TEXAS AIR CONTROL BOARD
6330 HWY. 290 EAST AUSTIN, TEXAS 78723 (512) 451-5711

TACB BULLETIN
No. 4-1986, OCTOBER 31

TACB to undertake year-long Dallas Visibility Study

Phase I concentrates on wintertime 'brown cloud'

The Texas Air Control Board will concentrate major resources on a study of visible pollution in Dallas. TACB studies to date show that since 1960 the distance one can see in the Dallas-Fort Worth area has decreased by about 50 percent. The study will focus on this decline and on a "brown cloud" that envelopes the Dallas area on some winter mornings.

The TACB study, to commence Dec. 15, will be year-long. It will be conducted in two phases, as follows:

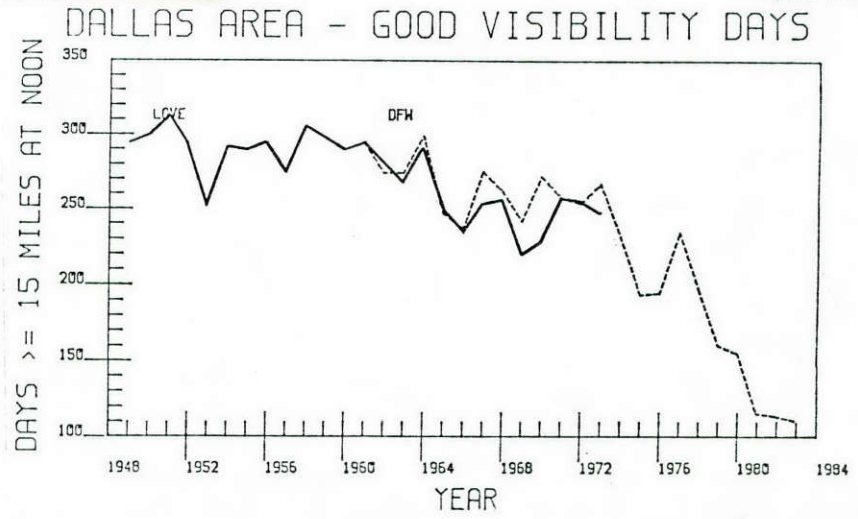
PHASE I -- In cooperation with the Environmental Protection Agency and the City of Dallas, TACB will conduct an extensive wintertime brown-cloud study beginning Dec. 15. The TACB has assigned $187,000 of its resources to this phase. The EPA has contracted with Sandia National Laboratories, Albuquerque, N.M. ($87,000) to conduct work on behalf of that agency. The City of Dallas will provide one monitoring site and equipment.

PHASE II -- The TACB, with the continued participation of the City of Dallas, will document the frequency and analyze the composition of visible pollution during the remainder of the year, with $128,000 in resources allocated for this work.

Total allocation of TACB resources would be about $315,000.

The TACB Research Division began studying visibility impairment (visible pollution) in Texas in June 1984. This study included research of visibility measurements made since 1948 by National Weather Service and Federal Aviation Administration Flight Service observers at Dallas Love Field and the Dallas/Fort Worth International Airport.

The objective of the TACB studies is to obtain a better understanding of what might be done to maintain or improve visibility in the Dallas area. The stages of the work are to monitor the air to collect samples of pollutants; chemical analyses of the samples; quantification of the various pollutants detected; and identification of the types of sources which emit such pollutants. This information then will be used to determine whether and how much additional air pollution controls that the State can impose can improve the situation.



A "good visibility" day is one on which it's possible to see 15 miles or farther. The graph above shows the marked decline in the number of such days in the Dallas area since 1948. The Texas Air Control Board's atmospheric scientists found that in 1948 it was possible to see 15 miles or farther on four out of five days. Now it is possible to see that far on only one day in three. The graph plots the number of noon observations during the indicated year when visibility was greater than or equal to 15 miles. The solid line is based on observations made at Dallas Love Field, and the broken line, observations made at Dallas/Fort Worth International Airport.

Inquiry objectives are identified by agency

Specifically, the TACB seeks to determine:

1) The composition of the wintertime brown cloud.

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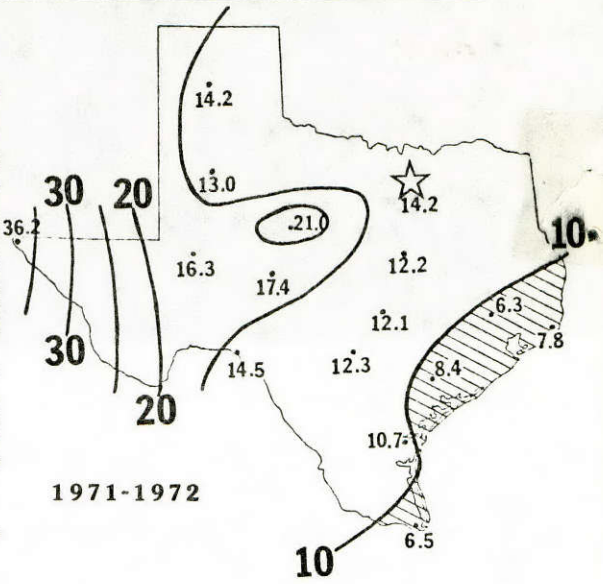
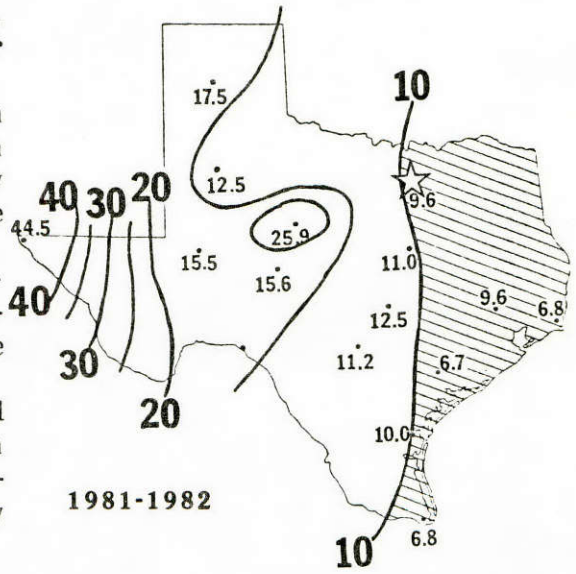
Visible pollution has shown a significant increase over the eastern half of the state for a number of years. This is indicated by the two maps. The 1971-1972 map shows visibility of 10 miles or less along the Gulf Coast. Ten years later (1981-1982) visibility in the entire eastern part of the state had been degraded to the 10-miles-or-less measurement. In 1971-1972, it was possible to see 14.2 miles on most days in the Dallas/ Fort Worth area (indicated by the star). By 1981-1982, it was possible to see only 9.6 miles on most days. More recent data gathered in a Texas Air Control Board study of the visible pollution will be released later this year.





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2) The composition of the urban haze during different times of the year.

3) How much of the visibility degradation is caused by vehicles, electric power plants, wood-burning, other anthropogenic (man-made) sources; and by natural sources.

4) How the visibility characteristics in different seasons compare with those of other cities; with pristine areas; and the reasons for observed differences.

5) To what extent the visibility degradation is attributable to particulates, nitrogen dioxide, and other substances.

6) The extent to which the components of urban haze are generated locally or transported into the area by the wind.

7) The possible adverse health impacts of pollutants that make up the visible pollution.

8) The meteorological conditions related to brown cloud formation and the average expected frequency of occurrence.■

Legislature reduces TACB budget but allows agency to retain greater portion of cost-recovery fees

The 69th Legislature in recent special sessions reduced the TACB FY 1987 budget by $375,000 to $12,598,003. The reduction was listed as "less voluntary savings pursuant to Executive Order MW-36." Thus, funds were not reduced in a particular area but, rather, the agency was left some discretion in applying the reduction.

Revisions contained in Rider No. 6 to the Appropriations Bill reduced General Revenue funds appropriated to the agency by $6 million; in the original bill adopted in regular session in 1985, General Revenue funds appropriated to the agency were reduced by $4.8 million. Offsetting the new reduction is a provision that cost-recovery fee revenue of up to $6 million is appropriated to the agency, rather than the $4.8 million appropriated in the original bill.

Other provisions of the revised Appropriations Bill which affect the agency are the elimination of a three percent salary increase for state employees for September 1, 1986; and a change of date for the issuance of state payroll warrants from the last working day of the month to the first working day of the month following the payroll period.

Executive Orders MW-36 and MW-39, restricting hiring, promotions, merit increases, purchases of supplies and equipment, travel, and some other activities, remain in effect.■

Industries notified of amounts of annual inspection fees due

The Texas Air Control Board has notified owners and operators of 921 industrial facilities of the amounts of fiscal year 1987 inspection fees due to the agency on or before December 10. Payments of the fees had begun to trickle in this week.

Notices were sent by certified mail to approximately 890 accounts that paid fees last year, as well as to delinquent accounts and new accounts believed to have started up operations in 1985.

Paul Henry, manager of the fee assessment program, said the TACB is investigating the few delinquent accounts from fiscal year 1986 to determine if enforcement action should be taken. "Some of these may have shut down operations and not advised us, and some may be able to show that based on their emissions they are not subject to the inspection fee," Henry said.

The mailout of notices included a statement of the amount due, a form required to be completed and returned to the TACB, and a copy of the TACB rules concerning inspection fees.

The fee provisions, contained in the General Rules, were adopted by the Board at its September 26 meeting. They state:

1) Fees are applicable to the owner or operator of each account for which actual emissions in 1984 of total suspended solids, nitrogen oxides, volatile organic compounds, or any other air contaminant equal or exceed 50 tons per year and for which potential emissions equal or exceed 100 tons per year.

2) In cases in which operations commenced during or after 1984, actual or potential emissions for 1985 are to be considered.

3) Nitrogen, carbon dioxide, water, methane, ethane, hydrogen, and oxygen are not considered air contaminants for purposes of calculating fees.

4) The rule provisions do not apply to accounts which contain only nonregulated, nonpermitted facilities which have received no notices of violation within the most recent five-year period.

5) Separate fees are payable for each account (defined as all of the facilities at a property), including those not assigned numbers by the TACB. The owner or operator is responsible for contacting the agency to obtain a number. The amount of the fee charged is determined by the highest aggregate emission rate of any air contaminant at an account as provided by the rate schedule.

6) The TACB executive director is to review the fees assessed and the costs recovered, and is to present a report to the Board on the results of the review along with recommended changes as appropriate.■

SCHEDULE OF FEES DUE BY DECEMBER 10, 1986

Emission Rate (TPY rounded down to the nearest ton)	Base Fee	Incremental Fee *
50-99	$ 725.00	$17.50/ton
100-249	1,595.00	13.05/ton
250-999	3,552.50	4.35/ton
1,000 & Up **	6,815.00	2.18/ton

*** Incremental fee to be applied to each ton in excess of the initial tonnage in the category**

**** Maximum fee is $14,500.00**

Sunset Advisory Commission begins TACB review

The Sunset Advisory Commission has begun its review of the Texas Air Control Board's policy structure and enforcement activities as required by the Texas Clean Air Act. The Act specifies that the review be completed prior to January 1, 1987. Members of the Commission's staff met with the agency's staff in September and October and received a number of reports prepared by the TACB for the review. TACB activities are scheduled to be considered at a public hearing to be held by the Commission on November 24.■

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Industry attorneys are urged to check TACB permit requirements before making design, operations changes

TACB's legal counsel, John Turney, discussed the agency's enforcement activities, the administrative penalty program, and the role of the regional offices in the overall agency programs at a recent meeting of the Oil, Gas, and Mineral Law Section of the Travis County Bar Association.

He urged the attorneys to get acquainted with regional office directors and staff who inspect pollution emission sources, respond to complaints, issue operating permits which must meet the requirements in construction permits, and are involved in the enforcement process generally from the issuance of a notice of violation to its resolution.

"There's a big risk in starting a project without checking TACB permit requirements," Turney cautioned the attorneys in indicating problems that can occur when changes are made in the design and operation of facilities.

He said many problems could be avoided if the facility owner/operator would review proposed design and operational changes with TACB regional staff before beginning work on the changes.

Discussing potential problems for oil and gas facility operators, Turney cited federal requirements -- enforced by the TACB -- for handling asbestos which is often contained in insulation material used on various kinds of equipment.

Several attorneys asked questions concerning the regulation of hydrogen sulfide from oil-related products, and the regulatory jurisdictions of the Railroad Commission and the TACB. Turney pointed out that the sulfur in those materials, especially in East Texas, is in the form of hydrogen sulfide which is highly toxic. The Railroad Commission regulates hydrogen sulfide from oil and gas facilities through equipment requirements and monitors to protect against catastrophic releases, Turney said. "Their focus is safety. Ours is adverse effects on health and welfare at concentrations that are not life-threatening and can occur without a major incident."■

Administative penalties

Total of 133 companies fined $1,095,830 since September

Twenty-two agreed orders assessing administrative penalties were approved by the Air Control Board on Oct. 24. A total of 133 such penalties have been assessed since Sept. 1, 1985. Total penalties exceed $1,095,830.00.

The board assessed penalties Oct. 24 against the following sources:

Ace Marble, Inc., FM 1902 near Crowley, Johnson County, operating cultured marble products manufacturing facilities without a permit or special permit, $250.

Demetrio and Ramiro Garza, Partners, doing business as Alamo Marble, 221 Austin Street, Garland, Dallas County, operating a synthetic marble manufacturing plant without a permit or special permit, $500.

Associated Ready Mix, Inc., 8000 South Highway 287, near Eureka, Navarro County, failure to pave all permanent in-plant roads as required by Standard Exemption No. 71(3) at its ready mix concrete plant, $1,000.

Cordova Marble Co., Inc., 1703 South Martinez Lane, Wylie, Collin County, operation of a cultured marble products manufacturing plant without a permit or special permit, $1,600.

Dale Nichols Marble, 2500 Old Bankhead Highway, Aledo, Parker County, operation of a synthetic marble manufacturing plant without a permit or special permit, $950.

DMO Industries, Inc., doing business as Designer Marble and Onyx, 195 Old Hico Road, Stephenville, Erath County, operation of a synthetic marble manufacturing plant without a permit or special permit, $400.

Stephen R. Smith, Inc., doing business as Farmers Oil and Gas Exploration, near Sweetwater, Nolan County, operating a storage tank battery without a permit or special permit, $500.

Garland Marble Co., Inc., 500 West Avenue B, Garland, Dallas County, operating a synthetic marble manufacturing plant without a permit or special permit, $250.

Grand Prairie Marble Co., 2427 NW Dallas Street, Grand Prairie, Tarrant

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Information from five monitoring networks

"Air Monitoring Report, First Quarter 1986" is now available

The TACB **Air Monitoring Report, First Quarter 1986** is available for purchase at the cost of production and mailing.

Inquiries should be addressed to Larry Butts, TACB, 6330 Highway 290 East, Austin, Texas 78723, telephone (512) 451-5711. Cost of the publication is $2.50. A mailing charge of $1 is also made. Written requests should be accompanied by a check made payable to the Texas Air Control Board in the required amount. Reports also may be obtained at the agency.

The TACB monitoring program and regional offices operated five ambient air monitoring networks during the first calendar quarter of 1986. These networks measured air quality for use in national ambient air quality standard (NAAQS) attainment analysis, control strategy, and toxic pollutant risk assessment.

The networks include a continuous air monitoring station (CAMS) network, noncontinuous air monitoring station (NCAMS) network, acid rain network, and Gulf Coast community exposure study network. In addition, spot sampling is done for pesticide concentrations; this formerly was done by means of stationary monitors.

The report for the first three months of 1986 shows the following for the pollutants for which national standards have been set:

Ozone--The one-hour average concentration exceeded the national standard of 0.12 parts per million (ppm) a total of 22 hours in the Houston area on six separate days, two hours in the West Texas (El Paso) area on one day, and two hours in the Beaumont-Orange-Port Arthur area on two separate days.

Sulfur dioxide--The national standard was not exceeded.

Nitrogen dioxide--The standard is based on an annual average; therefore, data relative to the national standard will not be available until the end of the year. The highest quarterly nitrogen dioxide average for the 1986 first quarter was 0.027 ppm measured at CAMS 6 in El Paso.

Carbon monoxide--The national standard for carbon monoxide is for two averaging times. There is a 9 ppm eight-hour average and a 35 ppm hourly average not to be exceeded more than once a year. The eight-hour standard has been exceeded periodically in El Paso during the winter months when very stable atmospheric conditions exist. The one-hour standard has never been exceeded. The eight-hour standard was exceeded in El Paso six times in January and once in March. These were the only times an exceedance of the standard was measured at TACB monitoring sites during the quarter.

Total suspended particulate--There are two primary standards related to health effects, and two secondary standards related to the physical environment. The long-term primary standard is based on data for a full year. The 24-hour-average primary standard was exceeded at seven sites during the quarter. Before this data is used as a basis for control strategy, it will be reviewed for the influence of windblown dust and other local weather conditions at the time of the high levels.

Lead--The lead standard was not exceeded at any TACB monitor during the quarter. ■

Administrative penalties . . . continued from page four

County, operating a synthetic marble manufacturing plant without a permit or special permit, $1,250.

Interior Marble Co., near 7100 Ledbetter, Arlington, Tarrant County, operating a cultured marble manufacturing plant without a permit or special permit, $500.

Keystone Products, Inc., 2610 Andjon Drive, Dallas, Dallas County, operating a synthetic marble manufacturing plant without a permit or special permit, $250.

Lake Dallas Counter Tops, 802 East Main, Lewisville, Denton County, operating a synthetic marble manufacturing plant without a permit or special permit, $250.

Marble Craft Products of Texas, Inc., 1236 Jackson Street, Red Oak, Ellis County, operating a synthetic marble manufacturing plant without a permit or special permit, $500.

Marshall Exploration, Inc., operator of saltwater disposal facilities two miles north of Bloomburg, Cass County, discharging odorous hydrogen sulfide gas

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emissions in violation of TACB regulation, $6,000.

McMarz Marble, Inc., 106 S.W. Parkway, Granbury, Hood County, operating a cultured marble products manufacturing plant without a permit or special permit, $250.

National Marble, Inc., U.S. Highway 380, Princeton, Collin County, operating a cultured marble products manufacturing plant without a permit or special permit, $2,000.

North Texas Marble, Inc., Oak Street, Everman, Tarrant County, operating a cultured marble manufacturing plant without a permit or special permit, $500.

Occidental Chemical Corp., 4403 La Porte Road, Pasadena, Harris County, operator of a polyvinyl chloride manufacturing plant, allowing non-emergency discharges of vinyl chloride monomer from a relief valve on equipment in vinyl chloride service on May 18 and July 23, 1986, in violation of the national emission standard for vinyl chloride, $3,000.

W. D. and Daughter, Inc., doing business as Parker County Redi-Mix, U.S. Highway 80 one mile west of Weatherford, Parker County, operator of a ready mix concrete plant, operating the plant without a permit or special permit, $500.

Southwestern Contracting Co., operator of a portable concrete batch plant at numerous locations in the Dallas-Fort Worth area, failing to operate the plant in compliance with the conditions of Standard Exemption No. 93, $1,500.

Trevor Boyce Associates, Inc., Seaberg Industrial Area in Dayton, Liberty County, operating a rubber sheet lining operation without a permit or special permit, $500.

Zeus Marble Co., Inc., 6355 Zenith, Dallas, Dallas County, operating a cultured marble products manufacturing plant without a permit or special permit, $1,000.

Board penalizes 27 companies at September meeting

The Board at its Sept. 26 meeting penalized 27 companies, as follows:

Abilene Marble Co., cultured marble manufacturing, 1625 South Treadaway, Abilene, Taylor County, construction without a permit, $250.

Amoco Oil Co., refinery at 2401 Fifth Avenue South, Texas City, Galveston County, carbon monoxide emissions in excess of limit in construction permit, $39,500.

Arapaho Petroleum, Inc., Managing General Partner of Breckenridge Gasoline Co., natural gas processing, FM 125 near Bivins, Cass County, construction without a permit, $750.

Best Marble Co., Inc., synthetic marble manufacturing, 2803 and 2805 Singleton, Rowlett, Dallas County, constructing and operating without a permit, $1,150.

Big Tex Feed Co., grain storage, 3720 Lamar Avenue, Paris, Lamar County, constructing and operating without a permit, $1,000.

Bloch Metals, Inc., scrap metal recovery, Tyler, Smith County, unauthorized outdoor burning, $1,000.

Bolfing Brothers Marble, Inc., synthetic marble manufacturing, 18407 Telge Road, near Cypress, Harris County, constructing and operating without a permit, $1,200.

Boney Construction Co., Inc., portable concrete batch plant near Glenn Heights, Dallas County, constructing and operating without a permit, $1,600.

Border Opportunity Saver Systems, Inc., disposable diaper panel assembly, Del Rio, Val Verde County, constructing and operating without a permit, $675.

Dallas Marble, Inc., cultured marble manufacturing, 1112 South Cedar Hill Road, Cedar Hill, Dallas County, constructing and operating without a permit, $1,000.

Formosa Plastics Corp. Texas, ethylene dichloride plant near Point Comfort, Calhoun County, violation of national emissions standard for vinyl chloride, a hazardous pollutant, $3,000.

Greif Brothers Corp., drum manufacturing, 1508 East Cedar Street, Angleton, Brazoria County, constructing and operating without a permit, $2,100.

Hematech Limited Partnership, hematite drilling fluid processing, 1930 Sheldon Road, Channelview, Harris County, changing the method of control of emissions from an existing facility without a permit amendment, $500.

Landel, Inc., spray painting, 7300 Chippewa, Houston, Harris County, constructing and operating without a permit, $500.

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Lock Block, Inc., dba Nova Block Co., concrete block manufacturing, near Justin in Denton County, constructing and operating without a permit, $650.

Metroplex Marble Contractors, cultured marble products, 2201 Raper Blvd., Pantego, Tarrant County, constructing and operating without a permit, $1,900.

Moulding Products, Inc., prefinished door manufacturing, 1222 Profit Drive, Dallas, Dallas County, constructing and operating without a permit, $1,700.

Nelson Services, Inc., bark processing and packaging, Cut-N-Shoot east of Conroe, Montgomery County, constructing and operating without a permit, $500.

Quality Marble Co., cultured marble manufacturing, 2561 South Treadaway, Abilene, Taylor County, constructing and operating without a permit, $250.

Quality Metal Finishing Paint Shop, Inc., abrasive blast cleaning and surface coating, 9610 Fairbanks North Houston Road, Houston, Harris County, constructing and operating without a permit, $500.

Shell Oil Co./Shell Chemical Co., phenol acetone plant, Deer Park Manufacturing Complex, Deer Park, Harris County, allowing oxidizer spent air vent in phenol acetone plant to emit a vent gas stream containing volatile organic compounds in excess of 250 pounds per hour averaged over any consecutive 24-hour period, $59,900.

E. W. Smith, Inc., cultured marble manufacturing, 1234 Jackson, Red Oak, Ellis County, constructing and operating without a permit, $500.

Texaco Chemical Co., chemical plant, Port Arthur, Jefferson County, failing to repair leaking components in benzene service within 15 days, $22,750.

Treco Sales, Inc., sand and flint bagging operation, 302 South Sycamore, Tomball, Harris County, constructing and operating without a permit, $3,400.

Venus Marble Co., cultured marble manufacturing, 1101 South Hampton Road, DeSoto, Dallas County, constructing and operating without a permit, $1,200.

The Wetch-It-Company, Inc., cultured marble manufacturing, 500 Tidwell, Cedar Hill, Dallas County, constructing and operating without a permit, $900.

Administrative penalties continued from page six

Mr. Ramon Quintana, El Paso County, outdoor burning of copper wire insulation, $750.

Board orders issued Aug. 22 assessing administrative penalties were as follows:

A Guaranteed Auto Parts, Inc., dba AGAP, Inc., burn-off oven used for engine-head cleaning, 541 North Main Street, Fort Worth, Tarrant County, constructing and operating without a permit, $500.

David Buster, Inc., hot mix asphalt plant, U.S. Highway 271 north of Pittsburg, Camp County, constructing and operating without a permit, $2,500.

Champlin Petroleum Co., refinery near Corpus Christi, Nueces County, violation of new source performance standards for petroleum refineries and national emission standard for hazardous air pollutant (benzene), $24,000.

Mr. Johnnie Rodriquez, president, Comal Iron & Metals, scrap metal salvaging, County Road 356, Guadalupe County, outdoor burning of coated copper wire, $3,000.

Contractor's Specialties, Inc., synthetic marble manufacturing, 14635 Chrisman, Houston, Harris County, constructing and operating without a permit, $1,000.

Designed Marble, Inc., cultured marble products manufacturing, 2103 Brennan Avenue, Fort Worth, Tarrant County, constructing and operating without a permit, $500.

Duininck Brothers, Inc., drum mix asphalt plant, Highway 19, Lamar County, constructing and operating without a permit, $3,500.

Hughes Drilling Fluids, bulk barite handling, 815 East Galbreath, Hebbronville, Jim Hogg County, constructing and operating without a permit, $4,150.

Jobe Concrete Products, Inc., concrete batch plant near the International Bridge north of Fort Leaton, Presidio County, constructing and operating without a permit, $1,900.

Longview Brass & Aluminum Co., brass furnace on Highway 149 south of Longview, Gregg County, constructing and operating without a permit, $250.

Lott Materials Contractors Co., aggregate transfer station south of Sour Lake, Hardin County, constructing and operating without a permit, $500.

Merichem Co., sand-

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Odor complaints prompt Houston, Brownwood air sampling

The TACB mcbile laboratory staff completed a week's sampling program today (Oct. 31) in the Allendale area of Houston in an effort to identify the source of odors which caused numerous complaints to the Houston TACB regional office and the City of Houston. There is a concentration of petrochemical industries in the area.

Earlier in the month the mobile laboratory staff sampled in the vicinity of Brownwood industries, also because of odor complaints.

The chemical analysis of samples from both studies is being completed in the TACB central laboratory in Austin.

On-site, real time analysis was done at two Allendale locations simultaneously, one at the mobile laboratory site at Milby Park and, using a van, downwind of some of the area industries.

Gas chromatographs were used for sampling. Compounds being analyzed include butadiene, benzene, toluene, xylene, chlorinated compounds, and unsaturated hydrocarbons.

Ms. Jackie Durchin, chemist, was project leader of the team of staff chemists and engineers.

Upon the completion of the laboratory analysis of samples, the TACB health effects staff will determine if any pollutants detected occur at concentrations which threaten health. The Houston TACB regional director, Herbert Williams, also will be advised of findings for enforcement action if state air pollution control regulations are found to have been violated.

Brownwood samples are being analyzed

Air samples taken in the vicinity of the 3M Company plant in Brownwood early in October are being analyzed to identify the cause of odors which have prompted some complaints to the TACB office in Abilene.

The samples were taken during a five-day visit to Brownwood by a staff of scientists and engineers operating from the agency's fully-equipped mobile laboratory and a van equipped for monitoring.

Some analyses were performed at the sampling site. These did not detect pollutant levels that would threaten health, the sampling team reported. Project leader Scott Mgebroff, chemist, said additional analyses are being performed in the central office laboratory to further identify the cause of odors. The TACB health effects staff will then determine if the pollutants at the concentrations detected pose a health risk. Ms. Debra Barber, TACB regional director at Abilene, will advise the manufacturer and the public of the findings.

The 3M plant manufactures reflective films, adhesive tapes, and printers ink. The processes employed require the use of a number of solvents, and the presence of these was detected in the air samples,

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Administrative penalties . . .

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ton, Harris County, constructing and operating without a permit, $750.

Mid-Cities Counter Top, cultured marble manufacturing and formica top laminating, 3508 Raider Drive, Hurst, Tarrant County, constructing and operating without a permit, $1,000.

Quality Sales Co., Inc., cultured marble casting, 7950 Eastex Freeway, Beaumont, Jefferson County, constructing and operating without a permit, $280.

Mr. Willie D. Reed, near Mansfield, Tarrant County, outdoor burning of copper wire, $200.

Mr. Robert Scott, owner, Scott and Sons Auto Sales, two used car dealerships at 9912 Airline Drive and 11527 Jones Road, Houston, Harris County, selling or offering for sale a motor vehicle not equipped with required emission control systems or devices, $500.

Texas Crude, Inc., natural gas dehydration and production tank battery, 5513 Cedar Point Road, Baytown, Harris County, constructing and operating without a permit, $9,000.

Union Oil Co. of California, Bakke Gasoline Plant near Andrews, Andrews County, alleged violation of national emissions standard for asbestos, a hazardous air pollutant, in plant demolition, $7,000.■

Ft. Worth withdraws from EPA program: TACB regional office assumes responsibility for annual inspections of 70 major sources

The TACB has assumed the responsibility for the annual inspection of major sources of air pollution in the city of Fort Worth as required by the EPA under the state's air pollution control plan. Formerly, these were included in the Fort Worth Health Department's air pollution control program which was partially funded by the EPA.

The city withdrew from the federal program effective October 1, 1986. It continues to operate a broad air pollution control program, however. Melvin Lewis, TACB's Fort Worth regional director, said that in cooperation with the TACB, the city continues to investigate all complaints; handles investigations related to national emission standards for hazardous air pollutants (NESHAPS), particularly where renovation and demolition projects involve the removal or disturbance of asbestos; and the inspection of minor pollution sources (identified by the TACB as B-type sources).

Lewis said the change in the funding of the Fort Worth air pollution control program means that the TACB regional staff now will be responsible for additional annual inspections of more than 70 major sources.■

Photographic slides analyzed

TACB study indicates visibility in El Paso is best in state despite wintertime haze

The TACB Research Division recently received a final report from Air Resource Specialists, Inc. of Fort Collins, Colo., on the analysis of photographic slides taken in a visibility study in El Paso. The TACB has been operating an automatic visibility camera in El Paso since December 19 as part of a study on visibility impairment in Texas cities. This camera takes photographs three times daily. The slides can then be analyzed by a computerized scanning densitometer for contrast variations.

Slides were analyzed by the TACB contractor for the period from December 19 to June 9. Considering all days during this time period, the camera recorded a visual range of at least 55 miles, 50 percent of the time. "This makes El Paso the city in Texas with the best overall average visibility," Keith Zimmermann, TACB atmospheric scientist, said. "However, El Paso is still plagued by episodes of severe haze about 10 percent of the time during the winter. Severe haze is defined in this case as haze, not related to humidity or precipitation, causing a visual range of less than 10 miles."

Copies of the report are available from Zimmermann, TACB Research Division, for $5.37 including tax and postage.■

Board Calendar

The Texas Air Control Board will not meet in the month of November. Meetings are tentatively scheduled for December 12 and January 16.

Brownwood

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Mgebroff said. They included xylene, cyclohexane, methyl ethyl ketone, aliphatic hydrocarbons, and ethyl acetate.

In both Houston and Brownwood, the mobile laboratory was operated on a 24-hour-a-day schedule, and the van on a 12-hour-a-day schedule. The laboratory and vans are used by the TACB in support of investigations by TACB regional offices in response to complaints about health effects or nuisance odors, and to assist regional directors in resolving questions about the presence of potentially toxic compounds in populated areas near industrial facilities.

The TACB's 12 regional offices are located in Abilene, Lubbock, Waco, Harlingen, Corpus Christi, Odessa, Houston, Fort Worth, San Antonio, Beaumont, El Paso, and Tyler. One-third of the TACB staff is assigned to those offices to investigate complaints, respond to emergencies, monitor air pollution, review applications for the construction of sources of air pollution, issue operating permits, and in a number of other ways carry out the program of the agency.■

Executive Director Eli Bell discussed the status of the State Implementation Plan for ozone at the Oct. 15 Dallas Chamber of Commerce Conference on Ozone and also at a recent meeting of the North Central Texas Council of Governments. Because problems he discussed are of concern throughout the state, the TACB Bulletin presents the following extracts.

TACB perspective on the ozone issue

Our agency realizes that there are only limited resources available for air pollution control and that the effective use of these resources will ultimately determine the success of our efforts to improve our air quality. We have found ozone control efforts to be extremely costly, both in terms of industrial economic expenditures and in terms of regulatory agancy manpower, and yet nonproductive in terms of reduced ozone levels. The inability to significantly reduce ozone levels concerns us, but so does the continued use of our limited resources to prepare and implement ozone strategies which restricts our ability to thoroughly address other air pollution problems. We do not advocate abandonment of all efforts to reduce ozone levels in our urban areas; however, we see the need for additional work on the causes and effects of high ozone levels. We believe the results of this work could form the basis of a cost-effective ozone control strategy.

In the meantime, regulatory agencies should have the opportunity to redirect some of the resources available for air pollution control programs to other potentially more productive efforts. For example, we believe that additional work in the area of toxic air contaminants and visibility impairment could produce significant health and welfare benefits for our citizens. Freeing-up resources from responding to federal requirements for additional ozone planning will, thus, remain a high priority for our agency...

POST-1982 SIP REVISIONS

By the end of 1982, EPA projected that many counties nationwide, including Dallas and Tarrant counties, would not meet the ozone standard during the summer "ozone" season. In February of 1983, EPA proposed economic and growth sanctions against these counties. However, in November 1983, EPA rescinded the sanctions proposal in areas where approved plans were being carried out by states. Instead, states were to submit additional plan revisions and in January 1984, EPA published guidelines for the new SIP revisions. On February 24, 1984, EPA issued a nationwide call for SIP revisions in those counties which failed to meet the national standards by the end of 1982. Dallas and Tarrant counties were included in the call.

On September 30, 1985, Governor White submitted the required plan revisions to EPA. These revisions included a number of new control measures to reduce volatile organic compound (VOC) emissions from industrial sources and from automobiles. Industrial sources are being required to tighten controls on degreasing operations, dry cleaning operations, surface coating operations, gasoline terminals, and process vents. In addition, any company proposing to modify an existing industrial plant or build a new industrial plant which would result in significant emission increases (100 tons per year) must document that equivalent emission reductions are occurring contemporaneously at the plant or in the area (offsets). Controls to reduce VOC emissions from automobiles include traffic reduction, traffic flow improvement measures, and an annual inspection of all 1980 and newer model year vehicles for signs of tampering with pollution control

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equipment or misfueling with leaded gasoline.

We have estimated that these control measures will result in reducing the annual VOC emissions in Dallas County by 26 percent. Although this represents substantial additional reductions, calculations made based on the current EPA control program guidance indicate the county VOC emissions must be reduced by 56 percent or an additional 30 percent by 1987, if the ozone standard is to be achieved. Since control measures are not currently available to reach this reduction requirement, it is our understanding that EPA plans to take no action, either approval or disapproval, regarding the recently submitted Dallas SIP revisions. Instead, we anticipate that EPA will publish approval of our VOC control regulations and call for continued and expanded efforts to reduce VOC emissions in the area.

FUTURE OZONE CONTROL REQUIREMENTS

Dallas and Tarrant counties are not unique in having ozone levels that at times exceed the standard or in not having sufficient VOC emission reductions available to demonstrate that the standard can be met. EPA expects that a number of major urban areas around the country will still experience exceedances of the standard after the 1987 attainment deadline. Therefore, EPA is currently working to develop new requirements for these areas.

Although the new policy has yet to be finalized, the following approaches seem to be considered by EPA to be key ingredients:

1) Improve the effectiveness of existing regulations and programs by ensuring program conformity and compliance.

2) Implement new control measures such as enhanced I/M, control of motor vehicle fueling and evaporative emissions, more stringent new source offset requirements and control of additional kinds of industrial processes.

"...additional controls will be required and will affect more people..."

3) Develop new plans to demonstrate attainment of the standard within a specified time period such as three years.

4) For areas unable to demonstrate attainment in their plans, require states to develop a Sustained Progress Plan to assess periodically the effectiveness of existing regulations and consider additional measures.

It is difficult for us to predict exactly how this new policy, if adopted, will affect the Dallas area. It is certain, however, that whatever control program is adopted by EPA, additional controls will be required and those controls will be even more costly and will affect even more people than have previously adopted measures. Some of the controls likely to be required in upcoming SIP's include:

1) I/M programs and industrial source controls in counties surrounding Dallas and Tarrant counties;

2) enhanced I/M program including tail pipe emissions testing;

3) motor vehicle fueling emissions controls such as Stage II vapor recovery and/or enhanced canisters on automobiles;

4) limits on gasoline vapor pressure; and

5) low VOC content coatings for architectural use and autobody refinishing.

Whenever and whatever is required in the next round of ozone SIP revisions, Texas and many other states will once again respond, for if an area does not submit a plant acceptable to EPA or does not carry through with the plan, EPA will have the authority to impose sanctions in the area. Those sanctions include withholding federal highway and sewage treatment funds and air pollution control grants and imposing a moratorium on industrial growth. With the potential economic repercussions of failure to submit or implement a plan this high, we will hope to work with area representatives to develop an ozone plan acceptable to both EPA and area citizens. In addition, however, we will continue to emphasize the need for additional information to help us to solve this problem and to work toward air quality improvements in the areas of toxic air contaminants and visibility impairment. ■

Clean Air Study Committee

Final draft of recommendations to Legislature to be ready by Dec. 1

The Legislature's Clean Air Study Committee report on its recommendations on three aspects of air pollution control is being prepared in the final draft form to meet the December 1 deadline set in 1985 amendments to the Texas Clean Air Act. No further meetings of the committee are scheduled at this time.

The committee was charged with the responsibility to study and report to the 70th Legislature with recommendations for action on the following issues:

1) Facilities that emit contaminants into the air and that have been allowed to operate without permits from the Texas Air Control Board because they were constructed or construction on them had begun before the Board's permitting program was implemented. (These are referred to as "grandfathered" facilities.)

2) The issuance of renewable permits.

3) Regulation of emissions into the air from ships.

Final recommendations adopted by the committee at its Sept. 5 and 19 meetings are:

Grandfathered facility permitting -- The Clean Air Study Committee, after study and consideration of the issue of whether grandfathered facilities should be permitted, recommends to the 70th Legislature of the State of Texas that permitting of grandfathered facilities should not be required. However, it is recommended that these grandfathered facilities continue to be reviewed and inspected for appropriate compliance.

Renewable permits -- The Clean Air Study Committee recommends that the permit renewal program be implemented in accordance with current statutory provisions and the procedures and timeframes outlined in Rule 116.12 of the Texas Air Control Board rules. The extent of the reviews conducted under this program should be commensurate with the funding provided by the Legislature through the appropriations process. If funding is not provided by the 70th Legislature through the appropriations process, the committee further recommends that Section 3.28(g) of the Texas Clean Air Act be repealed.

Regulation of emissions from ships -- The Clean Air Study Committee recommends that the 70th Legislature adopt the Resolution included with this report... to be forwarded to Congress in support of national review and action to establish consistent and appropriate control requirements.

The resolution defines the rationale for the committee's recommendation that the ships' emissions issue be dealt with at the national level, and concludes:

"Now, therefore, be it resolved, that the 70th Legislature of the State of Texas hereby urges the Congress of the United States to clearly define the United States Coast Guard jurisdiction over control of air emissions from marine vessels in the conduct of their normal activities and to require the United States Coast Guard, following completion of the study by the National Academy of Sciences' Committee on Control and Recovery of Hydrocarbon Vapors From Ships and Barges, to promptly determine, after consultation with the United States Environmental Protection Agency, what regulation of air emissions from ships and barges is necessary and appropriate recognizing the importance of uniformity and the effect on foreign trade; and the Congress and its committees and subcommittees involve the State of Texas and the maritime community in these studies and determinations..."■

Board adopts municipal solid waste regulation

At its meeting Oct. 24, the Board adopted Regulation XI, a new regulation entitled **Control of Air Pollution From Municipal Solid Waste Facilities.** It outlines procedures to be followed in reviewing permit applications for new or modified municipal solid waste facilities. The air emissions requirements for such facilities are also enumerated. Although the Texas Department of Health issues all permits for municipal solid waste facilities, the applications are subject to review by the TACB. The new TACB regulation and TDH's new Subchapter Q to Chapter 325 of its Municipal Solid Waste Management Regulations are in response to amendments to House Bill 2358 adopted by the 69th Legislature. These amendments stipulate the responsibilities of the TACB in relation to permit applications to the TDH for municipal solid waste facilities.■

TACB receives applications for four major projects

Two power plants, waste-to-energy facility, electronics assembly plant would represent capital investment of nearly $1.4 billion

The Texas Air Control Board has received applications for permits for four major construction projects with a total estimated capital cost of nearly $1.4 billion.

Each of the applicants paid the maximum permit fee of $50,000, which is required for projects with a capital cost of over $50 million. The Texas Clean Air Act authorizes permit fees as part of the TACB's cost-recovery requirement.

The applications are for an electronics assembly plant at Corinth, Denton County; a waste-to-energy plant at Austin; and two electric power generating plants, one at Calvert, Robertson County, and one at Gruver, Hansford County.

Boeing Electronics Co. of Seattle plans to build a plant at Corinth primarily for the assembly of aircraft electronic circuits. It will occupy approximately 200,000 square feet of production and office space. In terms of emissions of air contaminants and pollution control equipment required, the plant will be similar to other electronics plants in the Dallas and Austin areas, according to Lawrence Pewitt, TACB permits division director.

The emissions primarily will be volatile organic compounds such as xylene, styrene, and paint and lacquer thinners. Boeing has indicated it probably will use carbon adsorption technology to capture these emissions in the form of particulates. This permits the recovery of the chemicals from the carbonaceous material to which they become attached, according to James Caraway, TACB permits engineer.

The City of Austin plans to build a waste-to-energy plant southeast of Austin. The two 450-ton-per-day solid waste-fired mass burning incinerators will produce steam for the generation of 21 megawatts of electricity. This would be the largest municipally owned and operated plant of this type in the state. The TACB at its August 22 meeting granted a permit to American Ref-Fuel of Texas for the construction of a 1500-ton-per-day solid waste resource recovery facility at Pasadena which will burn municipal waste from Houston.

Gas scrubber, baghouse

The emissions from the Austin facility are proposed to be controlled by an acid gas scrubber and a baghouse, which is a large filter similar in operation to a vacuum cleaner. An acid gas scrubber sprays a slurry of an absorbant calcium hydroxide to neutralize such gases as hydrochloric acid, sulfuric acid, and hydrofluoric acid, commonly emitted in the combustion of solid waste. Particulate matter is removed in the baghouse.

The electric power-generating plants for which permits are being sought will use circulating fluidized bed boilers, a relatively new technology in the United States but in use in Europe for a number of years, according to James Crocker, TACB engineer.

The Texas-New Mexico Power Co., Dallas, plans to build a 600-megawatt power plant, the largest in the United States using a circulating fluidized bed boiler. It will be fueled with lignite. The combustion method is as follows: Sand or some other noncombustible material forms a "bed" in the boiler. This is placed in suspension by means of blown-in air and is heated, using natural gas. After it reaches the desired temperature, lignite is blown into the boiler and heated to the combustion state by the sand. The gas flame is then extinguished and the burning lignite maintains the sand's high temperature, which in turn ignites additional fuel as it is blown into the boiler.

Limestone may be mixed with the sand to trap sulfur dioxide, one of the most troublesome pollutants emitted by burning lignite. The limestone and sulfur dioxide form calcium sulfate, a solid, which falls to the bottom of the boiler. This is removed as necessary.

The Valley View Energy Corp., Dallas, has applied for a permit to construct a smaller (49 megawatt) electric power generating plant at Gruver which also will use a circulating fluidized bed boiler, but will be fueled with cow manure. The TACB granted the company a permit last year for a plant near Hereford, Deaf Smith

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All facilities regulated by permits required to install best available pollution controls

. . . continued from Page 13

County, which will burn cow manure as fuel.

The Texas-New Mexico plant, in addition to using limestone in the boiler, proposes to install a baghouse and other equipment to minimize emissions of sulfur dioxide, particulate matter, carbon monoxide, oxides of nitrogen, and volatile organic compounds. The Valley View plant proposes to install an acid gas scrubber to remove hydrogen chloride gas, and by adjusting the air-to-fuel ratio in the combustion unit design will control emissions of carbon monoxide and oxides of nitrogen. Sulfur dioxide fumes, which are not as significant in the burning of cow manure as in coal-fired units, will be controlled by the reaction of the sulfur dioxide gas with the calcium in the fuel, as well as by the acid gas scrubber.

The TACB requires the installation of the best available air pollution controls at all facilities regulated by permits. Before permits are issued, TACB permit engineers determine the level of public exposure to emissions, and TACB scientists determine whether this level poses a risk to public health and welfare. If it is found that there is a risk, the TACB requires the installation of additional pollution control equipment.

The state's primary control of air pollution is through the issuance of TACB permits which set maximum emission levels and require the best available pollution controls. Violation of permit requirements is cause for enforcement action.

Any time a person plans to build or modify a facility which may emit contaminants, a permit application must be submitted. Some facilities, because of insignificant emissions, qualify for a standard exemption from the permit requirements, Pewitt said. Persons who have constructed or modified facilities which emit pollutants into the air without having applied for permits should contact the TACB to determine their status in terms of compliance with state regulations, Pewitt said.

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