autumn and winter by these organizations and spring and summer--by the kolkhozes. Just when the conflict began was not clearly established. It is known that at first the question of bringing a criminal action was examined on the facts of arbitrary seizure of land, but this was rejected owing to the statute of limitations.... Later the procurator sued the Chermoz Timber-Rafting in favor of the kolkhozes; however, everything ended up in a peaceful agreement on 65 hectares of land, confirmed by the Perm' Oblast Court. But as for the question of the bottomland area--and it amounted to 42 hectares!--it was left unsettled. We can scarcely call this concern over earth-as-breadwinner. This is most perplexing. Above all the position of oblast organization, the position of the procurator's office as well as organizations engaged in rafting timber. Seeing that the land was used in its direct purposes should be the concern of all, but it turned out that this concerned--and weakly at that--just the kolkhozes from whom the land was arbitrarily seized. This is really an outright violation of the law!

The Fundamentals of Land Legislation of the USSR and the Union Republics and the land codexes of the union republics provide for the procedure of removal of land for state or social needs and land tracts for surveying operations. The Fundamentals and the 9 Aug 74 Resolution No 636 of the USSR Council of Ministers regulate the procedure for indemnifying losses to the land users and the losses of agricultural production upon the removal of land for state and social needs. Compliance with these orders of the laws and demands of the government is binding not only on kolkhoz and sovkhoz, but also each organization for whom the land is removed. And what happens in practice? One and a half hectares is removed, but then 1.5 more hectares is seized. Land is removed with the obligation to retain the fertile soil layer and return it on completion of operations, but this was forgotten, for some reason or other. Article 11 of the Fundamentals of Land Legislation reads that organizations and establishments are obliged on their account to bring farmland made available to them for temporary use up to a condition suitable for their use as prescribed. Enterprises, organizations and establishments conducting operations associated with disturbance of the soil cover are obligated to strip and store the fertile layer of soil in order to use it for recultivation and enhancement of the fertility of low-productivity land.

But this is the practice in far from all cases and sometimes leads to the bringing of a lawsuit, in which the court, naturally, disregards the reference of the defendants to the absence of allocations.

Under the suit brought by the procurator of Torzhokskiy Rayon, Kalininskaya Oblast, the court sought from the management of the gas lines under construction, in favor of the five kolkhozes, 74,700 rubles expended by them for the restoration of 75.56 hectares of land damaged during construction work. The management did not acknowledge the lawsuit, claiming that the contractor must be the one to make payments. In turn, the contractor alluded to the absence of allocations. The court found out that the management had allocations for recultivation of land and some of it--260,000 rubles--had not even been spent by the time the case was under examination. Just what is all of this, ignorance of the laws, their misunderstanding or simple bullheadedness.

Carrying out the laws and implementing measures on strengthening environmental protection is a matter for all state, including juridical, agencies, all cooperatives and all social organizations, as well as the general public. Stated in the draft of the USSR Constitution, now under discussion, is the following: "Citizens of the USSR are obligated to guard the environment and conserve its wealth" (Article 67). This wording, first introduced into the Fundamental Law of the land, is supported by the people.

Strict observance of the regulations of environmental conservation by all citizens, the people's scrutiny of environmental conditions and the active involvement of citizens in the well-organized protection of natural resources, as well as the participation in this effort of state agencies and public organizations--all this is the foundation for the consolidation of conservation legislation. Salient in this activity is preventing violations of the regulations on conservation. It is therefore vital to have the ministries and departments carry out in a clearcut way the obligations laid on them to improve the work in predicting the influence of expansion in production on the environment and to monitor observance of the laws in the corresponding industries, by bringing in the public.

Juridical agencies are also doing their bit in conservation. They are examining cases on illegal seizure of fisheries and other aquatic collecting areas, on poaching, illegal felling, pollution of inland waters and the air (Articles 163, 166, 169 and 223 of the RSFSR Criminal Code and the corresponding articles of the criminal codes of other union republics) as well as other legal violations; they are punishing the guilty and settling the question of indemnifying for the damage inflicted by these violations. In suppressing the criminal encroachments on nature and punishing the guilty, the courts are duty-bound also to prevent criminal acts. They have these opportunities and the law mandates that they exercise them. It is difficult, for example, to overestimate the importance of particular determinations that the courts are bringing on these cases. This form of juridical activity weighs heavily in the prevention of legal violations. The plenum of the USSR Supreme Court held in May-June this year directed attention precisely to this situation.

It must, however, be noted that the activity of the courts in conservation was discussed at the plenum five years ago, in April 1972. Comparison of statistical data for 1969-1971 with 1974-1976 data showed that in the second period there were 960 additional persons convicted for violation of conservation regulations, while the number of lawsuits examined dealing with indemnifying of damage was cut back by 42 percent. Characteristically, the increase in the convictions occurred for the illegal seizure of fisheries and other aquatic collecting areas and for poaching. In recent years the number of lawsuits on indemnifying the damage inflicted by these very violators has also risen. In regard to forest violations, in fact, there was a drop in the number of convictions and the number of lawsuits on indemnifying for damage.

These data characterize just one side of the courts' activity--their participation in the campaign against poachers and in the indemnification of damage inflicted by these criminal acts. A certain stirring up in this activity is something positive. However, the situation is otherwise regarding pollution of inland waters and the air. Of all crimes in protection of the environment these acts are the most dangerous and they entail generally the most severe consequences; they damage people's health. Stiffening efforts in preventing the pollution of inland waters and the air and bringing the guilty to legal accountability is dictated by life itself. These criminal acts are not few, but criminal lawsuits are still a mere handful.

Forests are a treasure of our state--they are state property, the possession of the people. Caring about their conservation and rational utilization is expressed in the Fundamentals of Forest Legislation of the USSR and the Union Republics confirmed by the USSR Supreme Court this year. The Fundamentals reiterate, in particular, the norms of accountability for damage or destruction of the forest because of careless handling of flame. This is a very important principle, because major damage is inflicted on the forests by fires; organized struggle with these fires is not yet getting proper attention. Here is one example.

By sentence of the Vel'skiy Rayon People's Court of Arkhangel'skaya Oblast, a certain Nekrasov was convicted for destroying a tract of forest as a result of negligent handling of flame. From the accused 3672 rubles were sought as indemnification. Seemingly, an ordinary case of manifestation of carelessness. However, as to consequences and nature of events this case is far from ordinary: fire ravaged 106 hectares of first-category forest in a section of the Vel'skiy interkolkhoz-sovkhoz tree farm. The fire lasted more than two months. And this happened under the following circumstances, determined by the materials of the case.

Drunkenly, Nekrasov set out with a friend to the neighboring village of Vlasovskaya. In a meadow they lit up some cigarettes and Nekrasov flipped a still-burning match into dry grass; at once it flamed up. He gave this no attention. The fire spread rapidly toward the cattle pen of the village of Vlasovskaya. On spotting the danger, Nekrasov and the villagers beat out the fire in the meadow, but it drew close to the forest along dips in the ground and ditches. The date was 30 Apr and in the first few days of May

postmistress Plashkina told about the danger of the forest burning to the management of the Vazhskiy Sovkhoz. There she was told that the fire was to be put out by the ones who had started it. Plashkina, like her fellow-villagers, had not started it, but they still tried to eliminate the flames. They failed. The Vel'skiy interkolkhoz-sovkhoz joined in extinguishing the fire only on 21 May, when the fire had covered already 30 hectares of forest, but did not carry through the fire-fighting efforts. The fire broke out anew. And a question is appropriate at this point: where were the agencies entrusted with safeguarding the forest? In fact, accountability for organizing protection of the forest from fires and their early elimination is placed by the government on the USSR State Committee on Forestry. And one more question: where were the local authorities, their responsible persons, where was the director of Vazhskiy Sovkhoz, A. Istomin, learning about the fire early in May?

For sake of objectivity, we must mention that the executive committee of the Vel'skiy Rayon Council of Arkhangel'skaya Oblast, on 25 May 73, adopted the decision, "On Measures to Improve Protection of Rayon Forests from Fires." This decision confirmed the operational plans for organizing the putting out of forest fires in the summer drawn up by tree farms; a number of vital measures were outlined to clear away shortcomings in this activity. Moreover, for the operational supervision of the extinguishing of forest fires, this same decision confirmed the rayon headquarters, numbering 16 responsible staff members of the rayon, headed by the executive committee chairman, K. Galkin. This notwithstanding, the fire breaking out in May continued into June and July.

The blithe way the management of the Vazhskiy Sovkhoz ignored the reports of the fire was noted in a particular determination directed by the people's court at the chief of the Vel'skiy Production Association of Sovkhozes. But who, you ask, looked into the behavior of the heads of the association and the personnel of other agencies who are by no means supposed to do nothing when fire is destroying a public treasure?

Neither were the local administrative agencies called on to actively battle with criminal acts and violations of law at the top of their form. Half a year after the incident, employees of the Vel'skiy ROVD had conducted no investigation, but only a verification of what had happened and thereupon refused to bring criminal charges. Another six months went by when the rayon procurator noted this glaringly erroneous resolution. Only then, a little more than a year after the fire, was an investigation finally gotten underway. Also curious is the fact that the ROVD investigator himself examined the lawsuit on indemnification for damages and he himself left the amount at 3856 rubles "without satisfaction." The investigator struck out of the suit, in particular, expenses in putting out the fire and clearing the forest tract as falling in the category of "lost profits." But on the strength of the USSR Council of Ministers resolution, "On Procedure and Levels of Material Accountability for Damage Done to Forests," the damage totals to be indemnified include costs for both putting out the fire and clearing the territory, as well as--by the way--costs in growing new forest vegetation in place of

what was ruined; this latter category of costs also was not sought by the tree farm. The court sought only part of the damages from Nekrasov. Left unsettled was the question of suing for the rest.

Events established in the Nekrasov case afford the conclusions to be drawn about other forest fires, too. In preparing for the plenum, the USSR Supreme Court studied 42 such cases and found that 40 resulted from careless handling of flame. Fires destroyed or damaged 12,114 hectares of forestland, averaging more than 280 hectares per fire. This is a sign of bad organization in forest conservation and extinguishing of forest fires. Each fire, if averaged out, wreaks damage in the amount of more than 10,000 rubles. These fires wrought 438,773 rubles in damage. On court decisions, 119,749 rubles was asked from the guilty parties--27.3 percent. But what of the other losses?

On these cases, like the Nekrasov case, numerous facts of reduced level of damages and the nonpresentation of lawsuits by involved organizations, as well as the unreasoned reduction in indemnification totals sought from the accused were all brought to light. Invariably linked to this are errors in qualifying the violations and in resolving questions on the levels of indemnification.

Not always do the victims sue for compensation for damages from the organizations whose employees were guilty of causing the damages. Sometimes this disinclination is explained by the wish to avoid the so-called shifting of funds from one governmental pocket to another. These actions, since they do not correspond to the law, cannot be deemed proper. In fact, indemnifying for damages in this instance binds the defendant to bring order into his organization and tighten up on job discipline.

In discussing the practice of the courts applying laws on conservations and noting that by their activity the courts promote the consolidation of legality and rational use of natural wealth, the plenum of the USSR Supreme Court called on the courts to keep on getting more active in this field.

Paragraph three of its 3 Jun 77 resolution contains the following passage from the plenum: "After examining the cases in this category, the courts must see to it that all parties guilty of criminal acts and other violations are brought to light and that measures provided by law are taken to bring them to criminal or administrative responsibility and require them to pay damages." These demands impose a great deal not just on the courts, but also on the agencies of preliminary investigations and on the procurator's office. Uncovering the guilty is easier in the stage of preliminary investigation, harder--in court session. However, when facts of secondary culprits being brought to juridical accountability--but not the main culprits of the incidents--are encountered, incidentally the latter not denying their guilt in court (cases of this kind are on record), the courts must not pass them by. Deserving of special attention in this paragraph is the passage about indemnifying for damages--one of the key means of preventing violations. Its vigorous application is the job of economic directors and all employees acting as plaintiffs.

Vital in this respect is the plenum's instruction on careful clarification of the levels of material damage (without executives, this is simply not feasible) and on the necessity, when examining civil cases and suits in criminal cases on compensating for damages inflicted by violations of the laws on conservation, to start from the fact that the law in these cases provides for full indemnification of damages. Exceptions from this rule can apply only to cases specified under law.

The plenum of the USSR Supreme Court at the same time gave explanations dealing with intensifying the struggle against encroachments for militia personnel and people's druzhinniki exercising duties in conservation and also for personnel in fish conservation, forest protection, conservation of preserves and inspectors, including volunteer inspectors, as well as citizens performing their social duty.

On the other hand, the plenum stressed that in those cases when officials of enterprises and organizations, clearly exceeding their rights and powers, pass on to employees subordinate in service orders whose execution leads to inflicting substantial harm to elements of the environment, they are to be subject to accountability under Article 171, RSFSR Criminal Code and the corresponding articles of the criminal codes of other union republics.

The plenum drew the attention of the courts, conservation agencies and the general public to the fullest possible strengthening of their preventive activity.

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USSR

LEGISLATION ON THE PROTECTION OF FORESTS

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[Article by N. Krasnov, doctor of jurisprudence; A. Kaverin, candidate of jurisprudence: "The All-Union Law on the Forests"]

[Text] The Soviet Union is a huge forested state. The woods are one of its most valuable natural riches. The enormous expanses of our country's forests contain about one-fourth of the world's supply of timber, and for coniferous species (the most valuable)--more than half. However, this is not the total worth of forests. They are the decorations of nature and a source of human health. The forests beneficially influence the climate, the atmosphere, the hydrological systems of rivers and lakes, and protect the soil from wind and water erosion. It is not without purpose that people refer to them as "green gold."

This is why Soviet forest legislation has important economic and social significance. It is directed at guaranteeing the efficient utilization of all the beneficial attributes of forests, their reproduction and protection.

One of the first laws of the Soviet state, the Leninist decree "On the Land," nationalized the forests. On 27 May 1918 the decree "On Forests" was approved. It was signed by V. I. Lenin. The formation and development of Soviet legislation on forests is inseparably linked with his name.

Forest legislation, in all stages of development of our state, actively promoted the solution of tasks for efficient utilization, reproduction and protection of the forests. Many of the earlier approved standard acts still retain their significance.

But under conditions of an economically developed socialist society there was a sharp growth in the intensity of using natural riches in the interests of developing industry, power engineering, transportation, agriculture, municipal construction and all branches of the national economy. The structure of the organization of the lumbering industry and timber use changed. Requirements mounted for reproducing and increasing the productivity of forests and for their protection. All this called for the codification of forest legislation.

The essential shortcoming in forest legislation was the lack of all-union law on forests. What related to woods was regulated basically by USSR governmental and union republic governmental decrees and by departmental standardization acts which were mainly outdated and often contained contradictions and deficiencies. An examination had to be made of all legal standards regulating forest matters. And, having noted what was outdated, we had to consolidate these standards into an orderly and coherent system with the purpose of correlating the rich experience gained over many years in managing the country's forests. We had to increase the organizational role of forest legislation under new conditions.

On 17 June 1977 the USSR Supreme Soviet approved the all-union law on forests --The Principles of Forest Legislation of the USSR and the Union Republics-- and approved the decree "On Measures for Further Improvement of Forest Conservation and the Efficient Utilization of Forest Resources." The standardization acts marked the beginning of the renewal and improvement of Soviet forest legislation under conditions of a Soviet society that has come of age.

The new law on forests expresses the tireless concern of the Communist Party and the Soviet state for efficient use of natural resources and the protection of nature in the interests of present and future generations. It will contribute to the successful resolution of tasks given by the 25th CPSU Congress to the country's lumber industry, and as an all-union law will serve as the legal basis for union republic woodlands codes and for the different acts of the USSR and the union republics.

The tasks of Soviet forest legislation--indicated in article 1 of the principles--is the regulation of forest relationships with the aim of guaranteeing efficient utilization of forests; their conservation and protection; reproduction and increased productivity to satisfy the demands of the national economy and the populace for wood, other wood products and the intensification of water conservation, protective, climate regulating, health and the different useful natural characteristics of forests. Article 1 also calls for protection of the rights of enterprises, organizations, institutions and citizens, and the strengthening of laws in the area of forestry matters. The successful solution of these tasks is possible only with the active cooperation in fulfilling the demands of forest legislation by the state in the person of the councils of workers' deputies, managerial, judicial, arbitration and prosecution organs, and on the part of all workers and their social organizations.

The principles carry out the codification of legislation according to the fundamental types of natural wealth--the land, its minerals, water and forests. Their uppermost significance has been underscored in the USSR Constitution. They are exclusive state possessions.

The exclusive character of Soviet state ownership of the forests is set by the Principles of Forest Legislation (article 3). This means that all forests are state property made available to be used by enterprises, organiza-

tions, institutions and citizens. State ownership of forests, outlined in the preamble to the principles, forms the basis for forest matters, that is, social relationships in the field of utilization, regeneration and protection of wooded areas, and serves as the prime prerequisite for running an efficient lumber industry.

Article 2 of the principles states that forest matters are regulated by the forest legislation of the USSR and union republics, and land water and mining affairs by the corresponding USSR and union republic legislation. Similar situations are contained in the Principles of Land Legislation, the Principles of Water Legislation and in the Principles of Legislation for Mineral Deposits. This marking out of the limits of the spheres of activity of the branches of legislation takes into account the specifics of legal regulation of public affairs on the utilization and protection of the land, its minerals, forests and water. These specifics result from the intrinsic natural properties of these objects and the variations of the functions they fulfill in public production. Such a demarcation is the important character trait of contemporary legislation on the efficient use and protection of natural resources.

In accordance with this the Principles of Forest Legislation otherwise specify a unified state timber fund in comparison with legislation earlier in force. The RSFSR Forest Code (1923) referred to a unified state timber fund with all forests and fertile lands designated for raising trees and for the needs of the lumber industry, and those set aside in an established order for this purpose from land for some other use (article 1). This is explained by the fact that the decree of the All-Russian Central Executive Committee [VTs IK] of 30 October 1922 "On Putting the Fertile Land Code Into Operation," proposed looking at the forest code under development as a continuation of the Land Code. Therefore, up until the approval of the Principles of Land Legislation (1968) matters concerning the use of land from the forest fund belonged to the sphere of activity of forest legislation, while in theory the rights were included in the concept of forest affairs. But, in so far as it is important to strengthen the specifics in the legal regulation of public affairs on the use and protection of the different kinds of natural resources, the Principles of Land Legislation (article 4) included the lands of the forest fund within the structure of a unified state land fund. The Principles of Forest Legislation as applied to this specified a unified state forest fund as a composite of all USSR forests (article 4). Forest matters in accordance with the preamble of the principles are understood as public matters on the utilization, reproduction and protection of forests. At the same time the subject of forest legislation is defined.

In the Principles of Forest Legislation there is a number of articles that concern land from the forest fund. These standards of land law are included here in view of the practical requirements of the lumber industry. At the moment of adopting the Principles of Land Legislation it turned out that the single standard on lands of the forest fund in the Principles of Land Legislation (article 43) had not received the necessary development in subsequent

land legislation. The lumber industry includes not only wood utilization, but also lumber industry land use (construction of roads and various industrial projects, the distribution of forest-tree nurseries, granting land parcels for secondary use to accomplish wood utilization, etc.). Therefore, the Principles of Forest Legislation include standards on utilization and accounting for lands of the forest fund, on control over their use on behalf of state lumber industry organs. The legal regulation of lumber industry land use must secure development in the Statute on Lands of the State Forest fund according to article 43 of the Principles of Land Legislation.

The Principles of Forest Legislation clearly define the limits of jurisdiction of the USSR and the union republics in regulation of forest affairs (articles 6 and 7). Such differentiation is based on the Leninist principle of democratic centralism and a national state system for our state which are justified by the historical experience of our country and reflected in the USSR Constitution. It establishes the legal basis for the USSR to carry out its constitutional functions according to the organization of utilization, reproduction and protection of forests on a national scale. It gives the union republics the necessary authority for regulating forest affairs accounting for their local peculiarities. It specifies the spheres of activity and fundamental trends for the development of all-union and republic legislation.

The principles allocate a great role to the public, trade unions, youth organizations, societies for the protection of nature, scientific and other public organizations, and to citizens in activities aimed at conservation and multiplication of the wooded wealth of our homeland. Public organizations and citizens actively help state organizations in carrying out measures on the efficient use, regeneration, conservation and protection of forests. The Principles provide that state organs are in every way possible obligated to consider the proposals of the public organizations and citizens. The public organizations together with state organs conduct important work in educating the Soviet people in the spirit of a thrifty, zealous and economic regard for nature.

The new law calls for basic requirements being presented to the enterprises, organizations, institutions, leaders in the lumber industry, and lumber consumers (articles 11, 34). It establishes that in taking care of woodlands and protecting them from pests and disease it must be done by means and methods that are not harmful to man and the environment.

To organize differentiated forest utilization, taking into account the national economic significance of forests, their distribution and the functions they fulfill, the principles divide forests into groups: those of state significance into first, second and third groups; and kolkhos into first and second groups.

The first group includes forests that chiefly fulfill water conservation, protection, sanitary, hygienic and health functions. They play a major role in protecting rivers, lakes, reservoirs and other water resources, agricul-

tural land, hilly inclines and other places subject to erosion. Municipal wooded areas, the forest forming green zones around cities and industrial enterprises are of enormous use. The overall land area for such green zones now exceeds 15 billion hectares. This green shield is a natural and reliable filter. In this group are the forests of national parks, parks and woodlands having scientific or historical significance, commercial nut zones and others.

The second group incorporates forests in regions of high density populations and developed networks of transportation means having protective and limited operational importance, as well as forests insufficient in raw materials resources. This group includes all kolkhoz forests not included in the first group.

The third group belongs to forests having a multitude of wooded regions that are primarily exploitable and intended for the constant satisfaction of national economic demands for wood without damaging the protective properties of the forests.

For every forest group a legal system for the use of forests has been specified.

The principles impart great importance to the regulation of lumber use affairs. Occupying a central position in the system of forest affairs, these problems were so fully embodied in the all-union law that 24 articles were devoted to them.

One of the basic types of forest use is the felling of timber. According to data from science and from the practice of cutting trees, if tree felling is carried out in accordance with scientific and technical requirements, not only are the forests not depleted, but conversely, the quality of lumber improves. Therefore, in the principles the primary requirements are clearly formulated which the timber felling organization must observe when cutting wood. These requirements vary depending on the forest group.

The optimal standard for cutting wood for primary use is computed tree clearing which responds to the important questions for the efficient use of forest resources: what is the amount of wood and where can it be felled; what complex of trees is subject to the first cutting? It responds even to economic questions. Therefore, the principles strengthen the fact that planning and utilization of forest resources must be carried out within the limits of computed tree clearing.

The strict fulfillment of this requirement permits for sound combination of not only the interests of the lumber industry, but even those of other branches--agriculture, water management, hunting and fishing, health, etc., and this means it is possible to proceed from overall state interests.

The forest is an indispensable storehouse of the most diverse products: soft resin, wood sap, wild fruits, nuts, mushrooms, berries and medicinal and

commercial plant life. Hay is cut and cattle grazed in forests. The regulation of matters involved in the preparation of soft resin, secondary wood products and other forms of forest use are completely expressed in the principles.

The principles create the prerequisites for the very best utilization of the useful natural properties of forests for the workers' rest and relaxation. They call for carrying out work on public improvement of green zones, for the organization of cultural relaxation for the people.

The Basic Trends in the Development of the National Economy of the USSR for 1976-1980, approved by the 25th CPSU Congress, gave the lumber industry one of the basic tasks--the systematic regeneration of forest resources and the increased productivity of forests.

This task will not lose its urgency even in the future. Therefore, the principles include standards aimed at the systematic reestablishment of forests in cleared areas, the establishment of forests in treeless regions, the realization of measures to care for trees, for their drainage, for the prevention of water and wind erosion, etc. Outlined are obligations for lumber industry enterprises and organizations for the reproduction of forest resources.

A special section of the principles and many standards in other sections are devoted to the protection and conservation of forests. They are aimed at a cautious regard for forests in the process of using them, at preventing the harmful influence to them during the operation and construction of enterprises, shops and other industrial projects.

Of great importance in carrying out forest legislation are standards in the Principles on the Responsibility for Its Violation (article 50). The basic forms of law violation are indicated there as is criminal, administration or other form of responsibility. Besides subjecting law violators to these types of responsibility, they are obliged to compensate for the damage caused.

In corresponding instances a halt to forest use or work being conducted is specified if it threatens the condition and reproduction of forests. For instance, this occurs when technological, sanitary and other measures providing for protection from forest fires and the elimination of harmful influences on the condition and reproduction of forests are not being carried out.

The steadfast putting of forest legislation into practice is an important task of judicial, prosecution and arbitration organs. Thus, the USSR Supreme Court Plenum that took place in June, 1977 obliged the courts in an adopted decree to improve their activities to the utmost on strengthening legislation for the protection of nature, keeping in mind that the cautious use of natural resources, the strict adherence to laws on the protection of land, its minerals, trees and water, animal and plant life and the atmosphere is one of the conditions for the successful fulfillment of national economic plans

and for guaranteeing the welfare of the Soviet people. The plenum required the courts to take decisive measures for the suppression and warning of criminal encroachments on natural objects.

The prosecutor has widespread opportunities to prevent and suppress law violations in the field of utilization and protection of the land, its minerals, forests and water. The need to use these opportunities was repeatedly indicated by the General Procurator of the USSR.

The Principles of Forest Legislation expand the legislative base of activity of the courts and the prosecutor to strengthen the law in the field of forest affairs.

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USSR

SOVIET SCIENTISTS DECRY POLLUTION OF ESTONIA

Oslo AFTENPOSTEN in Norwegian 26 Oct 77 p 9

[Article: "Environment Protection Weak in Estonia"]

[Text] As a result of extensive mining operations to extract oil shale on a large scale, a considerable part of northeastern Estonia has been changed into a moonscape.

Enormous ash heaps and desolate cliffs rise over a grey, almost dead landscape. Fertile soil and vegetation have been destroyed in large areas, the air is polluted by haze, smoke, sulphuric pollutants, nitrogen, phenols, and other poisonous substances. Rivers such as the Purtse and the Puhajogi (formerly rich in trout and salmon) are today without life, and also poison the seawater to a distance of several kilometers from their mouths; underground water is heavily poisoned--such is the landscape in northeastern Estonia.

So say 18 Estonian scientists (biologists, geographers, geologists, and ecologists) in a letter to their colleagues in the countries bordering on the Baltic. The scientists, anonymous for obvious reasons, appeal to their foreign colleagues to take up this matter in international forums.

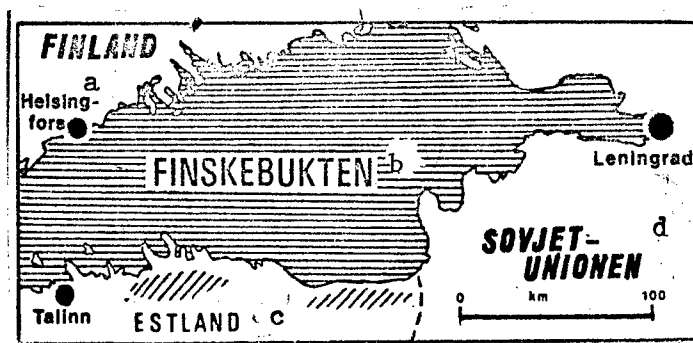
"We sincerely hope that this serious environmental problem will be discussed in the international press and in future international congresses on environmental questions. An open and thorough discussion will help us all greatly, and can in no way be regarded as interference in the internal affairs of the Soviet Union.

"We also hope that the agreement on the protection of the Baltic, signed in 1974, will come to be of practical value to all countries around the Baltic."

"And," the letter goes on, "let it be remembered that the key word in the Helsinki conference was cooperation. What we really need at the moment is cooperation and mutual understanding among all naturalists in the Baltic region for the purpose of saving Estonia's unique natural resources and to

put a stop to the systematic and constantly increasing destruction and pollution of the environment of which the Moscow regime is guilty, to the long-range detriment of the Estonian nation.

"In our view, the present critical environmental situation in northern Estonia is a direct result of bureaucratic, shortsighted, and overly comprehensive colonial administration. As such, it can, for the neighboring countries, serve as a frightening example of how natural resources should not be exploited," write the Estonian scientists.



The shaded lines indicate the extent of environmental damage in northern Estonia

Key:

- a. Helsinki
- b. Bay of Finland
- c. Estonia
- d. Soviet Union

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USSR

DELAYS IN INTRODUCTION OF PURIFICATION EQUIPMENT

Kiev RABOCHAYA GAZETA in Russian 9 Sep 77 p 2

[Article by A. Kalyagin, head of the Construction and Construction Industry Division of the People's Control Committee of the Ukrainian SSR, and S. Volk, Inspector of the People's Control Committee of the Ukrainian SSR: "A Flow of Turbid Water, Delays and Disruptions in Putting Purification Facilities into Operation in a Number of Enterprises in Donetsk oblast"]

[Text] In April of this year the People's Control Committee of the Ukrainian SSR discovered serious shortcomings in the construction of water purification facilities in Donetsk Oblast. Those responsible have been called to account and required to take urgent measures to remedy the problems which have arisen. What was done after that?

A follow-up inspection performed by the committee in August indicated that in a number of organizations improvements had actually been made. Thus, all work-obstructing deficiencies had been eliminated at the Slavyanskiy Ceramic Combine, the Ocheretyansk Experimental Facility, and the Grodovski and Karlovskiy Brickyards. The plan of construction and assembly operations at these facilities was carried out by the general contracting trust Ukrpromstroyremont. The client association Donetskstroymaterialy insured the construction of technical equipment, conduits, and other materials.

Unfortunately, the list of positive accomplishments comes to an end at this point. Leaders of many organizations and enterprises never took appropriate measures to accelerate construction of water purification facilities, thereby creating the possibility that they would not be ready for operation on schedule. Of the 40 facilities under construction this year, the plan of construction and assembly operations for 17 of them had not been carried out during this period. Measures which had been worked out by the ministries to eliminate the shortcomings and omissions which had been discovered earlier remain without material-technical resources, a work force, and machinery and equipment.

An especially large number of complaints is to be brought against the organizations of the republic's Ministry of Heavy Construction and Ministry of

Installation and Special Construction Work. The plan for construction and installation work for seven months was fulfilled by 57.5 and 46.5 percent respectively. The Donetsktyazhstroy combine utilized only a little over half of its allotted means. And what is most disturbing of all, much of this lag occurs at facilities under construction at those enterprises where the need for purification facilities is particularly great.

In July the Ministry of Construction of Heavy Industry Enterprises issued an order which outlined specific measures directed toward overcoming this lag. Unfortunately, however, the follow-up to check on implementation of this order has not been carried out in an organized manner. For example, in the construction of actuating facilities of the reverse water supply cycle for the calibration shop of the Konstantinovskiy Metallurgical Plant, which is being performed by the Konstantinovpromstroy Trust (managed by Comrade Zhavoronkov), only 220,000 of the planned 684,000 rubles has been spent. There are too few people on the site; it is unequipped with machinery; and there is only one work shift.

One finds an analogous situation at the Druzhkovskiy Hardware Manufacturing Plant, where a great amount of work remains before the Donbassekskavatsiya Trust (managed by Comrade Gavrish). According to measures approved by the ministry, excavation and earth moving operations at the neutralization facility were to have been completed in February. They remained uncompleted as late as August. Despite ministry assurances, one detects no pick-up in the tempo of construction operations at the complex of purification facilities for the Velikoanadol'skiy Firebrick Plant. Quite the contrary, and in fact one has noticed lately that the work tempo here has fallen off. Here is an example. As previously provided, the administration of Nerudstroy (headed by Comrade Shkol'nikov) was to accomplish 150,000 rubles' worth of construction operations in the month of August. Then for some reason the plan was scaled down to 100,000, but it was not fulfilled even at that.

A greater lag has been permitted in the construction of purification facilities for the Avdeyevskiy Coking By-Product Plant. The work force of two large trusts, Donetskkoksokhimstroy (managed by Comrade Melamud) and the aforementioned Donbassekskavatsiya, fulfilled only 24 percent of the operations planned for this period. By the end of the year Donbassekskavatsiya will have to dump approximately 750,000 cubic meters of earth onto the body of the storage area retaining wall; but only one-fifth of the workers needed are on the site or on the way, and there are very few pieces of excavation equipment and transport vehicles. The condition of the existing ash and slag accumulator has become an emergency; its basin is full to overflowing; and the plant has had to haul waste away to dumps in dump trucks, which, of course, costs the enterprise a pretty penny.

We cannot, of course, fail to be alerted by this situation in the construction of facilities important to the national economy. It is long since time for leading personnel in the ministries directing the construction of water purification facilities not only to sign good directives, to draw up plans for measures to be implemented, but also to insure that these are carried out.

EFFORTS TO PROTECT WATERS OF BALTIC SEA DISCUSSED

Riga SOVETSKAYA LATVIYA in Russian 21 Sep 77 p 2

[Article by A. Galich, Head of the Republic State Inspectorate for Protection of the Waters of the Baltic Sea: "Blotches on the Sea"]

[Text] Not long ago we completed a routine inspection flight over the water areas of the ports of Riga, Ventspils, Liepaya, and the Gulf of Riga. The weather was sunny and from the airplane the sea waters appeared with a light greenish cast.

But there near the bunkering moorage of the Ventspils petroleum transshipment base we spotted an iridescent blotch approximately 100 by 50 meters in size. This was already the second time this year that the water had been polluted by petroleum products during the fueling of ships. We noticed still another spot in the Liepaya city canal. It had been formed by the disposal of petroleum-containing water and extended from the bridge 150 meters toward the side of the lake. It was the third time we had noticed such pollution of the canal.

The reports compiled were sent to the appropriate managing personnel with directions to investigate the facts involved in the pollution and take measures to deal with those responsible.

The Republic State Inspectorate for Protection of the Waters of the Baltic Sea, which was created within the Ministry of Land Improvement and Water Resources of the Latvian SSR, took up its work on 1 January this year. Such matters were formerly dealt with by the inspector of the Riga area administration of state waters and the Liepaya regional state water inspectorate. We have already been able to achieve some positive results. The level of pollution in the Gulf of Riga as a whole is down in comparison with last year. The deliberate dumping of petroleum-containing water from ships on the open sea and in the water areas of the ports has ceased.

There have been fewer spills of petroleum products during the fueling of ships. The fishing collectives "Selga", "9 May" and "Uzvara" are dumping less impure waste water.

It was not without the persistence of our inspectorate that there was developed and put into operation a technological system for collecting petroleum-containing water from ships and transporting it to purification facilities in Riga, Ventspils, and Liepaya. Captains used to excuse themselves by saying that nobody would accept this water. But now the situation is different. We have been rendered great assistance by the republic People's Control Committee and the commission of the Council of Ministers of the Latvian SSR for nature conservation.

The republic inspectorate possesses definite rights, in particular, the right administratively to impose fines and to draw up the papers required to institute criminal proceedings against those guilty of polluting the sea. But it is important to create the conditions for compliance with established legal requirements. Our main difficulty is the fact that these conditions are being created intolerably slowly.

Latvian maritime shipping, Latrybprom, the production association of the fishing industry, and the Union of Latvian Fishing collectives are not yet provided with a system for collecting industrial and domestic sewage from ships and turning it over to the purification facilities of the Bolderayskiy multipurpose wood processing combine. Maritime shipping has been slow to complete work on deepening the access canal to the purification facilities in Bolderay, and the construction of moorings at these facilities is still in the initial stage. Latrybprom has only just submitted for approval plans for a collecting sump and pipeline to carry waste water from the berth of the former repair shops of the trawler fleet base to the collector of the city's canal. All scheduled deadlines for the completion of these operations have long since passed.

In addition to waste water, considerable rubbish accumulates on ships. It has to be collected and sent to dumps. However, many ships, particularly those belonging to the Union of Fishing Collectives and Latrybprom, do not have enough trash containers. And in Riga's fishing port, as well as the ports of Ventspils, there are not enough containers on shore. For a long time now the argument has gone on over who is to haul the trash to the dump: the port or the city? Latvian maritime shipping and Latrybprom are in a position to purchase several garbage trucks in order to put an end to such arguments.

Representatives of our inspectorate, the Riga State Water Administration, Baltrybvod, and of the Riga public health service inspected the channel of the Sarkandaugava in order to discover the sources of its pollution. It was found that the purification facilities of the rail tie treatment plant of the USSR Ministry of Railroads were not in operation and that the pressure collector was out of repair. Without any purification treatment, industrial waste water contaminated by petroleum products is dumped into the ditches of the Liyepinyu gardens and meliorative canal, whence they flow into the channel and then into the Daugava. A decree had to be issued to stop the plant's production operations until the shortcomings which had been found were eliminated.

There are delays in the fishing collectives and enterprises of Latrybprom; no deadlines are met; construction of purification facilities is lagging, especially of biological purification facilities. This includes, for example, the fishing collectives "Zveyniyek" and "Banga", which are playing a leading role in construction work, a partial contribution being made by fish-canning combines in Salatsgriva and Roya. Much is being done here to improve the fishermen's working conditions, for the welfare of the settlement; but the leaders cannot extend their reach as far as purification facilities: complete elimination of the discharge of untreated waste water is, for some reason, considered a secondary task.

Our inspectorate has to try persistently to get kolkhozes to allocate means for the construction of purification facilities and industrial enterprises to utilize fully the means released to them for this purpose.

In our country nature conservation is considered an important government task, the business of all the people. Article 18 of the craft of the USSR Constitution provides that in the interests of the present and future generations the USSR will take the necessary measures for the conservation and scientifically-based, rational utilization of the earth and its mineral resources and its plant and animal life, the maintenance of clean air and water, to insure the reproduction of natural resources, and to improve the human environment. Article 67 declares it to be the constitutional obligation of citizens of the USSR to watch over nature and conserve its riches.

These provisions of the constitution not only provide a record of the enormous nature conservation effort which has been made in our country, but they also increase the responsibility of all citizens, especially of the leaders of enterprises, farms, ministries and departments, for conserving natural resources. May the Baltic Sea be clean!

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BRIEFS

CLEAN RIVER--Petrozavodsk, 12 Oct--Fewer and fewer rivers in Karelia are being used for floating timber, which pollutes the water. The Shuya River, which empties into Lake Onega, is one river which has been freed from timber floating. This provided favorable conditions for the establishment at the mouth of the Shuya of one of the largest fish hatcheries in the country. Construction workers are now wrapping up the last work to be done here. The hatchery will raise over 2 million salmon, whitefish and sea eel fry each year. [Text] [Moscow PRAVDA in Russian 13 Oct 77 p 6] 8963

TBILISI ENVIRONMENTAL EDUCATION CONFERENCE--An intergovernmental conference on environmental education, conducted within the framework of UNESCO, opens in Tbilisi on 14 October. Invited to the conference are representatives of 149 countries, all members of this organization. At the request of a TASS correspondent, D. M. Gvishiani, chairman of the conference organizing committee and corresponding member of the USSR Academy of Sciences, tells about the program of the scientific forum. The main task of the conference is to generalize international experience in improving man's environment, organize ecological education, and outline a program of future work. The Soviet delegation will present its national report, which reveals the government's many-sided effort to protect the biosphere. Enormous sums have been allocated for this purpose during the Tenth Five-Year Plan alone--11 billion rubles. Considering the importance of the problems to be dealt with and the broad representation at the conference, it is to be expected that it will make a considerable contribution to the protection and improvement of the natural environment on a global scale. [Text] [Kiev RABOCHAYA GAZETA in Russian 14 Oct 77 p 4] 8963

BALTIC ANTI-POLLUTION SYMPOSIUM--A Soviet-Swedish symposium, conducted within the framework of long-term bilateral scientific and technical cooperation on environmental protection, and devoted to the protection of the Baltic Sea from pollution, opened on 26 September in Yurmala. Participating are specialists from the hydrometeorological service, chemists, biologists and oceanographers of both countries, and observers from the GDR, Poland and Finland. Institutes of the USSR Academy of Sciences and of the academies of sciences of the Baltic republics are widely represented on the Soviet side. The symposium is devoting most of its attention to

problems involved in neutralizing toxic substances in waste water and their biological self-purification. Common criteria are also being worked out to determine the effect of these substances on marine organisms. In connection with this, Soviet and Swedish scientists have planned two joint expeditions to study biological processes in the Baltic Sea. They will be undertaken on large oceanographic vessels of the USSR Hydrometeorological Service, which are equipped with dozens of scientific laboratories and the latest equipment. [Text] [Riga SOVETSKAYA LATVIYA in Russian 27 Sep 77 p 2] 8963

DEPARTMENT OF ECOLOGY--The Kiev People's University of Technical Progress, created on the initiative of social organizations, higher educational institutions, and institutes of the Academy of Sciences of the Ukrainian SSR, has won widespread popularity not only in the republic, but throughout the country as well. Its fruitful activity has been mentioned more than once during all-union inspections of people's universities. There are 25 departments here. This school year a new department has been established, a Department of Ecology and Ecological Technology. This is the first attempt to train specialists with various backgrounds in the area of ecology and nature conservation. Students develop a detailed familiarity with the state of the problem of "Man and the Biosphere" and its legal and political aspects; they learn ecological methodology and the bases of system analysis and the rational utilization of natural resources; they study the biological effect and hygienic significance of the physical elements of the external environment and chemical substances which pollute the air, the earth, and the water. The course of study lasts 2 years. At the conclusion there is a thesis defense. [Excerpt] [Kiev RABOCHAYA GAZETA in Russian 14 Oct 77 p 4] 8963

CONFERENCE STUDIES BLACK SEA POLLUTION--What is the best way to fight pollution of the coastal areas of the Black Sea by sewage from cities and health resorts? This problem among others was discussed by the Scientific Council of the Academy of Sciences of the Ukrainian SSR on Problems of the Biosphere in a session which met a few days ago in Kiev under the chairmanship of K. M. Sytnik, academician and vice-president of the Academy of Sciences of the Ukrainian SSR. The Council discussed the scientific research being conducted by the Institute of the Biology of the Southern Seas of the AN UKSSR [Academy of Sciences of the Ukrainian SSR] on problems involved in and prospects for deep-water discharge of sewage into the Black Sea, part of the program directed toward compliance with the decree of the CC CPSU and the USSR Council of Ministers (1976) on "Measures to Prevent Pollution of the Basins of the Black and Azov Seas". Other important questions were also discussed at the session of the Scientific Council of the AN UKSSR on Problems of the Biosphere. They included a plan for joint research by the Academy of Sciences of the Ukrainian SSR and the Southern Division of the All-Union Academy of Agricultural Sciences imeni V. I. Lenin on soil cover conservation, increasing effectiveness of fertility of the soil in our republic, and making more efficient use of the water resources in the Krivoy Rog industrial region. [Text] [Kiev PRAVDA UKRAINY in Russian 15 Jul 77 p 4] 8963

PURIFICATION FACILITIES IN OPERATION--T. Ye. Petrushenko, a reader from Zhdanov, wrote that local organs are not devoting enough attention to environmental protection. Industrial enterprises and motor vehicle transport continue to pollute the air with harmful emissions and the earth and our water supplies with untreated sewage. The deputy chairman of the Zhdanov gorispolkom, M. Kozlov, declared that the facts presented in the letter are indeed true. Vigorous measures are being taken to prevent air and water pollution. There have already been concrete accomplishments in the area of providing enterprises with purification facilities. For example, gas- and dust-trapping equipment has been constructed for the open-hearth mills of the plant imeni Il'ich; purification facilities have been renovated for the production line in the slag-grinding section of the "Azovstal'" [Azov Metallurgical Plant] open hearth mill, for the graphite plant, and for the crushing and sorting plants of the Zhdanov open-cut mine administration. Ninety-three solid-fuel boilers have been eliminated in the city. For the purpose of reducing the flow of motor vehicle traffic through residential areas two by-passes have been built. Motor transport enterprises have established tight controls on engine adjustment. A branch of Ukgipromez [Ukrainian Institute for the Planning of Metallurgical Plants] has developed a technical-economic basis for "Protecting the Air of Zhdanov and the Biological Life of the Sea of Azov", adherence to which will make possible significant reductions in air and water pollution. [Text] [Kiev RABOCHAYA GAZETA in Russian 29 Jul 77 p 4] 8963

PROPOSAL FOR NEW MINISTRY--Nature conservation has now become exceptionally important. It is no accident that this fact is reflected in the draft of the new USSR Constitution, which now contains a special article. In our opinion it should be supplemented by such a practical step as the creation of a special ministry for the protection of nature and conservation of the natural resources of the USSR. This ministry should take control of all work in the country dealing with nature conservation, the administration of all preserves, and the maintenance of clean air and water. [Text] [Moscow SOVETSKAYA ROSSIYA in Russian 7 Aug 77 p 3] 8963

NEW ANTI-OIL-Spill AGENT--Peat is an effective agent for use against oil which has been spilled on the surface of the sea. This has been proved by Estonian specialists in model studies in the Baltic Sea on eliminating oil pollution. Crumbs of dehydrated peat are quickly spread over a large area with the use of a special apparatus; each crumb can absorb three times its weight in oil and still remain afloat. To collect and then burn the oil-soaked peat is no difficult task. The "Tootsi" peat enterprise has already begun production of the crumbs for removing oil from the sea. [Text] [Moscow TRUD in Russian 28 Jun 77 p 4] 8963

CONSTITUTION AND ENVIRONMENT--The Communist Party and the Soviet Government are devoting much attention to questions of nature conservation. Eleven billion rubles have been allocated for this purpose in the Tenth Five-Year Plan. In our Krasnoyarskiy Kray alone the year 1976 saw 30 million rubles' worth of purification facilities put into operation. Today over 80 percent

of the waste water in our kray is fully treated. Many existing and new enterprises are introducing modern technological processes which make it possible to reduce the amount of water used in the production process. Scientific research organizations are developing economic water purification methods and water-free production processes. Great attention is also being devoted in our country to cleaning the air. In other words, an enormous amount of work dealing with the protection of nature is currently underway. This is reflected in Article 18 of the draft of the new constitution. In our opinion, however, the formulation of this article does not affirm that this has become an item of first-rate, government-wide importance. I would suggest the following wording for this article: "... In the interest of the present and future generations of the Soviet people, the state takes measures necessary for the conservation and scientifically-based, rational utilization of the earth and its mineral resources and plant and animal life, the maintenance of clean air and water, the reproduction of natural resources, and the improvement of the human environment." [Text] [Moscow TRUD in Russian 26 Jun 77 p 2] 8963

CLEAN AIR BASIN; EQUIPMENT--A specialized enterprise of the USSR Ministry of Power and Electrification, Energogazoochistka, was organized in Kishinev. Its branches are now in Moscow, Kiev, Tol'yatti, Chelyabinsk and Tula and one more is slated to open in Leningrad. This association, from the report of the VECHERNIY KISHINEV newspaper, is basically performing operational work in protecting the environment from pollution, in ventilation and air conditioning, is developing and manufacturing new kinds of equipment and instruments for monitoring the condition of the air basin, is introducing developments of scientific research institutes concerning new equipment in scrubbing flue gases and ash trapping, is providing methodological assistance in installing a variety of systems and is also working in purification of wastewater. [Text] [Moscow ZHILISHCHNOYE I KOMMUNAL'NOYE KHOZYAYSTVO in Russian No 10, Oct 77 p 3] 10123

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