

**DIESEL AND AUTO PRODUCE SMOG**  
A diesel-powered tank truck blows smoke as it goes through Tucson and the car ahead of it—although you can't see the fumes—also puts out air pollution and smog-producing products from its exhaust pipe.

# Gas Engine High As Smog Suspect

By BOB STIRLING  
Second of a series  
Not all smog is produced by gasoline engines, but all gasoline engines produce smog.

And, in Los Angeles, it has been decided that the automobile is the No. 1 cause remaining in that city's smog problem.

In Tucson, the gasoline engine also is the leading suspect as far as Robert L. Wortman, former University of Arizona research associate, is concerned.

Wortman had made partial studies of Tucson's air pollution content under the direction of Prof. Quentin M. Moss. More studies are needed, he said.

LOS ANGELES COUNTY burns 6 million gallons of gasoline every day in 3 million cars.

Pima County burns up 240,000 gallons of gasoline daily in 135,000 vehicles, according to Dr. James McDonald, University of Arizona physicist in the Institute of Atmospheric Physics.

McDonald agrees with Wortman on the idea that more studies are needed. McDonald said he is not ready yet to say the automobile is our greatest worry.

In Southern California, industry has been policed and has policed itself; backyard incinerators have been banned.

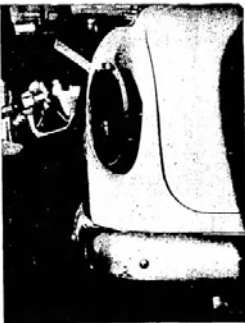
**CALIFORNIA EXPERTS** have declared that if all automobile engines were shut off tomorrow in the Los Angeles area there would be no smog there, according to the Air Pollution Foundation of San Marino, Calif.

Leslie A. Chambers, former research director of the Southern California Air Pollution Control District, has said:

"Automobiles contribute three-quarters of the substances known to be converted into smog."

**AND, IN Tucson, Phoenix and Los Angeles,** a similar problem is fared—air temperature inversions hold the smog over the communities.

All three cities have sunshine, and bright sunshine, working on exhaust fumes and vapors turns the air into a smog factory. In that factory, the exhaust fumes are changed into mystery chemical compounds that cause eyes to water and visibility to



**GAS IN—SMOG OUT**  
Each day in Pima County, 240,000 gallons of gasoline are burned by autos and trucks. The engine turns the fuel—and partly-burned fuel—into smog-producing products, according to California experts who have spent millions of dollars on research in air pollution and smog studies.

## 'BORN FREE'

### Lioness Elsa's Last Today By Husband

**NAIROBI, Kenya**—(AP)—A graphic description of the last hours of Elsa, the lioness of Joy Adamson's "Born Free," is given by Joy's game-warden husband today in the East African Standard.

George Adamson found Elsa ill under a bush near the Uru River.

"That night I slept beside Elsa in the bush to guard her against the attentions of wild lions and hyenas," he wrote. "Her ruin appeared and played around my bed but Elsa would not tolerate them near her."

"In spite of her weakness, she came twice to me and rubbed her face against mine with all her old friendliness."

"At dawn Elsa seemed better and I went off to have breakfast and do some office

"Late in the morning I found she had disappeared. At length I found her lying half in the river and close to a little island. She was desperately ill with labored and painful breathing."

"I stayed with her all day and from time to time tried to give her water in my cupped hands but she seemed unable to swallow although obviously she was thirsty."

"Toward dusk Elsa made a supreme effort and, helped by myself, crossed the river to

Serial Appearance

The adventures of Elsa to her release in the jungle, appearing in the Citizen in a book, "Born Free."