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**Category:** 59 – Designations

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON D.C. 20460

Office of  
Air and Waste Management

DATE: OCT 12, 1978

SUBJECT: Unclassified Counties with Significant VOC Point Source  
Emissions

FROM: David G. Hawkins, Assistant Administrator  
for Air, Noise, and Radiation

MEMO TO: Regional Administrator, Regions I-X

As a result of the recent petition by the State of New Jersey to review the 107 nonattainment designations, we have reviewed our policy regarding 107 designations and have reaffirmed our belief that many unclassified counties in the eastern part of the United States are likely to be in violation of the NAAQS for ozone. As you know, we have encouraged (but not required) Statewide nonattainment designations and the subsequent development of Statewide controls for volatile organic compound (VOC) sources. We should continue to encourage, but not require, Statewide VOC controls.

In order to reach a better position for deciding whether broader nonattainment designations are appropriate, I have requested the Office of Air Quality Planning and Standards to review and analyze in detail existing ambient air quality data. In particular, they will consider the area which can be assumed to be in violation of the photochemical oxidant standard, given a measured violation, and the suitability of aircraft data as an indicator of violations at the earth's surface. A contractual study to resolve these questions, using existing data, will be initiated in the near future.

Since there is a possibility that existing data will be insufficient to demonstrate that Statewide nonattainment designations for oxidants are appropriate, steps should be taken by the Regional Offices to identify or list those unclassified counties with high emissions that have a potential to exceed the standards. These would include counties which have large amounts of VOC emissions from major sources or large population within about 85 miles of an urban nonattainment area.

We have enclosed some information regarding those counties which have high point source VOC emissions and which are currently designated attainment or unclassified to assist you in preparing the above list for your Region. Once the list is prepared, the States should be encouraged, in the 1979 SIP submission for these counties, to require the application of RACT on all major sources of VOC emissions (greater than 100 t/yr

potential) for which EPA has issued a CTG by January 1, 1978. In addition, the 1979 plan should also contain a commitment to adopt and submit additional

legally enforceable regulations on an annual basis, beginning in January, 1980, for those CTGs that have been published by January of the preceding year.

If the State refuses to comply with this request, please require that additional ambient monitoring for ozone be conducted in each listed county as a specific grant provision during the next round of 105 grant negotiations.

If you have any questions regarding the above, please contact Walt Barber.

Enclosure

cc: Director, Air and Hazardous Materials Division, Regions I, III-X  
Director, Environmental Programs Division, Region II  
E. Tuerk  
W. Barber

## Enclosure

### Selection Procedure Followed

Objective: To identify 30-50 counties not presently designated nonattainment for ozone where VOC point source emissions may cause or contribute to violations of the O3 standard.

1. Prepare a list of all counties currently designated attainment or undesignated for O3. Rank order these counties by population and point source VOC emissions.<sup>1</sup>
2. Since additional ambient monitoring may be undertaken in such counties, arbitrarily select a limited number of counties from the listing above. Initially select the 50 counties with the highest point source emissions and the 50 counties with the highest population.
3. Since emphasis is on expanding RACT on point sources, and since the number of counties to be considered is limited (i.e., 30-50), delete all counties from the above listing that have VOC point source emissions less than 2500 TPY.

### Criteria for Selecting the Counties Suggested in Table 1

1. While high point source VOC emissions and population within the county are important, proximity to major urban areas where NMHC/NOx ratios are more favorable to O3 formation is also pertinent. Determine the proximity of each of the counties to major urban nonattainment areas.
2. Characteristics of Unclassified Counties Deserving Serious Consideration for Monitoring:
  - (1) High absolute amount of point source VOC emissions (i.e., >10,000 tons/yr) and located within 20-85 miles of urban nonattainment areas.<sup>2</sup>
  - (2) Counties which are on the "high emission" list and are adjacent to an urban nonattainment county.

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<sup>1</sup> In this analysis, point source VOC emissions are considered a key parameter, since point source emissions will generally not be controlled unless a county is designated "nonattainment." The magnitude of area source VOC emissions is less important, since area source emissions will be controlled to some degree by the FMVCP, regardless of whether a county is designated attainment or nonattainment.

<sup>2</sup> For this analysis, 85 miles was considered as the upper limit of the probable distance that VOC emissions would be transported and could participate in ozone formation. In other words, VOC emissions emitted within 85 miles of an urban nonattainment area are presumed capable of being transported to an area where the VOC emissions can react with available NOx to form ozone.

- (3) Counties which are on the "high emission" list, or on the "high population" list, and are within 20-85 miles of urban nonattainment areas.

TABLE 1

COUNTY	STATE	POINT SOURCE HC EMISSION	POPULATION (1970)	PROXIMITY TO URBAN NONATTAINMENT AREAS <sup>3</sup>
Calhoun	TX	63,805	17,831	85 miles
Winn <sup>4</sup>	LA	31,134	16,369	85 miles
Hutchinson <sup>5</sup>	TX	29,948	24,443	>85 miles
Butler	KS	22,792	38,658	35 miles <sup>6</sup>
Smith	TX	21,441	97,096	85 miles
McLeod	MN	18,998	27,662	30 miles <sup>4</sup>
Evangeline <sup>2</sup>	LA	18,017	31,932	75 miles
Moore <sup>3</sup>	TX	17,318	14,060	>85 miles
Forsyth	NC	16,732	214,348	85 miles
Gray <sup>3</sup>	TX	16,699	26,949	>85 miles
Stephens <sup>2</sup>	OK	16,104	35,902	75 miles
Kay <sup>2</sup>	OK	16,076	48,791	75 miles
Potter <sup>3</sup>	TX	14,527	90,511	>85 miles
Bell	TX	14,272	124,483	30 miles <sup>4</sup>
Guilford	NC	13,165	289,590	85 miles
Cameron <sup>7</sup>	TX	11,885	140,368	>85 miles
Kosciusko	IN	11,747	48,127	40 miles
Harrison	TX	10,174	44,841	30 miles <sup>4</sup>
Hertford	NC	9,885	23,529	65 miles

<sup>3</sup> Represents approximate distance from center of county to center of other county.

<sup>4</sup> These counties, each of which has substantial point source emissions, are relatively isolated counties. Less emphasis should be given to these counties than to others on this list.

<sup>5</sup> Potter, Hutchinson, and Moore Counties are located in North Texas and are adjacent to each other, with Gray County in close proximity. All have high point source emissions.

<sup>6</sup> Indicates county is adjacent to urban nonattainment county.

<sup>7</sup> Cameron, Texas has both high population and high point source emissions.

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COUNTY	STATE	POINT SOURCE HC EMISSION	POPULATION (1970)	PROXIMITY TO URBAN NONATTAINMENT AREAS <sup>8</sup>
Webster <sup>9</sup>	IA	9,876	48,391	70 miles
Clinton	IA	9,189	56,749	20 miles <sup>10</sup>
Meade	KY	9,102	18,796	30 miles
Matagorda	TX	8,845	27,913	85 miles
Kleberg	TX	8,702	33,166	40 miles
Johnson	TX	8,682	45,769	30 miles <sup>3</sup>
Dearborn <sup>11</sup>	IN	7,732	29,430	20 miles <sup>3</sup>
Franklin	KY	6,721	34,481	40 miles
Williamson	TX	6,561	27,305	30 miles <sup>3</sup>
Garfield <sup>2</sup>	OK	6,315	55,365	75 miles
McKinley <sup>2</sup>	NM	6,314	43,208	85 miles
Plaquemines	LA	6,150	25,225	30 miles <sup>3</sup>
Union <sup>2</sup>	LA	5,875	18,447	85 miles
Caldwell	NC	5,504	56,699	50 miles
Johnson	IN	5,114	61,138	15 miles <sup>3</sup>
Elkhart	IN	3,600	126,529	30 miles <sup>3</sup>
Sumter	SC	3,139	79,425	35 miles <sup>3</sup>
Snohomish	WA	2,664	265,236	40 miles <sup>3</sup>
LaPorte	IN	2,651	105,342	20 miles <sup>3</sup>

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<sup>8</sup> Represents approximate distance from center of county to center of other county.

<sup>9</sup> These counties, each of which has substantial point source emissions, are relatively isolated counties. Less emphasis should be given to these counties than to others on this list.

<sup>10</sup> Indicates county is adjacent to urban nonattainment county.

<sup>11</sup> Ozone monitoring data for this county may be available from an earlier study.