

UTAH STATE DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF AIR QUALITY
AIR QUALITY BOARD

REQUEST TO MAKE COMMENTS

NAME:	Reed Searle
ORGANIZATION OR AFFILIATION:	Intermountain Power Agency
GENERAL AREA OF COMMENT:	PSD wep10 rule
AMOUNT OF TIME REQUESTED:	3 minutes
WILL A WRITTEN COMMENT BE SUBMITTED?	yes-during public comment period.

(did not speak)



State of Utah

Utah Air Quality Board

Michael O. Leavitt
Governor

J. Howard Van Boerum
Chair

John M. Veranth
Vice Chair

Richard W. Sprott
Executive Secretary

Karl F. Brooks
David B. George
Dannie R. McConkie
Dianne R. Nielson
Richard R. Olson
Wayne M. Samuelson
JoAnn B. Seghini
Shelly Cordon Teuscher
Joseph D. Thompson

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AIR QUALITY BOARD MEETING

FINAL AGENDA

Wednesday
May 2, 2001
1:30 P.M.

168 N. 1950 W. (Building #2) Room 101

- I. Call to Order
- II. Date of Next Meeting
- III. Approval of Minutes of the April 4, 2001, Air Quality Board Meeting
- IV. **Propose for Public Comment:** R307-110-31 and SIP Section X.A, Revision to Inspection and Maintenance (I/M) Program SIP to Postpone On-Board Diagnostic (OBD) Test Requirements (**Bill Colbert**)
- V. **Propose for Public Comment:** R307-110-33 and SIP Section X.D, Salt Lake County Vehicle Emissions Inspection and Maintenance (I/M) Program (**Bill Colbert**)
- VI. **Propose for Public Comment:** Amend R307-110-34 and SIP Section X.D, Utah County's Vehicle Emissions Inspection and Maintenance (I/M) Program (**Bill Colbert**)
- VII. **Propose for Public Comment:** Amend R307-101-2, Definitions, and R307-405, Permits: Prevention of Significant Deterioration of Air Quality (PSD), to Adopt the Federal WEPCO New Source Permitting Provisions (**Colleen Delaney**)
- VIII. **Approval Order Request:** Holnam Incorporated (**John Jenks**)
- IX. **Amendment to Approval Order:** DAQE-0063-94, PacifiCorp Gadsby Power Plant (**Milka Radulovic**)
- X. **Approval Order Modifications:** Asphalt Materials (**E. Q. He**)
- XI. Information Items
 - A. Kennecott's Tailings Pond (**Rick Sprott**)
 - B. Compliance Activities for March 2001 (**Jeff Dean**)
 - C. HAPs Compliance Activities for March 2001 (**Bryce Bird**)
 - D. Monitoring Data for April 2001 (**Bob Dalley**)
 - E. SIPs Update (**Dave McNeill**)
- XII. Miscellaneous

- MINUTES -
UTAH AIR QUALITY BOARD MEETING
MAY 2, 2001

I. CALL TO ORDER

Howard Van Boerum called the meeting to order at 1:34 p.m.

Board members present:

J. Howard Van Boerum
Wayne M. Samuelson
Joseph D. Thompson

Shelly Cordon Teuscher
Karl F. Brooks
David B. George

JoAnn B. Seghini
Richard R. Olson
Dannie R. McConkie

Executive Secretary: Richard W. Sprott

II. DATE OF NEXT MEETING

The next Air Quality Board meeting will be held Wednesday, June 6, 2001, 1:30 p.m.

III. APPROVAL OF THE MINUTES OF THE APRIL 4, 2001, BOARD MEETING

Joseph Thompson made the motion to approve the minutes of the April 4, 2001, Board meeting. David George commented that some minor corrections need to be made, and those will be forwarded to Hannie Moeller. David George seconded the motion with the corrections. The motion passed.

IV. PRESENTATION TO RESIGNING BOARD MEMBERS

Richard Sprott, Executive Secretary to the Board, presented plaques to J. Howard Van Boerum and Shelly Cordon Teuscher in appreciation for their service as Air Quality Board members for the past eight years.

Ms. Teuscher expressed her appreciation for the opportunity to serve. Mr. Van Boerum responded with humorous comments about having been "...inducted into a society of professionals with a strange, unintelligible way of communication."

V. PROPOSE FOR PUBLIC COMMENT: R307-110-31 AND SIP SECTION X.A, REVISION TO INSPECTION AND MAINTENANCE (I/M) PROGRAM SIP TO POSTPONE ON-BOARD DIAGNOSTIC (OBD) TEST REQUIREMENTS

Presenter: Bill Colbert, Environmental Scientist, Mobile Source Section

Since 1992, EPA has made several amendments to the I/M rule and OBD testing requirements. The last amendment, April 5, 2001, extended the current deadline for mandatory implementation of the OBD-I/M inspection from January 1, 2001 to January 1, 2002. The requirement to implement OBD testing is found in Utah's SIP Section X.A. The only SIP change required as a result of EPA's new rule is to postpone the OBD implementation for one year, to January 1, 2002.

While the SIP is open for public comment, DAQ is taking the opportunity to remove appendices that are out of date and to move other appendices to the Technical Support Document.

Staff recommends the Board propose these changes for public comment.

- **MOTION**

Shelly Teuscher made the motion to propose R307-110-31 and SIP Section X.A for public comment. JoAnn Seghini seconded the motion. The motion passed.

VI. PROPOSE FOR PUBLIC COMMENT: R307-110-33 AND SIP SECTION X.D, SALT LAKE COUNTY VEHICLE EMISSIONS INSPECTION AND MAINTENANCE (I/M) PROGRAM

Presenter: Bill Colbert

Last fall, EPA promulgated Additional Flexibility Amendments to the Vehicle I/M Requirements. This rule change removed the mandatory I/M rule provision establishing the automatic decentralized, test-and-repair network credit discount and permits areas to demonstrate increased I/M program effectiveness of their networks. Salt Lake County's demonstration that its I/M program effectiveness is equivalent to a test-only network will be included in the SIP submittal to EPA.

Clean-up work will also be done on this section of the SIP.

- **MOTION**

Richard Olson made the motion to approve this item for public comment. Shelly Teuscher seconded the motion. The motion passed.

VII. PROPOSE FOR PUBLIC COMMENT: AMEND R307-110-34 AND SIP SECTION X.D, UTAH COUNTY'S VEHICLE EMISSIONS INSPECTION AND MAINTENANCE (I/M) PROGRAM

Presenter: Bill Colbert

Utah County's I/M program is a basic, decentralized test-and-repair network. The Utah County program has proven to be an effective program, and EPA will grant final approval via federal rulemaking action after SIP revisions document the program improvements.

Utah County has also revised its I/M ordinances to incorporate a new vehicle emissions test analyzer and data network which are Year 2000 and OBD compliant.

Staff recommends that the SIP revision be proposed for public comment.

Shelly Teuscher mentioned that the Utah County I/M program was a difficult issue. There was doubt as to whether the program would work. Utah County has done a wonderful job with their I/M program.

● **MOTION**

Shelly Teuscher made the motion to take to public comment the amendment to R307-110-34 and SIP Section X.D. Dannie McConkie seconded the motion. The motion passed.

VIII. PROPOSE FOR PUBLIC COMMENT: AMEND R307-101-2, DEFINITIONS, AND R307-405, PERMITS: PREVENTION OF SIGNIFICANT DETERIORATION OF AIR QUALITY (PSD), TO ADOPT THE FEDERAL WEPCO NEW SOURCE PERMITTING PROVISIONS

Presenter: Colleen Delaney, Environmental Scientist, SIP Section

DAQ is proposing to incorporate the changes EPA has made to the federal rule into the Utah permitting rules. These are primarily a series of definitions that have been incorporated into R307-101 and would affect the PSD permitting program in attainment areas and non-attainment NSR. In addition, certain specific definitions would apply only in the PSD attainment areas, and those are listed in R307-405.

Ms. Delaney discussed the three main changes that would be accomplished through adopting these new federal definitions:

1. A change for how a major modification is determined for electric utilities, basically big power plants.
2. Allow pollution prevention projects at major power plants to not be considered subject to these permitting rules because there would generally be a decrease in emissions.
3. Allow provisions for clean coal technology demonstration projects to be built in both attainment and non-attainment areas.

The proposed changes would incorporate the new federal language verbatim, with the exception of a few minor changes to make the requirements consistent with Utah's rules.

● **MOTION**

David George made the motion to propose for public comment amendment of R307-101-2, definitions, and R307-405. Karl Brooks seconded the motion. The motion passed.

IX. APPROVAL ORDER REQUEST: HOLNAM INC.

Presenter: John Jenks, Environmental Engineer, NSR Section

On March 4, 1999, Holnam Inc. was granted a variance for condition 8 of their Devil's Slide plant approval order which gives a limitation of 251 lbs/hr of NO_x emitted by the cement kiln baghouse. This variance was most recently extended on February 7, 2001. The extension was granted to provide time for Holnam to prepare and submit a notice of intent for a PSD (Prevention of Significant Deterioration) major modification approval order.

Holnam has completed all the steps required to obtain the required PSD permit. A public comment period was held, and the only comments received were from the source calling attention to some typographical errors and rule citations.

Board approval is required prior to issuing an approval order to any source which consumes more than 50% of the increments listed in R307-405-4. Modeling analysis shows that up to 97% of the increment is consumed in areas of elevated terrain surrounding the Devil's Slide plant, but these areas are not open to industrial development since steep slope angles make building in these areas prohibitive. Increment consumption along the valley floor in developable areas is less than 50%.

Staff recommends that Holnam Inc. be granted an approval order for their Devil's Slide plant PSD major modification.

- **MOTION**

Shelly Teuscher made the motion to grant approval for the Holnam Devil's Slide plant approval order. David George seconded the motion. The motion passed.

X. AMENDMENT TO APPROVAL ORDER: DAQE-0063-94, PACIFICORP GADSBY POWER PLANT

Presenter: Milka Radulovic, Environmental Engineer, NSR Section

PacifiCorp submitted a notice of intent to install and operate a temporary portable power generation facility adjacent to the existing Gadsby plant. To fulfill the required offset of 16.92 tons for PM₁₀ for the operation of the temporary project, PacifiCorp has lowered their current emissions by 16.92 tons per year from those listed in approval order DAQE-0063-94. For this emission change to be enforceable, an administrative amendment to the approval order is required. After the reduction, new PM₁₀ allowable emissions are 44.39 tons.

Since the Gadsby plant is a SIP source, the project requires approval by the Board. Staff recommends approval of this amendment.

- **MOTION**

David George made the motion to approve the amendment to the approval order for PacifiCorp's Gadsby power plant to allow them to lower their current emissions by the amount stated. Joseph Thompson seconded the motion. The motion passed.

XI. APPROVAL MODIFICATIONS: ASPHALT MATERIALS

Presenter: E.Q. He, Environmental Engineer, NSR Section

Asphalt Materials operates an asphalt recycling plant in West Jordan and a sand quarry in Bluffdale. The company has proposed to increase annual production for the asphalt recycling plant to 200,000 tons per year (from 50,000 tons) and to add a recycling plant to process road base at the Bluffdale site. The emission increases are less than the threshold to trigger the offset requirements and have little impact on the PM10 SIP and ozone maintenance plan. A 30-day public comment period was held and no comments were received.

Asphalt Materials is a PM10 SIP source; therefore, these modifications require Board approval. Staff recommends approval of the approval order modifications.

● MOTION

Joseph Thompson made the motion to approve this approval order modification. David George seconded the motion. The motion passed.

XII. INFORMATION ITEMS

A. Kennecott's Tailings Pond

Bill Williams, Vice President of Technical Services for Kennecott Utah Copper, addressed the Board about the dust problems at the tailings pond. Bill Adams and Doug Stauffer of Kennecott assisted Mr. Williams in his presentation.

Mr. Williams discussed the events of the past few weeks that led to the blowing dust, what is being done to correct the situation, and Kennecott's expectations with respect to the efforts that are being carried out at the present time.

Historically, Kennecott has seeded the tailings. About four weeks after seeding, enough growth occurs to control wind blown dust. In the past, this has worked quite well; however, the seeding has not done as well as expected in the area of concern. It became necessary to employ additional means to vegetate the area and keep the surface wet. This is a process that is balanced between being able to access the site and not being able to access. Also, it takes time to mobilize the necessary resources. The long-term objective is to have sustainable growth of vegetation that will prevent wind blown dust.

Bob Dalley of the Air Monitoring Center provided monitoring data which showed a PM10 reading of 201ug/m³ at the Magna monitoring station on March 14. This is an exceedance of the national standard for PM10. This should have been an early warning sign of problems at the tailings pond. On April 22, the Magna station measured a 156 ug/m³ reading, which also is an exceedance of the national standard, and there were visual observations of the tailings blowing into the Magna area.

Dave McNeill, DAQ, gave a brief summary of what the implications are of these two exceedances of the national standard. The standard, which is 150 $\mu\text{g}/\text{m}^3$, can be exceeded on the average of once per year if monitoring occurs every day, which means the standard can be exceeded three times in three years. Because DAQ monitors every third day, there are "expected exceedances."

In Section 189 of the Clean Air Act, it states that every moderate area, which is what Salt Lake County was originally designated, had to attain the National Ambient Air Quality Standards (NAAQS) by December 31, 1994. If an area was not able to demonstrate attainment of the standard by that time, then it was, by law, to be designated a serious PM10 non-attainment area. There is no way around that in the Clean Air Act. By statute, within four months of submitting data stating Salt Lake County has violated the NAAQS, EPA has to publish in the Federal Register a notice that Salt Lake County will be designated to a serious PM10 non-attainment area.

When this happens, within three years DAQ will have to submit a SIP to EPA referred to as a BACM (best available control measure) SIP. Major sources in the SIP will be required to apply BACM. What is not certain, is whether EPA will allow applying BACM only to Kennecott's tailings pond. Also, this will disallow Salt Lake County from submitting a redesignation request for three more years. By law, an area has to be in attainment for three years to be eligible to submit a redesignation request.

Paula Doughty of Kennecott commented that they also have a monitoring station in Magna that's monitoring PM10 data, and Kennecott's data came out significantly lower than DAQ's for the two days in question. Bob Dalley mentioned that Kennecott is using a Wedding volume flow control sampler. DAQ has used this sampler on two separate occasions and found, for AMC purposes, it doesn't work very well.

B. Compliance Activities

No comments or questions.

C. HAPs Activities

Bryce Bird pointed out that the large settlement with Chevron was negotiated prior to issuing a notice of violation. Chevron identified an omission on their part concerning the MACT standards and negotiated the settlement.

D. SIPs Update

Jan Miller informed the Board that EPA has approved the Ogden City carbon monoxide maintenance plan and redesignation request. It will become effective May 8, 2001.

E. Monitoring Activities

In addition to the info. given on the Kennecott tailings pond, Bob Dalley informed the Board that the summer ozone monitoring season began May 1.

The meeting adjourned at 3:13 p.m.



State of Utah

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MEMORANDUM

TO: Air Quality Board DAQ-041-01

THROUGH: Richard W. Sprott, Executive Secretary

FROM: Bill Colbert, Environmental Scientist

DATE: April 23, 2001

SUBJECT: Propose for Public Comment: R307-110-31 and SIP Section X.A, Revision to Inspection and Maintenance (I/M) Program SIP to Postpone On-Board Diagnostic (OBD) Test Requirements

Under the Clean Air Act as amended in 1990, 42 U.S.C. 7401 *et seq.*, states required to implement vehicle inspection and maintenance (I/M) programs were further required to incorporate a check of the onboard diagnostic (OBD) computer as part of those programs. Since 1992, EPA has twice amended the I/M rule to address various aspects of the OBD-I/M check--first, on August 6, 1996, and again on May 4, 1998.

On April 5, 2001, EPA once more amended the I/M rule and OBD testing requirements to provide states with greater flexibility to better meet local needs, to update requirements based upon technological advances, and to optimize program efficiency and cost effectiveness. These amendments extend the current deadline for mandatory implementation of the OBD-I/M inspection from January 1, 2001 to January 1, 2002.

The requirement to implement OBD testing is found in Utah's SIP X.A. The only SIP change required as a result of EPA's new rule is to postpone the OBD implementation for one year, to January 1, 2002.

However, staff is taking the opportunity, while the SIP is open for public comment, to remove appendices that are out of date and to move other appendices to the Technical Support Document that is submitted to EPA with the change in the SIP text. The materials to be moved are required by EPA in order to document the workings of the I/M program, but they are not enforceable and do not need to be part of the SIP itself. They add considerable bulk to the size of the SIP. Similar changes are made in Sections X.C and X.D, also on the Board's agenda for amendments.

Staff Recommendation: Staff recommends the board propose the changes for public comment.

R307. Environmental Quality, Air Quality.

R307-110. General Requirements: State Implementation Plan.

R307-110-31. Section X, Vehicle Inspection and Maintenance Program, Part A, General Requirements and Applicability.

The Utah State Implementation Plan, Section X, Vehicle Inspection and Maintenance Program, Part A, General Requirements and Applicability, as most recently amended by the Utah Air Quality Board on [~~October 7, 1998~~ August 1, 2001], pursuant to Section 19-2-104, is hereby incorporated by reference and made a part of these rules.

**KEY: air pollution, small business assistance program*,
particulate matter*, ozone**

[~~February 10, 2000~~ 2001

19-2-104(3)(e)

Notice of Continuation June 2, 1997

UTAH STATE IMPLEMENTATION PLAN

SECTION X

VEHICLE INSPECTION AND MAINTENANCE PROGRAM

PART A

GENERAL REQUIREMENTS AND APPLICABILITY

Adopted by the Utah Air Quality Board
[~~October 7, 1998~~]August 1, 2001

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GENERAL REQUIREMENTS AND APPLICABILITY
APPENDICES**

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 - ~~1.b Utah Code 41-6-163:168~~
 - ~~1.c Utah Code 41-1a-201:221~~
 - ~~1.d Utah Code 41-1a-1301:1318 and 41-1a-401:406~~
 - ~~1.e Utah Code 76-3-204 and 76-3-301:302~~
 - ~~1.f House Concurrent Resolution of the 1994 General Session~~~~

- ~~2 Exemption Documentation
 - ~~2.a Farm Plate Criteria~~
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- ~~4 UTAH91 Analyzer Specifications~~

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UTAH STATE IMPLEMENTATION PLAN
SECTION X
AUTOMOTIVE INSPECTION AND MAINTENANCE (I/M) PROGRAM
PART A
GENERAL REQUIREMENTS AND APPLICABILITY

1. General Requirements

Federal I/M Program requirements This SIP revision demonstrates compliance with the federal Basic I/M standards specified in 40 CFR 51 Subpart S, "Inspection/Maintenance Program Requirements" [~~published as a final rule by the U.S. Environmental Protection Agency (EPA) in the Federal Register on November 5, 1992]~~last amended at 66 FR 18156, April 5, 2001, as required by Section 182 of the Clean Air Act. The EPA I/M rule establishes a program performance standard and other requirements that will provide more effective control of carbon monoxide and ozone precursor emissions. The Utah State Implementation Plan establishes more stringent requirements for each designated I/M county. The requirements for Davis, Salt Lake, Utah and Weber Counties are described in parts B, C, D and E of this section.

On-Board Diagnostics (OBD) Checks By January 1, [~~2001~~]2002, OBD checks and OBD-related repairs are required as a routine component of basic and enhanced I/M programs on model year 1996 and newer light-duty vehicles and light-duty trucks equipped with certified on-board diagnostic systems. The federal performance standard requires repair of malfunctions or system deterioration identified by or affecting OBD systems.

Utah I/M program history and general authority The legal authority for Utah's I/M programs, Section 41-6-163.6, was enacted during the First Special Session of the Utah legislature in 1983. [~~(See Section X, Part A, Appendices for 41-6-163:168)]~~ I/M programs were initially implemented by Davis and Salt Lake Counties in 1984 and by Utah County in 1986. Section 41-6-163.5, also enacted in 1983, provided for automatic repeal of the I/M program authority upon attainment of the National Ambient Air Quality Standards (NAAQS). Section 41-6-163.5 was repealed in 1989.

In 1990, the legislature enacted Section 41-6-163.7 that requires that I/M counties use computerized I/M testing equipment, adopt standardized emission standards, and provide for reciprocity. Those requirements were fully implemented by Davis, Salt Lake, and Utah Counties on September 1, 1991, and by Weber County on January 1, 1992.

Section 41-6-163.6 was again amended by the legislature in 1992 to include vehicles owned and operated by the federal government, federal employees, and students and employees of colleges and universities. The 1992 revision of 41-6-163.6 also established more stringent restrictions for vehicles that qualify for a farm truck exemption.

Amendments to Section 19-2-104 made in 1992, authorize the Utah Air Quality Board to establish requirements for county I/M programs after obtaining agreement from the affected counties. [~~See Section X, Part A, Appendices for 19-2, the Utah Air Conservation Act~~] The same bill amended Section 41-6-163.6 to allow the counties to subject individual motor vehicles to inspection and maintenance at times other than the annual inspection. This authority was sought in anticipation of adding an on-road testing element to the current I/M programs as soon as funding is available.

Section 41-6-163 was amended in 1994 to authorize implementation of I/M programs stricter than minimum federal requirements in counties where it is necessary to attain or maintain ambient air quality standards. Section 41-6-163 requires preference be given to a decentralized program to the extent that a decentralized program will attain and maintain ambient air quality standards and meet federal requirements. It also requires affected counties and the Air Quality Board to give preference to the most cost effective means to achieve and maintain the maximum benefit with regard to air quality standards and to meet federal air quality requirements related to motor vehicles. The legislature indicated preference for a reasonable phase-out period for replacement of air pollution test equipment made obsolete by program in accordance with applicable federal requirements, and if such a phase-out does not otherwise interfere with attainment of ambient air quality standards.

House Concurrent Resolution No. 9 of the 1994 General Session of the legislature (H.C.R. 9) was a concurrent resolution of the legislature and the governor expressing opposition to the EPA position regarding the implementation of enhanced automobile inspection and urging the EPA to recognize the benefits of other automobile inspection program options and to work with the state to develop workable plans for attaining ambient air quality standards and protecting public health. [~~A copy of H.C.R. 9 is provided in Appendices of Section X, Part A.~~] Parts B, C, D and E of this section document state I/M requirements and applicability that are specific to Davis, Salt Lake, Utah and Weber Counties, respectively.

In 1995, the legislature amended Section 41-6-163.7 to rescind the requirement for I/M program standardization and reciprocity between counties. Consequently, standardization and reciprocity between I/M counties is no longer required, each I/M county is free to develop an I/M program that best meets the respective county's needs.

2. Applicability

Technical Support Documentation (TSD) Tab ____: ZIP codes for affected counties

General Applicability All of Utah's ozone and carbon monoxide non-attainment and maintenance areas are located in the four counties where Utah's State Implementation Plan for Automotive Inspection and Maintenance (I/M) Program is applicable.

U.S. BUREAU OF CENSUS POPULATION FOR OZONE NON-ATTAINMENT AREAS

Ozone non-attainment Area	1980 Census	1990 Census
Salt Lake County	619,066	725,956
Davis County	146,540	187,941
Total	765,606	913,897

U.S. BUREAU OF CENSUS POPULATION FOR CARBON MONOXIDE NON-ATTAINMENT AREAS

CO non-attainment Area	1980 Census	1990 Census
Ogden City	64,407	63,909
Provo City	74,111	86,835
Salt Lake City	163,034	159,936
Total	301,552	310,683

EPA's requirement for minimum mandatory geographic coverage for Basic I/M programs is the urbanized area in which an applicable nonattainment and maintenance area is located. Parts of Utah's carbon monoxide and ozone nonattainment and maintenance areas are geographically located within the following U.S. Bureau of Census urbanized areas. There is no direct correspondence between the geographic boundaries of the nonattainment and maintenance areas, the urbanized areas, and Utah's I/M programs.

1990 U.S. BUREAU OF THE CENSUS DATA FOR NON-ATTAINMENT URBANIZED AREAS

Urbanized Areas	1980 Census	1990 Census
Ogden Urbanized Area	205,744	259,147
Provo-Orem Urbanized Area	169,699	220,556
Salt Lake Urbanized Area	<u>674,201</u>	<u>789,447</u>
Total	1,049,644	1,269,150

Utah's State Implementation Plan for I/M is applicable county-wide in Davis, Salt Lake, Utah, and Weber Counties. The carbon monoxide and ozone nonattainment and maintenance areas and the associated urbanized areas are located completely within these

four counties. Utah's carbon monoxide and ozone nonattainment and maintenance areas are located in two metropolitan statistical areas (MSAs), the Provo-Orem MSA and the Salt Lake City-Ogden MSA. The Provo-Orem MSA includes all of Utah County. The Salt Lake City-Ogden MSA includes all of Davis, Salt Lake, and Weber Counties.

1990 U.S. BUREAU OF THE CENSUS DATA FOR UTAH I/M PROGRAM AREAS

County	1980 Census	1990 Census
Davis	146,540	187,941
Salt Lake	619,066	725,956
Utah	218,106	263,590
Weber	144,616	158,330
Total	1,128,628	1,335,817

Enforcement mechanism The I/M programs are registration-enforced on a county-wide basis. Section 41-6-163.6(1) requires that a certificate of emissions inspection or a waiver or other evidence that the motor vehicle is exempt from the I/M program requirements be presented prior to registration of a motor vehicle in the counties where I/M programs are required.

Applicable zip codes Federal I/M regulations require submittal of a list of ZIP codes for I/M program areas. EPA plans to use ZIP codes to help I/M programs identify vehicles subject to emissions-related recalls by the manufacturer. This I/M program element is only mandatory in areas where enhanced I/M is explicitly required by the Clean Air Act. Participation in the database and access to the information will provide consumer and air quality benefits should Utah's I/M programs elect to participate when the system is developed. [~~The ZIP codes covered by Utah's I/M programs, in whole or in part, as specified by county in the United States Postal Service's 1995 Utah Zip Code Directory are found in Appendix 3 of Section X, Part A.~~]

Test frequency Vehicles are tested on an annual basis. A certificate of emissions inspection or a waiver or other evidence that the vehicle is exempt from the I/M program requirements must be presented at the time of, and as a condition precedent to, registration or renewal of registration of a motor vehicles as specified in Section 41-6-163.6 [~~(Section X, Part A, Appendices)~~] and 41-1a-203(1)(c) [~~(Section X, Part A, Appendices)~~]. The I/M inspection is required within two months prior to the month the registration renewal is due. Owners of vehicles operated without valid license plates or with expired license plates are subject to ticketing by peace officers at any time. Registration status is also checked on a random basis at roadblocks and in parking lots at various locations around the state. Per Section 41-1a-402 [~~(Section X, Part A,~~

~~Appendices~~), Utah license plates indicate the county of registration and the expiration date of the registration.

Valid registration required Per Section 41-1a-1303 [~~Section X, Part A, Appendices~~], it is a Class C misdemeanor for a person to drive or move, or for an owner knowingly to permit to be driven or moved upon any highway any vehicle of a type that is required to be registered in the state that is not registered in the state. Section 41-1a-1315 specifies that it is a second degree felony to falsify evidences of title and registration.

Registration schedules Section 41-1a-215 [~~Section X, Part A, Appendices~~] specifies that vehicle registration dates are staggered throughout the year. Registrations continue for a period of twelve months beginning with the first day of the calendar month of registration and does not expire until the last day of the same month in the following year. Vehicle owners are not able to alter the test frequency by late registration of the vehicle. Section 41-1a-216 says that "the new registration shall retain the same expiration month as recorded on the original registration even if the registration has expired" unless the vehicle has been out of service. This provision ensures that the vehicles are tested on an annual basis.

Change of ownership Vehicle owners are not able to avoid the I/M inspection program by changing ownership of the vehicle. Upon change of vehicle ownership the vehicle must be re-registered by the new owner. The new owner must present an emissions certificate, waiver, or proof of exemption from the I/M program as a condition precedent to registration. The I/M documents must be dated no more than two months prior to the registration date. The new annual registration and I/M inspection dates for the vehicle will be the date of registration.



State of Utah

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MEMORANDUM

TO: Air Quality Board DAQ-042-01

THROUGH: Richard W. Sprott, Executive Secretary

FROM: Bill Colbert, Environmental Scientist

DATE: April 13, 2001

SUBJECT: Propose for Public Comment: R307-110-33 and SIP Section X.D, Salt Lake
County Vehicle Emissions Inspection and Maintenance (I/M) Program

The Ozone Maintenance Plan, section IX.D.2 of the State Implementation Plan (SIP), requires Salt Lake County to implement improvements to their vehicle inspection and maintenance (I/M) programs, beginning in 1998, to reduce emissions of ozone precursors.

Salt Lake County implemented its I/M program in 1998. The program consists of a 2-speed dynamometer test. In addition, the technicians do a pressure test of the gas cap to ensure that it is functioning properly. All 1968 and newer model year light-duty vehicles, light-duty trucks and heavy-duty trucks are tested on an annual basis in a decentralized, test-and-repair network.

Last fall, EPA promulgated Additional Flexibility Amendments to the Vehicle I/M Requirements. This rule change removed the mandatory I/M rule provision establishing the automatic decentralized, test-and-repair network credit discount and permits areas to demonstrate increased I/M program effectiveness of their networks. Salt Lake County's demonstration that its I/M program effectiveness is equivalent to a test-only network will be included in the SIP submittal to EPA.

Staff recommendation: Staff recommends the Board propose the changes for public comment.

R307. Environmental Quality, Air Quality.

R307-110. General Requirements: State Implementation Plan.

R307-110-33. Section X, Vehicle Inspection and Maintenance Program,, Part C, Salt Lake County.

The Utah State Implementation Plan, Section X, Vehicle Inspection and Maintenance Program, Part C, Salt Lake County, as most recently amended by the Utah Air Quality Board on [~~February 5, 1997~~]August 1, 2001, pursuant to Section 19-2-104, is hereby incorporated by reference and made a part of these rules.

KEY: air pollution, small business assistance program*,

particulate matter*, ozone

[~~February 10, 2000~~]2001

19-2-104(3)(e)

Notice of Continuation June 2, 1997

UTAH STATE IMPLEMENTATION PLAN

SECTION X

**VEHICLE INSPECTION
AND MAINTENANCE PROGRAM**

PART C

SALT LAKE COUNTY

Adopted by the Utah Air Quality Board
[February 5, 1997] August 1, 2001

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SECTION X, PART C
SALT LAKE COUNTY
Appendices

- 1 Motor Vehicle I/M Program Ordinances
 - 1.a ~~[Salt Lake City-County Health Department Health Regulation #22 Governing the Motor Vehicle Emissions Inspection Maintenance Program for the Control of Air Contaminant Emissions from Motor Vehicles, revised 1993~~
 - ~~1.b] Salt Lake City-County Health Department Health Regulation #22A Governing the Motor Vehicle Emissions Inspection Maintenance Program for the Control of Air Contaminant Emissions from Motor Vehicles, 1996~~
 - 1.b Salt Lake City-County Board of Health Resolution - Fees
 - 1.c Salt Lake County Commission Resolution
- ~~[2 Attorney General's Letter~~
- ~~3 County Attorney and Board of Health Letters~~
- ~~4 Audit Policies~~
- ~~5 Out-of-state Vehicle Notification Letter~~
- ~~6 Resources, Staff, Budget, Facilities and Equipment~~
- ~~7 Inspector Training~~
- ~~8 Auditor Training~~
- ~~9 MOBILE5 Modeling~~
- ~~9.a Basic I/M Mobile 5.a Model Methodology and Documentation~~
- ~~9.b Enhanced I/M Mobile 5.a.h Model Methodology and Documentation~~
- ~~10 ASM2 Specification]~~

UTAH STATE IMPLEMENTATION PLAN
SECTION X
AUTOMOTIVE INSPECTION AND MAINTENANCE (I/M) PROGRAM
PART C
SALT LAKE COUNTY

1. I/M performance standard

Technical Support Documentation (TSD), Tabs _____ : MOBILE5.a input and output files for modeling; demonstration of program effectiveness

Federal requirements EPA's I/M regulation, 40 CFR Part 51, Inspection and Maintenance Program Requirements, [~~Final Rule November 5, 1992~~]last amended at 66 FR 18156, April 5, 2001, specifies a model Basic I/M program. Utah is required by Section 182 of the Clean Air Act to implement an I/M program in Salt Lake County that is at least as effective as the EPA's Basic Performance Standard. The Basic I/M performance standard is specified in 40 CFR 51.352. Regulators are not required to implement the exact elements specified in EPA's model I/M programs. EPA's I/M regulations instead require a performance demonstration that local I/M programs result in automotive emissions equal to or less than predicted for the EPA model I/M program. State and local governments may choose options best suited for their area to meet the performance standard.

[Basic] I/M Performance Standard Salt Lake County [~~'s Basic~~] began its I/M program in 1984. The I/M program exceeds the Basic I/M performance standard for all pollutants. Salt Lake County [~~is in a moderate ozone non-attainment area~~]was redesignated as attainment for ozone on July 17, 1997 and is not classified for carbon monoxide. [~~Achieving EPA's Basic I/M performance standard in Salt Lake County will result in no increase in NO_x as a result of the Basic I/M program.~~]

Salt Lake County I/M program requirements The Utah Air Quality Board adopted an ozone maintenance plan for Salt Lake and Davis Counties on November 5, 1993. The plan was reorganized and adopted on January 5, 1995. Revisions to the ozone maintenance plan were adopted by the Board on June 5, 1996, and January 7, 1997; EPA approved the plan on July 17, 1997. The ozone maintenance plan required implementation of an **improved** I/M program no later than January 1, 1998. The ozone maintenance plan established a performance standard for both counties that is more stringent than the federal Basic I/M performance standard. Parts A and C of Section X, together with referenced appendices, demonstrate compliance with the **improved IM program** for Salt Lake County as specified in Part IX.D.2.g of the Ozone SIP and herein after referenced as Salt Lake County's UTAH98 Program.

[Basic]UTAH98 I/M Program MOBILE modeling The performance standard demonstration made use of EPA's MOBILE[5.a] model. MOBILE5.a.h was used for

the UTAH98 I/M program performance standard demonstration analysis. The MOBILE5.a.h model is able to calculate emission factors, grams of a particular pollutant per vehicle mile traveled across the fleet in an area (G/VMT), given information about the fleet, climate, fuel characteristics, and I/M programs in a local area. [MOBILE5.a was used for the Basic I/M performance standard demonstration analysis. The MOBILE5.a input and output files for the modeling performed to evaluate the emission reduction benefits for Salt Lake County's Basic I/M program are found in the Appendices for Section X, Part C.] Table X.C.1 summarizes the [attainment milestones, the applicable performance standard and program target emission factors for VOC, CO and NO_x for the Basic I/M program] modeled VOC, CO and NO_x emission factors specified in Section IX, Part D.2 of the Ozone Maintenance Plan for the UTAH98 I/M program. The modeling demonstrates compliance with both the federal Basic I/M performance standard [as required by the ozone maintenance plan until the UTAH98 Enhanced I/M program is implemented] and the Ozone Maintenance Plan Basic I/M performance standard. Attainment of this performance standard only required I/M emission benefits derived from a test-and-repair network. Subsequent to this demonstration, EPA promulgated Additional Flexibility Amendments to the Vehicle Inspection Maintenance Requirements effective August 23, 2000. This rule change removed the mandatory I/M rule provision establishing the decentralized, test-and-repair network credit discount and permits areas to demonstrate increased I/M program effectiveness of their networks. Future MOBILE modeling of the Salt Lake County I/M program will take advantage of this credit.

[SALT LAKE COUNTY BASIC I/M PERFORMANCE STANDARD ANALYSIS SUMMARY
(Basic I/M program effective until replaced by UTAH98 Enhanced I/M program no later than January 1, 1998)]

pollutant	program modeled	emission factors in grams/mile			
		January 1	1997	2000	2003
VOC	Basic Performance Standard		2.70	2.47	2.30
	Basic Program Target		2.66	2.40	2.22
NO _x	No I/M or ATP Program		2.60	2.38	2.23
	Basic Program Target		2.53	2.32	2.17
		January 1	1996	2000	
CO	Basic Performance Standard		22.85	18.69	
	Basic Program Target		21.14	17.83	

TABLE X.C.1]

SALT LAKE COUNTY UTAH98 I/M PERFORMANCE STANDARD ANALYSIS SUMMARY

pollutant	program modeled	emission factors in grams/mile				
		July 1	1998	2000	2003	2006
VOC	<u>Basic Performance Standard</u>			2.47	2.30	
	<u>UTAH98 Performance Standard</u>		2.09	1.85	1.63	1.47
	<u>UTAH98 Program Target</u>		2.09	1.85	1.63	1.47
NO _x	<u>No I/M, No ATP</u>			2.38	2.23	
	<u>UTAH98 Performance Standard</u>		2.20	1.96	1.81	1.76
	<u>UTAH98 Program Target</u>		2.20	1.96	1.81	1.76
CO	<u>Basic Performance Standard</u>			18.69		
	<u>UTAH98 Performance Standard</u>		15.46	12.65	10.56	9.29
	<u>UTAH98 Program Target</u>		15.46	12.65	10.56	9.29

TABLE X.C.1

~~[Salt Lake County UTAH98 Enhanced I/M program requirements The Utah Air Quality Board adopted an ozone maintenance plan for Salt Lake and Davis Counties on November 5, 1993. The plan was reorganized and adopted on January 5, 1995. Revisions to the ozone maintenance plan were adopted by the Board on June 5, 1996, and January 7, 1997. The ozone maintenance plan requires implementation of an enhanced I/M program no later than January 1, 1998. The ozone maintenance plan established a performance standard for both counties that is more stringent than the federal Basic I/M performance standard. Parts A and C of section X, together with referenced appendices, demonstrate[s] compliance with the enhanced IM program for Salt Lake County as specified in Part IX.D.2.g of the Ozone SIP and herein after referenced as Salt Lake County's UTAH98 Enhanced Program.~~

~~UTAH98 Enhanced I/M Program MOBILE modeling The performance standard demonstration is made by use of the most recent release of EPA's MOBILE model. The MOBILE5.a.h model is able to calculate emission factors, grams of a particular pollutant per vehicle mile traveled across the fleet in an area (G/VMT), given information about the fleet, climate, fuel characteristics, and I/M programs in a local area. MOBILE5.a.h was used for the UTAH98 Enhanced I/M program performance standard demonstration analysis. The performance demonstration summary and Mobile 5.a.h input and output files for the performance demonstration analysis for the UTAH98 Enhanced I/M program are found in Section X, Part C, Appendices. Table X.C.2 summarizes the modeled VOC, CO and NO_x emission factors specified in Section IX, Part D.2 of the Ozone Maintenance Plan for the UTAH98 Enhanced I/M program. The modeling demonstrates compliance with both the federal Basic I/M performance standard and the ozone maintenance plan Basic I/M performance standard~~

SALT LAKE COUNTY UTAH98 ENHANCED I/M PERFORMANCE STANDARD ANALYSIS SUMMARY
 (UTAH98 Enhanced I/M Program to replace the Basic I/M program no later than January 1, 1998)

pollutant	program modeled	emission factors in grams/mile				
		July 1	1998	2000	2003	2006
VOC	Basic Performance Standard			2.47	2.30	
	UTAH98 Performance Standard		2.09	1.85	1.63	1.47
	UTAH98 Program Target		2.09	1.85	1.63	1.47
NO _x	No I/M, No ATP			2.38	2.23	
	UTAH98 Performance Standard		2.20	1.96	1.81	1.76
	UTAH98 Program Target		2.20	1.96	1.81	1.76
CO	Basic Performance Standard			18.69		
	UTAH98 Performance Standard		15.46	12.65	10.56	9.29
	UTAH98 Program Target		15.46	12.65	10.56	9.29

TABLE X.C.2]

The PM₁₀ contingency plan adopted on July 1, 1994, requires implementation of an [enhanced]improved I/M program in Davis and Salt Lake Counties if Salt Lake County violates the PM₁₀ standard. Commitments from the Salt Lake County Commissioners to implement an [enhanced]improved I/M program, as required by the SIP, are in Section IX, Part A, Appendix 1. The [enhanced]improved I/M program can be revised in the future by the Salt Lake County Commissioners as long as the revised program meets all the applicable performance standards documented in the Ozone SIP, Section IX.D.

2. Network type

TSD Tabs _____ : Letters of opinion from the Utah Attorney General's Office and the Salt Lake County Attorney's offices verifying the authority to implement the specified network in Salt Lake County

Salt Lake County's [Basic]I/M program [is currently a basic]comprises a decentralized, test-and-repair [system consisting of]network with approximately [400]310 stations. [Beginning January 1, 1998, the UTAH98 Enhanced I/M network will use ASM2 (BAR97) inspections in a decentralized test and repair network. Letters of opinion from the Utah Attorney General's Office and the Salt Lake County Attorney's offices verifying the authority to implement the specified network in Salt Lake County are provided in Section X, Part C, Appendices, along with] The UTAH98 network provides ASM2 tailpipe inspections in a decentralized test-and-repair network for light duty gasoline vehicles. Vehicles exceeding 8500 lbs GVWR and/or with full-time four wheel or all wheel drive undergo a Two-Speed Idle (TSI) inspection. Salt Lake [County] Valley H[h]ealth Department regulations administering the program are provided in Appendix C.1.

3. Tools and resources

TSD Tabs : Budgets and descriptions of personnel resources, facilities and equipment

Funding mechanisms Salt Lake County's I/M program is funded through two mechanisms. At the time of registration, a fee of [~~\$1~~]\$3 per car is collected by the Salt Lake County Tax Assessor's Office or Utah Tax Commission Motor Vehicle Customer Service Division. Those monies are remitted to the county and [~~in which the vehicle is registered.~~ Under its Basic I/M program, Salt Lake County sells the emissions certificates for \$23 each. This fee is projected to increase to \$3 after implementation of the UTAH98 Enhanced I/M program. ~~F~~]the fees are dedicated to I/M needs. [~~Furthermore~~]In addition, the County charges fees for various permitting activities. A fee schedule can be found in Appendix C of the [~~Salt Lake City-County Regulation #22 for the Basic I/M program and~~]Salt Lake City-County Regulation #22A for the UTAH98 [~~Enhanced~~]I/M program. [~~The county put the fee schedule into appendices so that it can be revised quickly, as needed, to support the program without taking the entire document through rulemaking. Salt Lake County began its I/M program in 1984. Past performance has demonstrated that adequate funding of the county's I/M program can be maintained in this manner.~~]

Funding requirements Salt Lake County will continue to allocate funding as needed to comply with the relevant requirements specified in Utah's SIP; Utah statutes; county regulations and policies; and the federal I/M program regulation. Program budgets will include funding for resources necessary to adequately: manage the program; conduct covert and overt audits, including repairs as specified in Section [~~X.C.~~]13 below; assist and educate inspectors, repair technicians, station owners, and the public; manage, analyze, and report data; ensure compliance with the program by inspectors, stations, and vehicle owners; and evaluate and upgrade the programs. [~~Budgets and descriptions of personnel resources, facilities, and equipment for Salt Lake County's I/M program are provided in Section X, Part C, Appendices.~~]

4. Test convenience

There are approximately [~~400~~]310 [~~permitted~~] [~~Basic~~] I/M stations currently [~~available~~]permitted within Salt Lake County. [~~Salt Lake County estimates that this number may decrease by 10-15% when the UTAH98 Enhanced I/M program is initially implemented. Specific o~~]Operating hours are not specified by the county. However, an I/M technician must be available for at least 40 hours per week at facilities open to the public. Some stations that test and service only one type of vehicle are permitted. [~~It may not be practical to have a sports car tested at a heavy duty truck repair facility.~~] Also there are government and private fleet permitted stations that are not open to the public.

5. Vehicle Coverage

TSD Tab : Statistics for the subject vehicle fleet by vehicle type, model year, vehicle class and weight class; waiver policies; sample letter regarding out-of-state exemption.

Subject fleet The Salt Lake County health regulations specify that all model year 1968 and newer model year light duty vehicles, light duty trucks, and heavy duty trucks registered or principally-operated in Salt Lake County are subject to the I/M program except for exempt vehicles. Vehicle coverage is discussed in greater detail in the Salt Lake County health regulations provided in Section X, Part C, Appendices. [~~Statistics for the subject vehicle fleet by vehicle type, model year, vehicle class, and weight class are included in Appendices for Section X, Part C.~~] The data was compiled for the 1990 emissions inventory and has been subjected to a comprehensive quality assurance effort.

Alternative fuels Vehicles operated on alternative fuels such as propane, alcohol, and natural gas are also subject to the program. Dual-fueled vehicles are tested twice, once on each fuel.

Government fleet Section 41-6-163.6(1)(b) of the Utah Code requires that all vehicles owned or operated in the I/M counties by federal, state, or local government entities comply with the I/M programs. Salt Lake County permits government stations and certifies inspectors to perform I/M inspections. The I/M station permit and inspector certification requirements are the same for government fleets as for private or commercial stations and inspectors. Some government agencies choose to have their vehicles inspected at a commercial I/M station. Salt Lake County requires submittal of a list of subject vehicles and a certificate of compliance or waiver for each vehicle every year. [~~See Section X, Part C, Appendices, for the waiver policies developed by Salt Lake County.~~]

Vehicles owned by students and federal employees Section 41-6-163.3(5) requires universities and colleges located in Utah's I/M areas to require proof of compliance with the I/M program for vehicles which are permitted to park on campus regardless of where the vehicle is registered. Vehicles operated by federal employees and operated on a federal installation located within an I/M program area are also subject to the I/M program regardless of where they are registered. Proof of compliance consists of a current vehicle registration in an I/M program area or an I/M certificate of compliance or waiver, or evidence of exempt vehicle status as specified in this section.

Rental vehicles The Salt Lake County I/M health regulations require that vehicles available for rent or use in Salt Lake County are subject to its I/M program. To the extent practicable, all vehicles principally-operated in the county are subject to the I/M program.

Farm truck exemption Eligibility for the farm truck exemption from the I/M programs is specified in Section 41-6-163.6(4) and must be verified in writing by Salt Lake County I/M program staff. The owner must sign an affidavit on Utah State Tax Commission form TC-838 that vehicle use will be limited to agricultural activities. A copy of the form is provided in Appendices for Section X, Part A. Due to past abuses by vehicle owners, Salt Lake County strictly limits use of the farm truck exemption.

Diesel vehicle exemption Diesel vehicles are no longer exempt from I/M. Salt Lake County implemented its diesel I/M program on January 1, 1997 in accordance with Salt Lake County Health Regulation #28.

New vehicle exemption Proof that a vehicle is new and being registered for the first time is established by presentation of a Manufacturer's Statement of Origin (MSO) at the time of registration.

Out-of-state exemption Vehicles registered in Salt Lake County, but operated out-of-state are eligible for an ~~[extension]~~exemption. The owner must complete Utah State Tax Commission form TC-810 in order to be registered without inspection documentation. The owner must explain why the vehicle is unavailable for inspection in Utah. Common situations include Utah citizens that are military personnel stationed outside of the state, students attending institutions of higher education elsewhere, and people serving missions. If the temporary address of the owner is located within another I/M program area listed on the back of the form, the owner must submit proof of compliance with that I/M program at the time of, and as a condition precedent to, registration or renewal of registration. The vehicle owner must identify their anticipated date of return to the state and is required to have the vehicle inspected within 10 days after the vehicle is back in Utah. Salt Lake County maintains a record of such exemptions and requires submission of an I/M inspection certificate or waiver at the indicated time. ~~[A copy of the Tax Commission form is found in Section X, Part A, Appendices and samples of the letter Salt Lake County sends to vehicle owners who have not complied after the return date is provided in Appendices of Section X, Part C].~~

Exempt vehicles [statistics] Motorcycles, farm vehicles and new vehicles being registered for the first time are exempt. ~~[Statistics for exempt vehicles are provided in Table X.C.3.~~

~~VEHICLES EXEMPT FROM I/M PROGRAM REQUIREMENTS IN SALT LAKE COUNTY
(provided by Utah Motor Vehicle Customer Service Division January 1995)~~

motorcycles	-8,212
farm trucks (over 12,000 GVW)	—148
farm trucks (≤ 12,000 GVW)	—143
new vehicles	-8,813

total

17,316

TABLE X.C.3

~~Unregistered vehicles~~ Law enforcement agencies conducted random roadblock surveys in 1992. The number of unregistered vehicles or vehicles with expired registrations in Salt Lake County is unknown. A data summary of the 1992 survey is provided below:

1992 REGISTERED AND UNREGISTERED VEHICLE DATA
(Utah Highway Patrol and Motor Vehicle Customer Service Division data)

County	Vehicles Registered	Registration Citations	Registration Warnings
Salt Lake	528,452	4,404	791]

~~Roadside I/M program element~~ The Salt Lake County I/M health regulations require that vehicles available for rent or use in Salt Lake County are subject to its I/M program. To the extent practicable, all vehicles principally operated in the county are subject to the I/M program.]

6. Test procedures and standards

TSD Tabs : ASM2 Analyzer specifications.

~~Specifications~~ Detailed specifications for the I/M test procedures and standards are described in the Salt Lake County health regulations provided in Section X, Part C, Appendices. [The ASM2 and UTAH91 Analyzer specifications are provided in Section X, Part C, Appendices 7 and Section X, Part A, Appendices. Specifications for the test procedure and equipment were developed according to good engineering practices to ensure test accuracy.]

~~Basic I/M Program test procedure and analyzer~~ Salt Lake County's [Basic] I/M program uses the ASM2 test procedure [EPA's PRECONDITIONED TWO-SPEED IDLE TEST as specified in EPA-AA-TSS-I/M-90-3 March 1990, Technical Report, "Recommended I/M Short Test Procedures for the 1990's: Six Alternatives." All Basic emissions inspections are performed using the UTAH91 Analyzer, a BAR90-type emissions analyzer. The UTAH91 Analyzer calibration specifications and emissions test procedures meet the minimum standards established in Appendix A of the EPA's I/M Guidance Program Requirements, 40 CFR Part 51 Subpart S. Covered vehicles are defined in X.C.5. All covered vehicles in Salt Lake County are subject to the Basic I/M test procedure and inspected using the UTAH91 analyzer as specified in Section X, Part A, Appendices until the UTAH98 Enhanced I/M program begins no later than January 1, 1998.]in accordance with EPA-AA-RSPD-IM-96-2, Acceleration Simulation Mode Test

Procedures, Emission Standards, Quality Control Requirements, and Equipment Specifications, Technical Guidance. The inspection for vehicles will consist of a loaded-mode Emissions test for concentrations of hydrocarbons (HC), carbon monoxide (CO), and oxides of nitrogen (NO_x), a functional inspection of the gas cap and a visual/tampering inspection of the [fuel filter neck restrictor,] PCV, EGR, AIR and catalytic converter systems. OBDII testing will be performed on 1996 and later model year vehicles in compliance with federal statute. All UTAH98 I/M emissions inspections are performed using the BAR97-compliant UTAH98 Analyzer. The UTAH98 Analyzer calibration specifications and emissions test procedures meet the minimum standards established in above referenced ASM2 Specification. The testing will use a BAR97-compliant dynamometer. Covered vehicles are defined in the Salt Lake Valley Health Department regulations. Gas cap and EGR valve function tests will be included in the UTAH98 program. Full-time and All-wheel four wheel drive and vehicles with a GVWR exceeding 8500 lbs undergo a Two-Speed Idle test unless they are OBD-compliant. All covered vehicles in Salt Lake County are subject to the UTAH98 I/M test procedure which began April 1, 1998.

~~[UTAH98 Enhanced I/M Program test procedure and analyzer Salt Lake County's Enhanced I/M program uses the ASM2 test procedure in accordance with EPA-AA-RSPD-IM-96-2, Acceleration Simulation Mode Test Procedures, Emission Standards, Quality Control Requirements, and Equipment Specifications, Technical Guidance and will be performed with BAR97-compliant equipment. The inspection will consist of a loaded-mode Emissions test for concentrations of hydrocarbons (HC), carbon monoxide (CO), and oxides of nitrogen (NO_x), a functional inspection of the gas cap and a visual/tampering inspection of the fuel filter neck restrictor, PCV, EGR, AIR and catalytic converter systems. OBDII testing will be performed on 1998 and later model year vehicles. All UTAH98 Enhanced I/M emissions inspections are performed using the BAR97-compliant UTAH98 Analyzer. The UTAH98 Analyzer calibration specifications and emissions test procedures meet the minimum standards established in above referenced ASM2 Specification. The testing will use a BAR97-compliant dynamometer. Covered vehicles are defined in X.C.6. Gas cap and EGR valve function tests will be included in the UTAH98 program. All covered vehicles in Salt Lake County are subject to the UTAH98 Enhanced I/M test procedure beginning January 1, 1998.~~

~~Covered vehicles are defined in Section X.C.5. Until January 1, 1998, all covered vehicles in Salt Lake County are subject to the Basic test procedure and inspected using the UTAH91 analyzer as specified in this section. On January 1, 1998, all covered vehicles will be inspected under Salt Lake County's UTAH98 program as specified in this section.]~~

Pre-inspection emissions-related repairs Inspectors in the county's test-and-repair networks are required to perform the emissions test prior to making any emissions-related repairs when a vehicle is presented for an emissions inspection. All inspectors

who conduct test-only inspections, are required to ask the vehicle owner or operator whether a tune-up or other emissions-related repairs have been performed within 6 weeks prior to the emissions inspection and to document the owner's response in the [UTAH91 or]UTAH98 [Enhanced] I/M computer vehicle information database (VID).

Safety issues Vehicles presented in unsafe condition must be repaired before inspection. Vehicles are also subject to an annual safety inspection administered by the Highway Patrol. Submission of proof of compliance with the safety program is also required as a condition for registration or renewal of registration. Most owners in Salt Lake County's test-and-repair network have the safety and emissions inspection performed at the same time. Data relative to the safety inspection can be recorded in the [UTAH91 or] UTAH98 [Enhanced] I/M Analyzers. The Salt Lake County I/M program is administered with close cooperation with the Utah Highway Patrol Safety Program. UTAH98 [Enhanced] I/M program equipment, including dynamometers, shall be operated in accordance with manufacturer's specifications to prevent injury or damage to people or equipment. Exhaust gases are to be safely ventilated in accordance with EPA-AA-RSPD-IM-96-2.

Exhaust leaks [~~The UTAH91 analyzer measures exhaust carbon monoxide (CO) and carbon dioxide (CO₂). Exhaust CO + CO₂ readings of less than 6% indicate a leaky exhaust system and will cause either analyzer to abort the inspection. See section 3.3.30C of the UTAH91 analyzer specifications in Appendices for Section X, Part A.~~] The UTAH98 [Enhanced I/M program] analyzer will reject vehicles with leaking exhaust systems in compliance with EPA-AA-RSPD-IM-96-2.

[Basic] UTAH98 I/M program emission standards The Salt Lake County Health Regulation #22A, Appendix D, includes hydrocarbon, oxides of nitrogen and carbon monoxide emission standards. These emission standards allow for quick adjustment of the standards in case actual failure rates fall below the level specified in the State Implementation Plan. [Prior to January 1, 1998, vehicles undergoing Basic I/M testing must pass both the hydrocarbon and carbon monoxide emission standard, as applicable.] The emission standards for the [Basic] UTAH98 I/M program were used in the MOBILE5.a.h modeling to demonstrate compliance with the federal Basic I/M performance standard.

[Enhanced (UTAH98) I/M program emission standards ~~The Salt Lake County Health Regulation #22A, Appendix D, includes hydrocarbon, oxides of nitrogen and carbon monoxide emission standards. These emission standards allow for quick adjustment of the standards in case actual failure rates fall below the level specified in the State Implementation Plan. Effective January 1, 1998, vehicles must pass the hydrocarbon, nitric oxide and carbon monoxide emission standard, as applicable. The emission standards for the UTAH98 Enhanced I/M program were used in the MOBILE5.a.h modeling to demonstrate compliance with the federal Basic I/M performance standard.]~~

Stringency Salt Lake County will adjust tailpipe emission standards as necessary to maintain a stringency rate of at least 22% for pre-81 model year vehicles, the stringency rate used in the ~~[Basic I/M and]~~UTAH98 ~~[Enhanced]~~I/M performance standard modeling demonstrations.

Re-test standards The same test procedure and emission standards are used for initial tests and retests, regardless of which part a vehicle may have failed during an initial test. The ~~[UTAH91 and]~~UTAH98 ~~[Enhanced]~~I/M test procedure requires an official test, once initiated, to be performed in its entirety regardless of intermediate outcomes, except in the case of invalid test conditions, unsafe conditions, or the fast pass/fail algorithms.

Anti-tampering provisions Salt Lake County requires a visual emissions control device inspection to determine whether the air system, catalyst, fuel inlet, exhaust gas recirculation (EGR) valve, evaporative system, positive pressure crankcase valve (PCV), and gas cap are present, appear to be properly connected, and appear to be the correct type for the certified vehicle configuration. Regardless of the vehicle model year, Salt Lake County does not allow waivers for tampered vehicles or money spent to repair tampered or missing emission control devices to be applied towards a minimum waiver cost. Salt Lake County requires repair of catalyst, and air pump system~~[, and fuel inlet restrictor]~~ for model year 1984 and newer vehicles. The county requires repair of any tampering of the air system, catalyst, ~~[fuel inlet,]~~ exhaust gas recirculation (EGR) valve, evaporative system, positive pressure crankcase valve (PCV), and gas cap on model year 1990 and newer vehicles. 1996 and newer vehicles also are required to have emission-related malfunction indicator lights (MIL) extinguished. ~~[The catalytic convertor must be replaced on vehicles that fail due to a tampered fuel inlet restrictor.]~~

Engine changes The Salt Lake County health regulations have a section that addresses engine changes. After an engine change, vehicles are tested to the tailpipe emission standards and anti-tampering requirements applicable to vehicles of the chassis model year. Mixing vehicle classes (e.g., light-duty with heavy-duty) and certification types (e.g. California with federal) within a single vehicle is considered tampering.

Fuel switching Vehicles that are switched to a fuel type for which there is no certified configuration are tested according to the most stringent emission standards for that vehicle model year and vehicle type.

7. Test Equipment

TSD Tab : Technical specifications for the UTAH98 Enhanced i/M Analyzer

~~[UTAH91 Specifications~~ Written technical specifications for the UTAH91 Basic I/M Analyzer, a BAR90-type computer emissions analyzer, are provided in Section X, Part A, Appendices.

~~UTAH98 Specifications~~ Written technical specifications for the ~~UTAH98 Enhanced I/M Analyzer, a BAR97-type computer emissions analyzer, will be provided in Section X, Part C, Appendices. It will be validated in time to meet the January 1, 1998 Enhanced I/M program implementation date.]~~

Analyzer access restrictions An inspector access code is required to use the analyzer for official tests, a service access code to repair or service the analyzer, and an auditor access code to access the audit functions. DOS functions are not accessible to station owners, inspectors, or analyzer service personnel. Programming changes are made by Salt Lake County I/M auditors from disks supplied by the analyzer manufacturer.

Data security provisions Manual data entry is minimized. For initial inspections, the inspector enters vehicle registration and vehicle information from the keyboard. For retests, the inspector calls up the initial test file, compares the vehicle and owner data, and confirms the VIN/license plate data. Data regarding inspections, analyzer calibration and service, lock-out activities, and audit information are ~~[stored to a secured disk drive and retrieved by county auditors on a regular basis, but at least once per quarter]~~transmitted via phone line to the county every night.

~~[UTAH91 Automated test procedure~~ The UTAH91 analyzer automatically reads all test measurements, records test results in the computer database, determines whether the vehicle has passed or failed a test, and prints vehicle inspection reports and inspection certificates for all subject vehicles. The analyzers are capable of simultaneously sampling dual exhaust vehicles. The UTAH91 analyzer bench includes two non-dispersive infrared (NDIR) analyzers for carbon monoxide, carbon dioxide, and hydrocarbon measurements (one low range and one high range), and one NDIR analyzer for carbon dioxide measurement. The test procedure is automated to the highest degree practical to minimize the potential for intentional fraud and/or human error in compliance with ASM2.]

UTAH98 Automated test procedure The UTAH98 analyzer automatically reads all test measurements, records test results in the computer database, determines whether the vehicle has passed or failed a test, and prints vehicle inspection reports and inspection certificates for all subject vehicles. The analyzers are capable of simultaneously sampling dual exhaust vehicles. The UTAH98 analyzer will measure carbon monoxide, carbon dioxide, nitric oxide and hydrocarbon emissions. The test procedure is automated to the highest degree practical to minimize the potential for intentional fraud and/or human error in compliance with ASM2.

Security lockouts The analyzers are programmed to trigger lock-outs when abuse or tampering occur. Lock-outs occur after any security system is tampered, failure to conduct or pass periodic calibration tests, or the data recording medium is full. The analyzer can not be used until the lock-out has been cleared by a Salt Lake County I/M auditor. The analyzer automatically keeps an electronic record of all lock-outs including

the date of the lock-out, the reason for the lock-out, and the date and person that cleared the lock-out.

~~[UTAH91 Basic I/M certified analyzer use restriction Since September 1, 1991 and ending on December 31, 1997 Salt Lake County requires official emissions tests be conducted only on registered UTAH91 analyzers. A description of the certification procedure is provided in Appendices of Section X, Part A. There have been several updates of the UTAH91 Analyzer specifications to date and more will follow, as necessary, to accommodate new technology vehicles and changes to the program.]~~

UTAH98 [Enhanced] I/M certified analyzer use restriction [Beginning on] Since January 1, 1998, Salt Lake County has require[s]d official emissions tests to be conducted only on registered UTAH98 [Enhanced] I/M analyzers. The UTAH98 [Enhanced] I/M analyzer [will be]is certified in compliance with BAR97. Updates to the UTAH98 [Enhanced] I/M Analyzer specifications may occur, as necessary, to accommodate new technology vehicles and changes to the program.

UTAH98 [Enhanced] I/M certified analyzer design and certification The UTAH98 analyzer [will be]is BAR97 designed and certified. The UTAH98 analyzer [will] performs ASM2 testing in compliance with the Acceleration Simulation Mode Test Procedures, Emission Standards, Quality Control Requirements, and Equipment Specifications Technical Guidance, EPA-AA-RSPD-IM-96-2, July 1996 and 40 CFR 51.358.

8. Quality Control

General quality control specifications The UTAH9[+]8 analyzer specification[s] [were]was carefully designed to insure that emission measurement equipment is calibrated and maintained properly, and that inspection, calibration records, and maintenance records are accurately created, recorded, and maintained. [~~The UTAH9+ specifications meet the test equipment quality assurance practices described in 40 CFR 51 Subpart S Section 51.359 and Appendix A. Salt Lake County will design the UTAH98 analyzer using sound engineering practices to insure that emission measurement equipment is calibrated and maintained properly, and that inspection, calibration records, and maintenance records are accurately created, recorded, and maintained in compliance with 40 CFR 51 Subpart S Section 51.359 and Appendix A.~~]

Automatic electronic quality assurance features Operational analyzer quality assurance measures such as analyzer calibration, zero and span check, hydrocarbon hang-up check, and leak check are mandatory automatic analyzer capabilities. Gas accuracy tolerances, dilution limits, analyzer warm up requirements, system response time requirements, optical correction factors, and interference effects are also addressed in the analyzer specifications. If the checks are not performed on schedule or identify measurements outside of acceptable limits established in the specifications, a lock-out occurs

preventing use of the analyzer until such problems are corrected. [~~See Sections 2.12, 2.13, and 2.18 of the UTAH91 Analyzer specifications.~~] Records of all quality assurance activities with respect to the analyzer are automatically recorded in the analyzer's electronic database and evaluated by Salt Lake County I/M auditors on a regular basis. The analyzer specifications discuss requirements for assurance that unauthorized access to the I/M database in the analyzer is prevented. Attempts to deliberately avoid or defeat analyzer or inspection quality assurance provisions result in disciplinary action against the I/M mechanic and/or station. The automatic electronic quality assurance features of the UTAH98 [Enhanced] I/M analyzer [~~will be~~] are in compliance with the referenced ASM2 specification, EPA-AA-RSPD-IM-96-2.

Analyzer maintenance [~~Section 1.8 of t~~]The UTAH9[1]8 Analyzer specifications describes required services, warranty provisions, and documentation that analyzer manufacturers must provide to customers. It includes ensuring that the analyzer meets the quality assurance specifications at the time of delivery, that routine quarterly preventative maintenance is performed, training on how to use, maintain, and operate the analyzer is provided by the manufacturer, and that if repair of defects can not be made promptly a temporary analyzer replacement is provided. Service activities are recorded in the analyzer's electronic database. [~~Salt Lake County has conducted a survey of analyzer owners to determine compliance with these provisions. Failure of an analyzer manufacturer to meet quality assurance specifications could result in de-certification of that manufacturer's product for use in Salt Lake County.~~] Maintenance of the UTAH98 [Enhanced] I/M Analyzer [~~will be~~] is in compliance with the Salt Lake County Health Regulation #22A.

Document security [~~Document security was a high priority during the UTAH91 analyzer design phase. The analyzer tracks the unique certificate numbers and ensures that the certificate printed matches the test number. Missing certificate numbers are stored in the analyzer database for auditor review. The certificates are printed on a dedicated and locked printer. Only certified inspectors have access to the certificate printer and storage area. Access to the certificates is only possible for the purpose of loading or aligning certificates in the printer. Attempts to access this area at other times or without an access code sets a lock-out that only Salt Lake County auditors can clear. The certificate storage area is designed with redundant security systems including both hardware and software locks. See Section 2.16 of the UTAH91 analyzer specifications. The blank certificates are commercially printed with sequential and unique serial numbers on counterfeit-resistant security paper.~~] Document security for the UTAH98 [Enhanced] I/M Analyzer [~~will be~~] is in compliance with the Salt Lake County Health Regulation #22A.

Analyzer certification Sound engineering practices were followed during the design and certification of the UTAH9[1]8 analyzer to insure accurate and repeatable inspections under a range of environmental conditions. Manufacturer owner's manuals, operating instructions, and warranty provisions were also reviewed during the certification process.

Comprehensive records of the certification process have been maintained. [~~UTAH98 Enhanced I/M Analyzer certification will be in compliance with the Salt Lake County Health Regulation #22A.~~]

General analyzer security provisions The Salt Lake County Health Regulation #22 requires use of a certified and registered UTAH9[+]8 I/M analyzer for official inspections [~~prior to January 1, 1998. Beginning January 1, 1998, Salt Lake County Health Regulation #22A requires use of a certified and registered UTAH98 Enhanced I/M analyzer for official inspections.~~] Inspection records include the analyzer registration number. The regulations make it illegal to alter analyzer software or hardware without written approval. Analyzer calibration requirements, maintenance, and warranty provisions are also specified in the above Salt Lake County health regulations.

9. Waivers

Waiver rate Salt Lake County will take corrective action as needed to maintain a maximum waiver rate of 1% of the initially failed vehicles or the Utah Air Quality Board will revise the SIP and emission reductions claimed based on the actual waiver rate. The conditions for issuing waivers legally authorized and specified in the Salt Lake County health regulations meet the minimum waiver issuance criteria specified in 40 CFR Subpart S 51.360.

Waiver procedures The Vehicle Inspection Report (VIR) printed by the I/M analyzer after each inspection and provided to the vehicle owner/operator includes warranty and waiver information, if the vehicle failed the emissions inspection. A waiver document may be issued only by Salt Lake County I/M Technical Center staff and only after verification of required documentation. Any tampered, missing, or inoperable emission control devices must have been replaced or repaired. At least \$100 for 1968 through 1980 model year vehicles and \$200 for 1981 and newer model year vehicles must have been spent on acceptable emission repairs as verified by a Salt Lake County I/M program auditor by physical examination of the vehicle and review of the repair documentation. Repair documentation, such as receipts, are copied and retained by auditor to prevent reuse. Salt Lake County requires signed documentation on official stationery of a business involved in the automotive repair industry to include labor costs. In Salt Lake County, the retest must reflect a reduction of carbon monoxide oxides of nitrogen and/or hydrocarbon emissions after repairs. [~~After January 1, 1998, the retest must reflect a reduction in oxides of nitrogen (NO_x) emissions if the vehicle originally failed the emissions inspection as a result of NO_x emissions in excess of the standards.~~] Emissions defects indicated by On Board Diagnostics II (OBD II) fault codes must be repaired for the vehicle to qualify for a waiver. Vehicles still under the federal emissions warranty are not eligible for a waiver until all warranties are exhausted. Warranted repair and tampering repair may not be applied to the repair cost waiver limits. Waivers are only valid for one test cycle. The vehicle owner surrenders the original waiver document at

the time of registration; copies are not accepted for registration purposes. Specific provisions regarding waivers may be found in the Salt Lake County health regulations and the Utah Tax Commission Division of Motor Vehicle policy manual which is available upon request. ~~[The I/M program in]~~ Salt Lake County does not provide for time extensions to relieve economic hardships in obtaining emission-related repairs.

10. Motorist compliance enforcement

TSD Tab ____: Detailed description of inspection frequency, inspection scheduling, license plate requirements, and enforcement of the registration requirements

Registration denial Salt Lake County's I/M program is enforced by means of registration denial. Vehicle owners must present proof of compliance with the I/M program, a waiver, or evidence of exemption from the I/M program as a condition precedent to vehicle registration or registration renewal. ~~[See Section X.C.4 and X.C.5 for a more detailed discussion of inspection frequency, inspection scheduling, license plate requirements, and enforcement of the registration requirements.]~~ Citations are routinely issued to operators of vehicles with expired or missing license plates during routine traffic stops, parking lot inspections, and roadblocks. As specified in Section 41-1a-1303 ~~[(Section X, Part A, Appendices)]~~ of the Utah Code, driving without registration is a Class C misdemeanor. The penalty for a Class C misdemeanor is imprisonment of no more than 90 days and \$750 for persons or up to \$1000 for corporations, associations, partnerships, or government instrumentalities. In addition to paying a fine, the motorist must register the vehicle. It is currently a Class B misdemeanor to violate a County health regulation. The penalty for a Class B misdemeanor is an imprisonment not exceeding six months and for persons a fine of up to \$1000 or for corporations, associations, partnerships, or government instrumentalities a fine of up to \$5000. ~~[Copies of the relevant statute are provided in Section X, Part A, Appendices.]~~ In Utah, the magnitude of such penalties is a judicial rather than an administrative decision. Per Section 41-1a-1315 falsification of evidences of title and registration is a second degree felony.

Certificate of Compliance The Certificate of Compliance is dated by the I/M analyzer immediately after a passing inspection is completed. The certificate is only valid for registration purposes for two months. At the same time the analyzer also prints the following information on the certificate to ensure unambiguous vehicle identification: the vehicle identification number (VIN), license number, model year, make, and model. A sample of the Certificate of Compliance is in ~~[Appendix C of]~~ the UTAH9[+]8 specifications. The certificates are only printed in the event that the vehicle passed the emissions inspection. Separate documentation, including the same vehicle information, is used for waivers.

Fuel changes to non-subject status Vehicle changes that would result in registration changes from a subject to exempt status require physical confirmation by Salt Lake

County I/M program personnel at the I/M technical center. Falsification of registration or title information is a felony offense.

Title transfers Proof of compliance with the I/M program is required for a title transfer. The system ensures that owners are not able to avoid the program by extending the inspection date through manipulation of the title and registration system.

Salt Lake County I/M program staff, peace officers, and Utah Tax Commission Motor Vehicle Customer Service Division routinely work together to ensure that motor vehicle owners that move into an I/M program area complete registration transfer including compliance with the I/M program. Except for higher education students and active duty military personnel, people are required to register their vehicles in the county in which they are domiciled. As discussed in the Vehicle Coverage section, although these two exempted classes of vehicle owners do not have to register their vehicles in Utah, they do have to comply with the I/M programs. Employment status, maintenance of a residence, enrollment of children in local schools, and voting districts are considered when identifying persons in violation of this requirement.

Salt Lake County I/M program staff work with citizens, the Utah Motor Vehicle Customer Service Division and county attorneys to identify and prosecute people that illegally transfer registration to a non-subject area to avoid the I/M program. The process is very labor intensive. There are many legitimate reasons to be operating a vehicle in an I/M program area that is registered elsewhere. Violators must be dealt with on a case-by-case basis. Persons caught to date have been subject to fines of around \$700. Those prosecuted and convicted could end up with a criminal record and actual jail time. Fraudulent registration of a motor vehicle is a felony offense. Most people confronted with evidence of their guilt and the seriousness of their offense, to date, have complied promptly. The involved agencies are developing more efficient methods of dealing with illegal registrations that result in exemption from the I/M program.

Salt Lake County is committed to a cooperative aggressive effort to ensure that vehicles operated in the county comply with the I/M program to ensure a compliance rate of at least 96%.

11. Motorist compliance enforcement program oversight

Utah Tax Commission, tax assessors, and county roles The Utah Tax Commission Motor Vehicle Customer Service Division and Salt Lake County tax assessor deny application for vehicle registration or renewal of registration without submittal of a valid certificate of compliance, waiver, or verified evidence of exemption. Proof is retained by the tax clerk, micro-photo-copied, and then destroyed. Altered or hand-written documents are not accepted. All certificate data is collected by Salt Lake County I/M program auditors and subjected to scrutiny for evidence of any improprieties.

Database quality assurance The vehicle registration database is maintained and quality assured by the Motor Vehicle Customer Service Division. The I/M inspection database is maintained and quality assured by the Salt Lake County I/M program staff. The Salt Lake County I/M program has access to the Motor Vehicle Customer Service Division database and utilize it on a regular basis for quality assurance purposes. The database is subject to regular auditing, cross-referencing, and analysis. The database is also evaluated using data obtained during roadblocks and parking lot surveys. Evidence of program effectiveness problems trigger additional joint enforcement activities.

Oversight provisions The oversight program includes verification of exempt vehicle status through inspection, data accuracy through automatic and redundant data entry for most data elements, an audit trail for program documentation to ensure control and tracking of enforcement documents, identification and verification of exemption-triggering changes in registration data, and regular audits of I/M inspection records, I/M program databases, and the Motor Vehicle Customer Service Division database.

Enforcement staff quality assurance I/M program auditors and tax clerks involved in vehicle registration are subject to regular performance audits by their supervisors. All enforcement personnel (direct and indirect) involved in the motorist enforcement program are subject to disciplinary action, additional training, and termination for deviation from procedures. Specific provisions are outlined in the Motor Vehicle Customer Service Division procedures manual which is available upon request [~~the Salt Lake County I/M audit policy documents provided in Appendices for Section X, Part C, containing the Salt Lake County health regulations~~].

Co-operative enforcement oversight effort The Motor Vehicle Customer Service Division, Utah Division of Air Quality, Utah Highway Patrol and Salt Lake County I/M program staff meet at least once per month to ensure on-going high quality oversight of joint motorist compliance program. EPA audit of this process is authorized if measures to protect tax-payer confidentiality acceptable to Motor Vehicle Customer Service Division are exercised.

12. I/M Program quality assurance

TSD Tab _____ : Salt Lake County audit policies.

Station/inspector audits Salt Lake County's I/M program regularly audits all certified I/M inspectors and stations to ensure compliance with Salt Lake County health regulations and policies. Particular attention is given to identifying and correcting any fraud or incompetence with respect to vehicle emissions inspections. Compliance with recordkeeping, document security, analyzer maintenance, and program security requirements are scrutinized. The inspector's skill level is also evaluated during audits. Another major purpose of the audits is to retrain inspectors, as necessary, as soon as problems are identified. Documentation sufficient to support a legal case to suspend or

revoke a certification is also collected in the event of serious and/or repeated violations. Most stations and inspectors are audited every month and all at least quarterly.

Covert audits Salt Lake County, to the extent possible, performs a covert audit of each inspector and station at least once a year. The number of covert audits at least equals the number of certified inspectors. Covert audits are performed using a variety of vehicles that are representative of the subject fleet that are set to fail across a full range of malfunctions. Suspected problem stations and inspectors are targeted for earlier and more frequent audits. Complaints also trigger additional audits.

Covert performance audits shall include:

Remote visual observation of inspector performance, which may include the use of aids such as binoculars or video cameras, at least once per year per inspector in high-volume stations (i.e., those performing more than 4000 tests per year);

Site visits at least once per year per number of certified inspectors (per inspector FTE) using covert vehicles set to fail (this requirement sets a minimum level of activity not a requirement that each inspector be involved in a covert audit); and

For stations that conduct both testing and repairs, at least one covert vehicle visit per station per year including purchase of repairs and subsequent retesting if the vehicle is initially failed for tailpipe emissions.

Electronic audit capabilities The Salt Lake County I/M program equipment performs various analyses to identify statistically inconsistent data indicative of problem stations and inspectors. Overt audit records are maintained electronically in the analyzer. After overt audits, the auditor retrieves the data on the analyzer diskette containing the audit, vehicle inspection, and analyzer service, maintenance, and calibration records dating back to the previous audit. The data from each audit is added to the comprehensive central Salt Lake County I/M database. Further analysis of the central database results in identification of stations and inspectors for which additional audits are performed. [~~It is anticipated that the UTAH98 Enhanced I/M program electronic audit capabilities will be substantially similar the UTAH91 program.~~]

Auditor quality assurance Auditors receive 24 hours of formal classroom instruction and are provided on-the-job training in: the use of the UTAH91 analyzer; the Salt Lake County I/M health regulations, basic air pollution control; basic principles of emissions-related motor vehicle engine repair; emission control systems; evidence gathering; administrative procedures and laws; quality assurance practices; and covert audit procedures. Salt Lake County sends auditors to additional automotive emissions-related training and meetings on a regular basis. Auditor supervisors audit the I/M program auditors by reviewing their documentation and also auditing a number of their stations at least once every year. [~~It is anticipated that the UTAH98 Enhanced I/M program auditor~~

~~quality assurance process will be substantially similar the UTAH91 program.]~~

Written audit procedures Copies of the Salt Lake County I/M program overt and covert audit procedures are provided in Section X, Part C, Appendices. A detailed description of the audit capabilities of the UTAH91 analyzer are found in Section 3.9 of the UTAH9[+]8 analyzer specifications.~~[It is anticipated that the UTAH98 Enhanced I/M program written audit procedures and analyzer's automatic audit capabilities will be substantially similar the UTAH91 program.]~~

13. Enforcement against stations and inspectors

TSD Tab _____ : Penalty schedule

General enforcement provisions The Salt Lake County I/M program is responsible for enforcement action against incompetent or dishonest stations and inspectors. The Salt Lake County health regulations include a penalty schedule. For serious or repeated offenses, auditors are authorized to immediately suspend the station or inspector by locking out their [~~UTAH91 or~~]UTAH98 analyzer[(s)]. The County does not have legal authority to impose direct fines on stations or inspectors, but suspension or revocation of a station permit results in a substantial loss of income that is far in excess of \$100 fine suggested by the EPA guidance. Fee settlements are at least as much the station's anticipated income for emissions testing for the time during which the station would be suspended. A station permit may be suspended or revoked even if the owner/operator had no direct knowledge of the violation. In the case of incompetence, re-training is required before the permit is restored.

Salt Lake County revised its penalty schedules to comply with the more stringent specifications included in 40 CFR 51.364. The Utah Air Quality Board adopted the revised penalty schedules on January 30, 1995. [~~The revised penalty schedule is found in the Section X, Part C, Appendices.~~] At a minimum, inspector certification and station permit suspension shall be imposed for at least 6 months (or a fee retainage or settlement penalty equivalent to the inspector's salary for that period) whenever a vehicle is intentionally improperly passed for any portion of the required test.

Suspension and revocation Suspension or revocation effectively bars an individual from further inspections because the auditor removes the inspector's authorization code from the [~~UTAH91 or~~]UTAH98 analyzer. Evidence of indirect participation in emissions inspections by an individual while suspended or revoked would result in legal action against the station. If the station is suspended or revoked the analyzer is totally locked-out. The analyzers are initialized by an auditor for use at a single permitted station and only by inspectors certified for that station. A record of the serial numbers of all registered analyzers and their locations is maintained by Salt Lake County.

Enforcement records Salt Lake County keeps comprehensive records of all audit

activities, warnings, suspensions and revocations, and reports enforcement activity statistics to the EPA and the executive secretary[~~on an annual basis~~ annually.

14. Data collection

Analyzer inspection data The UTAH91 analyzer creates a detailed record of each emissions inspection performed including, but not limited to the following data, for each vehicle tested: test record number; inspection station number; inspector number; test system number; date of the test; emission test start time; the time final emission scores are determined; vehicle identification number (VIN); license plate number; test certificate number; gross vehicle weight rating (GVWR); model year, make, and type of vehicle; number of cylinders or engine displacement; transmission type; odometer reading; category of test performed (i.e., initial, first retest, or subsequent retest); fuel type of the vehicle; emission scores for HC, CO, NO and CO₂ at ~~idle and 2500 RPM~~ 25 mph and 15 mph; and results (pass/fail/not applicable) for visual inspection of the catalytic converter, air system, gas cap, evaporative system, and positive crankcase (PCV) valve ~~and the fuel inlet restrictor~~. The tailpipe emission standards for each type of vehicle is included in a look-up table in the UTAH9[+]8 analyzer. The UTAH9[+]8 analyzer automatically uses the appropriate standards for the type of vehicle being tested and makes a pass/fail determination. The inspection data is recorded by the UTAH9[+]8 analyzer during the inspection procedure.

Analyzer quality assurance data Quality assurance data including a detailed history of all calibration (including the concentration values of the calibration gases), service, lockout, and document security events are also recorded and maintained by the UTAH9[+]8 analyzer. Each UTAH9[+]8 record includes, as applicable, the station number, mechanic access number, auditor access number, service access number, analyzer serial number, date, and activity time.

~~[UTAH91 analyzer database specifications The programming criteria for the analyzer database is described in Section 3 of the UTAH91 analyzer specifications. Appendix F of the UTAH91 analyzer specifications contains a complete description of the electronic data records. The data disk containing inspection and quality assurance information is removed from the UTAH91 analyzer by an auditor at least once a month during overt audits and maintained permanently in Salt Lake County's central I/M database.]~~

UTAH98 analyzer data collection The UTAH98 [Enhanced] I/M analyzer data collection system ~~[will]meets~~ the requirements specified under 40 CFR 51.365~~[and be substantially similar to the UTAH91 data collection system. Detailed Salt Lake County UTAH98 database specifications will be developed in time to support the January 1, 1998, UTAH98 program implementation.]~~

15. Data analysis and reporting

Annual reports Salt Lake County shall analyze I/M program data and submits annual reports to the U.S. Environmental Protection Agency and the executive secretary upon request. Beginning in July of 1995, Salt Lake County will submit to EPA and the executive secretary an annual report, for January through December of the previous year, which provides statistics on the testing, quality assurance, and enforcement activities of each I/M program. At a minimum the annual reports will include all of the data elements listed 40 CFR Subpart S 51.366.

Biennial reports Beginning in July of 1996, and biennially thereafter, Salt Lake County shall submit a report to EPA and the executive secretary discussing all changes made in the program design, funding, personnel levels, procedures, regulations, and legal authority. The report will also supply a detailed discussion of the impact of such changes upon the program, any weaknesses or problems discovered in the program over the previous two-year period, the steps that were taken to address those problems, the result of those corrective actions, and any future efforts planned.

16. Inspector training and certification

TSD Tab _____ : Inspector training description and tests

Inspector certification and initial training No person may conduct an official I/M inspection unless they are certified. Salt Lake County requires all persons desiring to become I/M technicians to pass a pretest to insure they have a basic understanding of automotive engine operation and repair. Only about one half of those attempting to become certified pass the pretest and are allowed to take the formal training class. Salt Lake County requires formal training prior to certifying inspectors. Each class includes at least the following information: the causes and effects of air pollution; the purpose, function, and goal of the I/M program; I/M health regulations, policies, and procedures; technical details of the test procedures and the rationale for their design; emission control device function, configuration, and maintenance; quality control procedures and their purposes; public relations; and safety and health issues related to the I/M inspection process. Salt Lake County provides the training directly. Inspector candidates will not be issued a certificate unless they have passed a written test with at least 80% (or lower if an occupational analysis justifies it) correct responses and a hands-on test during which the trainee demonstrates the ability to properly conduct all test procedures, calibrate the analyzer, properly utilize equipment, and to follow other I/M program requirements. Salt Lake County will take appropriate steps to insure the security of the testing process.

[Basic-i]Inspector certification renewal Inspector certification is valid for a period of one year, at which point refresher training and testing, are required prior to certification renewal. An auditor enters the inspector's certification expiration date in the analyzer(s)

that the inspector is authorized to use. ~~[Starting 60 days prior to the inspector's certification expiration date the analyzer displays the message "Your mechanic permit expires MM/DD/YY". The analyzer locks-out inspectors that attempt to use the analyzer after their certification expires and displays the following message: "Your mechanic permit expired (date). You are not authorized to perform any emissions inspections at this time. Please contact your local I/M office."]~~The analyzer locks out the inspector upon expiration of the certification. Auditors will not clear the lock-out until the inspector has renewed the certification. Salt Lake County may require evidence of more comprehensive emissions-related automotive training as a prerequisite to inspector certification renewal.

Inspector certification suspension and revocation A determination of inspector incompetence or failure to comply with I/M program requirements may result in suspension or revocation or an inspector's certification prior to the annual expiration date. A certification to conduct I/M inspections is not a legal right but rather a privilege bestowed by Salt Lake County conditional upon adherence to its I/M program requirements.

Inspector training authority and materials Authority to require mandatory I/M inspector training is established and described in the Salt Lake County health regulations. ~~[A description of the I/M inspector training programs and the written and hands-on tests is provided in Section X, Part C, Appendices.]~~

17. Public information and consumer protection

General public information Salt Lake County, along with the Utah Department of Environmental Quality, provides a comprehensive public education and protection program including strategies to educate the public on: Utah's air quality problems; ways that people can reduce emissions; the requirements of state and federal law; the role of motor vehicles in the air quality problem; the need for and benefits of a vehicle emissions inspection program; ways to operate and maintain a vehicle in a low-emission condition; how to find a qualified repair technician; and the requirements of the I/M program. Information is provided via direct response to inquiries for information, reports, classes, pamphlets, fairs, school presentations, workshops, news releases, posters, signs, and public meetings.

Salt Lake County I/M Technical Center Salt Lake County operates an I/M Technical Center staffed with trained auditors and capable of performing emissions tests. A major function of the I/M technical center is to serve as a referee station to resolve conflicts between certified I/M inspectors, permitted stations, and motorists. Auditors actively protect consumers against fraud and abuse by inspectors, mechanics, and others involved in the I/M program. Complaints made on a confidential basis are investigated and resolved in a manner that conceals the person's identity to ensure protection of whistle blowers. Auditors advise motorists regarding emissions warranty provisions and assist

the owners in obtaining warranty-covered repairs for eligible vehicles. Applications for waivers are evaluated by auditors at the I/M technical center and issued only after visual verification that all the requirements for a waiver have been met. The I/M technical center also provides motorists with information regarding the I/M program, general air pollution issues, and emissions-related automotive repairs.

Vehicle inspection report A vehicle inspection report (VIR) is printed and provided to the motorist after each vehicle inspection. The VIR includes a public awareness statement about automotive emissions and lists additional ways that the public can reduce air pollution. The test results are detailed on the VIR. Information about vehicle emissions warranties and the benefits of emissions-related repairs are printed for vehicles that failed the test. Information about waiver requirements and application procedures are printed on the VIR, if the vehicle has failed a retest, including the address and telephone number of the applicable I/M technical center. A complete description of the VIR is included in [Appendix E of] the UTAH9[+]8 analyzer specifications. [~~It is anticipated that the UTAH98 Enhanced I/M VIR will be substantially similar to that used in the UTAH91 program.~~]

Co-operative public education tools A variety of pamphlets and radio, television, and newspaper advertisements about automotive air pollution issues are developed and distributed by the Salt Lake County I/M program in cooperation with other I/M counties and the Utah Division of Air Quality. [~~The legislature authorizes funding each year for pass-through money from the state to Salt Lake County for public education to help reduce vehicle emissions.~~]

18. Improving repair effectiveness

TSD Tab : Description of available training

High priority Salt Lake County implemented a major Basic I/M program revision on September 1, 1991. Shortly thereafter, the Salt Lake County and the Utah Division of Air Quality staff jointly identified improvement of repair effectiveness as a high priority action item. The Governor's Clean Air Commission also recommended making affordable additional emissions-related training available. Full emission reductions will only be realized if the repair industry is able to competently diagnose and repair emissions-related defects.

Continuing education To that end, Salt Lake County's I/M staff has worked with Utah's higher education institutions to develop and provide emissions-related automotive technology classes to technicians. Inspectors are also encouraged to take classes offered by trade organizations, automobile manufacturers, and dealers. Salt Lake County subsidizes the tuition for certified I/M inspectors. The certification renewal tests are difficult enough to make this provision a good incentive. The classes are advertised in the county I/M technical bulletins. [~~Appendices of Section X, Part C include~~

~~descriptions of some of the classes available in the community.]~~

I/M program repair support activities In initiating improved automotive educational opportunities, Salt Lake County works on a day-to-day basis to ensure that repair information is available. I/M stations are required to have available up-to-date relevant automotive diagnostic references and tools as a condition for obtaining a permit. Salt Lake County maintains a hot line to its I/M technical center that any mechanic can call for technical assistance related to vehicle inspection, diagnosis, and repair. Technical bulletins are regularly mailed to each certified inspector with information regarding training schedules, common problems found with particular engine families, and diagnostic tips.

19. ~~[Basic and Enhanced Basic]~~Improved I/M SIP implementation

~~[As required by 40 CFR Part 51.373(a) the Basic I/M SIP requirements not included in the September 30, 1993, adoption of Section X by the Utah Air Quality Board have been funded and implemented, including but not limited to the specified covert audits requirements specified in Section X.C.12 and the penalty provisions specified in Section X.C.13. The Utah Air Quality Board adopted the changes included in Section X, Part C, Appendices on January 30, 1995.]~~

The ~~[Basic]~~I/M program health regulations, policies, procedures, and activities specified in this I/M SIP revision have been implemented. ~~[The Enhanced UTAH98 I/M program requirements will be implemented no later than January 1, 1998.]~~Salt Lake County shall continue to implement and operate the I/M program until a maintenance plan without an I/M program is approved by EPA in accordance with Section 175 of the Clean Air Act as amended.



State of Utah

DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF AIR QUALITY

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MEMORANDUM

TO: Air Quality Board DAQ-043-01

THROUGH: Richard W. Sprott, Executive Secretary

FROM: Bill Colbert, Environmental Scientist

DATE: April 23, 2001

SUBJECT: Propose for Public Comment: Amend R307-110-34 and SIP Section X.D, Utah County's Vehicle Emissions Inspection and Maintenance (I/M) Program

Utah County is a moderate carbon monoxide (CO) National Ambient Air Quality Standard Non-Attainment (NAAQS) area and is required to conduct a vehicle emissions I/M Program. These program requirements are documented in the SIP Section X, Part D, last approved by the Air Quality Board on February 5, 1997.

Utah County's I/M program is a basic, decentralized, test-and-repair network. Historically, this type of program network received an automatic 50% discount in total program effectiveness when using the approved EPA MOBILE emissions model. However, Section 348 of the National Highway System Designation Act of 1995 (NHSDA) permitted areas to demonstrate actual program effectiveness in lieu of an automatic 50% discount. Upon its initial evaluation of the Utah County program, EPA granted an interim program approval while the county completed its data collection and analysis. When completed, this analysis was reviewed by US EPA Region VIII which agreed that Utah County had provided an adequate program analysis to convert the interim approval to final approval via federal rulemaking action after SIP revisions document the program improvements since 1997.

Utah County has also revised its I/M ordinances to incorporate a new vehicle emissions test analyzer and data network which are Year 2000 (Y2K) and On-Board Diagnostics (OBD) compliant.

Staff Recommendation: Staff recommends that the SIP revision be proposed for public comment.

R307. Environmental Quality, Air Quality.

R307-110. General Requirements: State Implementation Plan.

R307-110-34. Section X, Vehicle Inspection and Maintenance Program, Part D, Utah County.

The Utah State Implementation Plan, Section X, Vehicle Inspection and Maintenance Program, Part D, Utah County, as most recently amended by the Utah Air Quality Board on [~~February 5, 1997~~]August 1, 2001, pursuant to Section 19-2-104, is hereby incorporated by reference and made a part of these rules.

KEY: air pollution, small business assistance program*,
particulate matter*, ozone

[~~February 10, 2000~~]2001

19-2-104(3)(e)

Notice of Continuation June 2, 1997

UTAH STATE IMPLEMENTATION PLAN

SECTION X

**VEHICLE INSPECTION
AND MAINTENANCE PROGRAM**

PART D

UTAH COUNTY

Adopted by the Utah Air Quality Board
[February 5, 1997] August 1, 2001

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**SECTION X, PART D
UTAH COUNTY
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- ~~11.e~~ Utah Protocol for Test-and-Repair Network Effectiveness Evaluation
- ~~11.f~~ EPA Letter from Margo Oge to Dianne Nielson regarding Utah Protocol]

- 1 Motor Vehicle I/M Program Ordinance
 - 1.a Vehicle Emissions Inspection/Maintenance Program, Ordinance 2000-31, revised 10-31-00.
 - 1.b Vehicle Emissions Inspection/Maintenance Program, Ordinance 1999-28, revised 12-29-99
 - 1.c Provo I/M Ordinance **Need ordinance # and date)**

UTAH STATE IMPLEMENTATION PLAN
SECTION X
AUTOMOTIVE INSPECTION AND MAINTENANCE (I/M) PROGRAM
PART D
UTAH COUNTY

1. I/M performance standard

Technical Support Documentation (TSD) Tab___: MOBILE5.a input-output files, Basic and Enhanced; description of Basic I/M program improvements

Federal requirements EPA's I/M regulation, 40 CFR Part 51, Inspection and Maintenance Program Requirements [~~Final Rule November 5, 1992~~] last amended at 66 FR 18156, April 5, 2001, specifies a model Basic I/M program. Utah is required by Section 182 of the Clean Air Act to implement an I/M program in Utah County that is at least as effective as the EPA's Basic Performance Standard. The Basic I/M performance standard is specified in 40 CFR 51.352. [~~Regulators are not required to implement the exact elements specified in EPA's model I/M program. EPA's I/M regulations instead require a performance demonstration to show their programs result in automotive emissions equal to or less than predicted for the EPA model I/M program.~~] While local governments have flexibility to implement programs best suited for their area, EPA's regulations require a performance demonstration that local I/M programs result in automotive emissions equal to or less than predicted for the EPA model I/M program. State and local governments may choose options best suited for their area to meet the performance standard.

[Basic] I/M Program MOBILE modeling The performance standard demonstration is made by use of the most recent release of EPA's MOBILE model. The MOBILE5.a model is able to calculate emission factors, grams of a particular pollutant per vehicle mile traveled across the fleet in an area (G/VMT), given information about the fleet, climate, fuel characteristics and I/M programs in a local area. Version MOBILE5.a was used for the Basic I/M performance standard demonstration analysis. The MOBILE5.a input and output files for the modeling performed to evaluate the emission reduction benefits for Utah County's Basic I/M program are found in the [~~Appendices for Section X, Part D~~] Utah County I/M Program Technical Support Document (TSD). Table X.D.1 summarizes the attainment milestones, the applicable performance standard and program target emission factors for VOC and CO emission factors specified in 40 CFR 51.

UTAH COUNTY I/M PERFORMANCE STANDARDS ANALYSIS SUMMARY

pollutant	program modeled evaluated at 32 degrees F at 35 mph	emission factors in grams/mile				
		January 1	1996	1997	2000	2003
VOC	Basic Performance Standard			2.70	2.47	2.30
	Basic Program Target			2.65	2.42	2.22
CO	Basic Performance Standard		22.85		18.69	
	Basic Program Target		21.89		17.83	
	Enhanced Performance Standard		20.50		13.70	
	Enhanced Program Target		21.30		12.70	

TABLE X.D.1

~~[Basic]~~ I/M Program Performance Standard Utah County's I/M program exceeds the Basic I/M performance standard for all pollutants, although the EPA only requires the demonstration for each pollutant which caused an area to be subject to an I/M program. Utah County is ~~[in]~~ a moderate carbon monoxide (CO) National Ambient Air Quality Standard (NAAQS) non-attainment area.

~~[Basic]~~ I/M Program Improvements On December 18, 1995, the Utah County Commission adopted Ordinance No. 1995-29, which adopt[s]ed the Diesel Vehicle Emissions Inspection/Maintenance Program Rules and Regulations and the Vehicle Emissions Inspection/Maintenance Program Rules and Regulations in book form. ~~[Copies of Utah County ordinance No. 1995-29 and the Vehicle Emissions Inspection/Maintenance Program Rules and Regulations are provided in Section X, Part D, Appendix D.1. Revisions to the Vehicle Emissions Inspection/Maintenance Program Rules and Regulations, adopted by the Utah county Commission in 1996, are also included in Section X, Part D, Appendix D.1.]~~ Ordinance 1999-28 was adopted by the Utah County Commission on December 29, 1999 and modified on October 31, 2000 to accommodate a new analyzer and data network that are Year 2000 (Y2K) and On-Board Diagnostics (OBD) compliant. ~~[The proposed revisions define primary residence and] These regulations require [that] individuals [with their] whose primary residence is in Utah County to register their motor vehicles in Utah County, removes the exemption for diesel vehicles older than model year 1968 (except for vintage vehicles), establishes waiver cut points, allows the county to recall specific vehicles for quality assurance testing, and allows the county to require repair of vehicles following the additional testing. [The Utah County Commission also adopted a Remote Sensing Program ordinance on [date to be determined.] Utah County's Remote Sensing Program Ordinance is provided in Section X, Part D, Appendix D.1.]~~ Provo ~~[passed an ordinance requiring e] City ordinance requires that the~~ vehicles operated by people staying in Provo for more than sixty days be inspected and repaired as specified in the Utah County I/M ordinance regardless of where the vehicle is registered. ~~[The ordinance is] These ordinances are provided in Section X, Part D, Appendix D.[9]1.[Other vehicles operated~~

in Utah County will be subject to surveillance using a remote sensing device. Vehicles identified as gross emitters in Utah County will be required to repair the vehicle to comply with the relevant emissions standard for the make and model of the vehicle. Utah County's Remote Sensing Program ordinance is provided in Section X, Part D, Appendix D.1.]

Enhanced I/M Program requirement [The Utah Air Quality Board adopted a revision to the carbon monoxide SIP for Provo-Orem on July 1, 1994, that requires implementation of an Enhanced I/M program, or an equivalent control measure, in Utah County no later than July 1, 1995.] The Utah County Commission resolution committing to implement emission reduction programs that will achieve the reductions that are necessary to attain the standard by December 31, 1995, as required by the SIP, is in Section X, part D, Appendix 3. On January 25, 1995, the Utah County Commissioners adopted Ordinance No. 1995-02, which adopts the Enhanced and Basic Vehicle Emission Inspection and Maintenance Program Rules and Regulations and specifies they shall be in effect and enforced only if the County Commission is unable to implement alternative emission reduction strategies that result in the required emission reduction credits as provided for in the State Implementation Plan for Carbon Monoxide for Utah County. [A copy of Utah County Ordinance 1995-02 is in Section X, Part D, Appendix D.1.]

[Enhanced] I/M Program Improvements MOBILE modeling The performance standard demonstration is made by use [of the most recent release of] EPA's MOBILE model. The MOBILE[5.a] model is able to calculate emission factors, grams of a particular pollutant per vehicle mile traveled across the fleet in an area (G/VMT), given information about the fleet, climate, fuel characteristics, and I/M programs in a local area. [MOBILE5.a was used for the performance standard demonstration analysis. Section X, Part D, Appendix D.11 contains the MOBILE5.a input and output files for the modeling performed to evaluate the emission reduction benefits for Utah County's Enhanced I/M program.] Version MOBILE5.a was used for the performance standard demonstration analysis. Table X.D.[2]1 summarizes the attainment milestones, the applicable performance standard and program target emission factors for CO.

[Enhanced] Improved I/M Program Performance Standard Utah County's [Enhanced] Improved I/M program exceeds the federal Basic I/M performance standard for all pollutants, although the EPA only requires the demonstration for each pollutant which caused an area to be subject to an I/M program. Utah County [is developing and implementing innovative Basic I/M improvements described above that they expect will demonstrate] has incorporated Basic I/M improvements to demonstrate compliance with the Enhanced I/M performance standard for carbon monoxide. [See Section X, Part D, Appendix D.11 for details of Utah County's Basic I/M improvements.] The performance demonstration summary and Mobile 5.a input and output files for the performance demonstration analysis for the Enhanced I/M program for Utah County will be added after the county adopts specific Enhanced I/M requirements.

2. Network type

TSD Tab ___: Letters of opinion from the Utah Attorney General and the Utah County Attorney

Utah County's I/M program is a basic, decentralized, test-and-repair network [system consisting of approximately 140 stations]. Beginning July 1, 1995, Utah County's network [~~will be~~] was required to be Enhanced and test-only unless a test-and-repair network was approved by EPA as being equivalent to a test-only network regarding emission reduction effectiveness. Letters of opinion from the Utah Attorney General's Office and the Utah County Attorney's office validating the authority to implement the specified network in [the] Utah County are provided in [Section X, Part D, Appendix D along with the Provo City ordinance] the TSD.

~~[EPA evaluated Salt Lake County's test and repair network effectiveness in 1995 and concluded in a letter from Margo Oge to Dianne Nielson that the program "may well be as effective as a basic test-only program." She added that the findings would also be applicable to Utah County, provided it used the same audit procedure. EPA will accept the evaluation results as the basis for interim approval of test-and-repair network credits equivalent to a test-only network. Final network credit approval would be based on data demonstrating network effectiveness after the Enhanced I/M program is implemented. The letter from Margo Oge is found in Section X, Part D, Appendix D.11.f and the Utah Protocol describing the methodology by which the Basic I/M network effectiveness evaluation was conducted is provided in Section X, Part D, Appendix D.11.c.]~~

During 1995, Utah County submitted a state implementation plan (SIP) for an enhanced I/M program following the provisions of Section 348 of the National Highway System Designation Act of 1995 (NHSDA). The NHSDA allowed I/M programs to bypass the 50% credit reduction that is normally given to a decentralized I/M program. The Act allowed areas to use good engineering judgement to determine the benefits of a specific program design. Accordingly, Utah County re-evaluated the emission reductions for an enhanced decentralized I/M program. Utah County demonstrated its decentralized I/M program with enhancements would provide equal or greater emission reductions than a centralized test-only program.

Utah County had previously conducted an extensive evaluation of the emission reduction credits for a decentralized I/M program. In an effort known as the Utah Protocol, EPA ran a detailed analysis of the Utah data in comparison to the Minnesota data concluding that the Utah programs were equivalent to a centralized program. This analysis alone was not sufficient to meet the requirements of the NHSDA. In order to meet the requirements of the Act, Utah County performed additional testing and analysis following a methodology developed by the Environmental Council of the States (ECOS), State and Territorial Air Pollution Program Administrators (STAPPA) and EPA I/M Workgroup in response to the NHSDA. The proposed evaluation procedure allowed states considerable flexibility in

determination of the specific data and analysis techniques to be used to quantify I/M program effectiveness.

Utah County's NHSDA analysis was submitted to EPA on May 27, 1999. EPA responded in a letter dated July 26, 1999, that Utah County had provided an adequate qualitative analysis and that EPA intended to convert the interim approval of Utah County's I/M Program to a proposed full approval. Final approval is anticipated through a rulemaking action executed via a federal register notice.

3. Tools and resources

TSD Tab __: Budgets, description of resources

Funding mechanisms Utah County's I/M program is funded through ~~[two mechanisms. At the time of registration, a fee of \$1 per car is collected by the Utah state Tax Commission Motor vehicle customer service Division or the Utah County Tax Assessor's Office. Those monies are remitted to the county in which the vehicle is registered. Utah County sells the certificates for \$2.25 each. The fees are dedicated to IM needs. Furthermore,]~~ several mechanisms including a \$1 air pollution control fee for each passenger vehicle registered in the county. I/M Certificates are sold to I/M test stations for \$2.25 each. The county also charges fees for various permitting activities. The fees are dedicated to the I/M program. A fee schedule can be found in an Appendix to the Utah County's I/M Program ordinance ~~[which is provided in Section X, part D, Appendix D.1. The county puts the fee schedule into an appendix so that it can be revised quickly, as needed, to support the program without taking the entire document through rulemaking. Utah County began its I/M program in 1986. Pas performance has demonstrated that adequate funding of Utah County's I/M program can be maintained in this manner].~~

[Basic] I/M program funding requirements Utah County will ~~[continue to]~~ allocate funding as needed to comply with the relevant requirements specified in Utah's SIP; Utah statutes; county ordinances, regulations and policies; and the federal I/M program regulation. ~~[Program budgets will include funding for resources necessary to adequately manage the programs; conduct overt and covert audits, including repairs as specified in Section N; assist and educate inspectors, repair technicians, station owners, and the public; manage, analyze, and report data; ensure compliance with the program by inspectors, repair technicians, stations, and vehicle owners, and evaluate and upgrade the programs.]~~ Budgets and descriptions of personnel resources, facilities, and equipment for Utah County's I/M program are included in ~~[Section X, Part D, Appendix D.8]~~ the TSD.

[Enhanced I/M program funding requirements] Utah County expects that a test-only network, if implemented, would have fewer stations than are in their basic test-and-repair network. Utah County can provide oversight of the Enhanced I/M Program with the level of funding described above. ~~Additional staff will not be needed.]~~

4. Test convenience

There are approximately 140 permitted Basic I/M stations [~~currently available~~] within Utah County. Specific operating hours are not specified by the county. Some stations that test and/or service only one type of vehicle are permitted. [~~It may not be practical to have a sports car tested at a heavy duty truck repair facility. Also, t] There are also government and private fleet permitted stations that are not open to the public. [~~In the nearly 10 years that Utah County's I/M program has been in place, no complaints have been received.~~]~~

5. Vehicle Coverage

TSD Tab ___: Farm truck exemption form; Tax Commission form; sample letter to owners

Subject fleet [~~The Utah County I/M ordinance specifies that a] All model year 1968 and newer model year light duty vehicles, light duty trucks, and heavy duty trucks registered or principally-operated in Utah County are subject to the I/M programs except for exempt vehicles as specified in Section 6.6 of the Utah County I/M Ordinance. [~~Vehicle coverage is discussed in greater detail in the Utah County I/M ordinance provided in Section X, Part D, Appendix D.1. Statistics for the subject vehicle fleet by vehicle type, model year, vehicle class, and weight class are included in Section X, Part D, Appendix D.11. The data was compiled for the 1990 emissions inventory and has been subject to a comprehensive quality assurance effort.~~]~~

Alternative fuels Vehicles operated on alternative fuels such as propane, alcohol, and natural gas are also subject to the program. Dual-fueled vehicles are tested twice, once on each fuel. [~~See sections 3.1.21 and 3.3.31 of the UTAH91 Analyzer specifications provided in Section X, Part A, Appendix A.4 of Section X and Utah County's Enhanced I/M ordinance alternative fuels requirements.~~]

Government fleet Section 41-6-163.6(1)(b) of the Utah Code requires that all vehicles owned or operated in the county by federal, state, or local government entities comply with the I/M programs. [~~The Utah County I/M programs may permit government stations and inspectors to perform I/M inspections. The I/M station and inspector permit requirements are the same for government fleets as for private or commercial stations and inspectors. Some government agencies choose to have their vehicles inspected at a commercial I/M station. Utah County requires submittal of a list of subject vehicles and a certificate of compliance or waiver for each vehicle every year.~~]

Vehicles owned by students and federal employees Section 41-6-163.3(5) of the Utah Code requires universities and colleges located in Utah's I/M areas to require proof of compliance with the I/M program for vehicles which are permitted to park on campus regardless of where the vehicle is registered. Vehicles operated by federal employees and

operated on a federal installation located within an I/M program area are also subject to the I/M program regardless of where they are registered. Proof of compliance consists of a current vehicle registration in an I/M program area or an I/M certificate of compliance or waiver, or evidence of exempt vehicle status as specified in this section.

Farm truck exemption Eligibility for the farm truck exemption from the I/M programs is specified in Section 41-6-163.6(4) of the Utah Code and must be verified in writing [~~by the Utah County Assessor's office~~]. The owner must sign an affidavit on Utah State Tax Commission form TC-838 that vehicle use will be limited to agricultural activities. [~~A copy of the form is provided in Section X, Part A, Appendix 2.b.~~]

Diesel vehicles [~~Diesel vehicles are no longer exempt from I/M.~~] A light and heavy duty diesel I/M program was implemented in 1994 and is defined in SIP Section XXI.

New vehicle exemption Proof that a vehicle is new and being registered for the first time is established by presentation of a Manufacturer's Statement of Origin (MSO) at the time of registration.

Out-of-state exemption Vehicles registered in an I/M county but operated out-of-state are eligible for an extension. The owner must complete Utah State Tax Commission form TC-810 in order to be registered without inspection documentation from Utah County. The owner must explain why the vehicle is unavailable for inspection in Utah. Common situations include Utah citizens that are military personnel stationed outside of the state, students attending institutions of higher education elsewhere, and people serving missions. If the temporary address of the owner is located within another I/M program area listed on the back of the form, the owner must submit proof of compliance with that I/M program at the time of, and as a condition precedent to, registration or renewal of registration. The vehicle owner must identify their anticipated date of return to the state and is required to have the vehicle inspected within 10 days after the vehicle is back in Utah, unless they can demonstrate that the vehicle had passed an I/M inspection in another area. Utah County maintains a record of such exemptions and requires submission of an I/M inspection certificate or waiver at the indicated time. [~~A copy of the Tax Commission form is found in Section X, Part A, Appendix A.2.c and samples of the letter Utah County sends to vehicle owners who have not complied after the return date is provided in Section X, Part D, Appendix D.5.~~]

Exempt vehicle [~~statistics~~] Motorcycles, farm vehicles, and new vehicles being registered for the first time are exempt as well as diesel powered vehicles less than three years old. [~~Statistics for exempt vehicles are provided in Table X.G.~~]

~~VEHICLES EXEMPT FROM I/M PROGRAM REQUIREMENTS IN UTAH COUNTY
(provided by Utah Motor Vehicle Customer Service Division January 1995)~~

Motorcycles 3124

farm trucks (over 12,000 GVW)	362
farm trucks ≤ 12,000 GVW)	374
new vehicles	1540
total	5400

TABLE X.D.3]

Unregistered vehicles [From data gathered by law enforcement agencies in random and regular roadblock surveys, an estimated 2,500 unregistered vehicles or vehicles with expired registration are estimated to be operated in Utah County. A data summary is provided below.] I/M ordinances and regulations require that vehicles available for rent or use in Utah County are subject to its I/M program. To the extent practicable, all vehicles principally-operated within the county are subject to the I/M program.

[1992 REGISTERED AND UNREGISTERED VEHICLE DATA
(Utah Highway Patrol and Motor Vehicle Customer Service Division data)]

County	Vehicles Registered	Registration Citations	Registration Warnings
Utah	154,970	1,523	742

TABLE X.D.4]

[Roadside I/M program element . I/M ordinances and regulations require that vehicles available for rent or use in Utah County are subject to its I/M program. To the extent practicable, all vehicles principally-operated within the county are subject to the I/M program. If effective, Section 10.41 of Utah County's Enhanced I/M program ordinance requires on highway emissions tests using a remote sensing device. A copy of the ordinance is provided in Section X, part D, Appendix D.1.b. A copy of Utah County's proposed Remote Sensing Program Ordinance is provided in Section X, Part D, Appendix D.1.c.]

6. Test procedures and standards

TSD Tab ___: UTAH2000 analyzer specification

Specifications Detailed specifications for the I/M test procedures and standards are described in the Utah County I/M ordinance provided in Section X, Part D, Appendix D.1. [The UTAH91 Analyzer specifications are provided in Section X, Part A, Appendix A.4. The Enhanced test procedure, equipment, and personnel practices are specified in #EPA-AA-EPSP-IM-93-1, April 1994, and 40 CFR Part 51 VII.] Specifications for the test procedure and equipment were developed according to good engineering practices to ensure test accuracy. [The specifications for Utah County's remote sensing device is provided in Section X, Part A, Appendix A.6.]

~~[Basic test]~~ *Test procedure and analyzer* The Basic I/M program [uses] is compatible with EPA's PRECONDITIONED TWO SPEED IDLE TEST as specified in EPA-AA-TSS-I/M-90-3 March 1990, Technical Report, "Recommended I/M Short Test Procedures for the 1990's: Six Alternatives." 1996 and newer vehicles are tested using OBD II test procedures. All Basic emissions inspections are performed using the UTAH[91]2000 Analyzer, a BAR[90]97-type emissions analyzer. The UTAH[91]2000 Analyzer calibration specifications and emissions test procedures meet the minimum standards established in Appendix A of the EPA's I/M Guidance Program Requirements, 40 CFR Part 51 Subpart S.

Covered vehicles are defined in Section [X.D.]5 above. All covered vehicles in Utah County are subject to the Basic test procedure and inspected using the UTAH[91]2000 analyzer as specified in this section. ~~[If and when Utah County's Enhanced I/M program is implemented, all 1980 and older model year covered vehicles will be subject to the Basic test procedure and inspected using the UTAH91 analyzer as specified in this section.~~

~~Utah County's Enhanced test procedure and analyzer~~ *If and when Utah County's Enhanced I/M program is implemented, all model year 1981 and newer covered vehicles registered in Utah County are subject to the Enhanced test procedure, equipment, and personnel practices as specified in Utah County's Enhanced and Basic Vehicle Inspection and Maintenance Program Ordinance January 25, 1995; #EPA-EPSS-IM-93-1, April 1994 (Section X, App. 8.a.1); and 40 CFR Part 51 VII, November 5, 1992.]*

Pre-inspection emissions-related repairs Inspectors in the county's test-and-repair networks are required to perform the emissions test prior to making any emissions-related repairs when a vehicle is presented for an emissions inspection. All inspectors who conduct test-only inspections, are required to ask the vehicle owner or operator whether a tune-up or other emissions-related repairs have been performed within 6 weeks prior to the emissions inspection and to document the owner's response in the UTAH[91]2000 ~~[or Enhanced I/M]~~ computer database.

Safety issues Vehicles presented in unsafe condition must be repaired before inspection. Vehicles are also subject to an annual safety inspection administered by the Highway Patrol. Submission of proof of compliance with the safety program is also required as a condition for registration or renewal of registration. Most owners in Utah's test-and-repair networks have the safety and emissions inspection performed at the same time as the emissions inspection. Data relative to the safety inspection can be recorded in the UTAH[91]2000 Analyzer. Utah County's I/M program is administered with close cooperation with the Utah Highway Patrol Safety Program.

Exhaust leaks The UTAH[91]2000 analyzer measures exhaust carbon monoxide (CO) and carbon dioxide (CO₂). Exhaust CO + CO₂ readings of less than 6% indicate a leaky exhaust system and cause the UTAH[91]2000 analyzer to abort the inspection. ~~[See~~

~~section 3.3.3OC of the UTAH91 analyzer specifications in Section X, Part A, Appendix A.4.]~~

Emission standards The Utah County proposed I/M ordinance includes hydrocarbon and carbon monoxide emission standards in an appendix to allow for quick adjustment of the standards in case actual failure rates fall below the level specified in the State Implementation Plan. Vehicles must pass both the hydrocarbon and carbon monoxide emission standard regardless of the NAAQS attainment status of the county of registration. The emission standard for the Basic I/M program was used in the MOBILE5.a modeling that was conducted to demonstrate compliance with the Basic I/M performance standard. ~~[The remote sensing carbon monoxide and oxides of nitrogen emissions standards for Utah County will be established and revised as specified in the [proposed] Remote Sensing Program ordinance provided in section X, Part D, Appendix D.1.e].~~ Utah County also established waiver emission standard for carbon monoxide that can be found in Appendix F of Utah County's Vehicle Emission Inspection Maintenance Program ordinance ~~[that is provided in Section X, Part D, Appendix 1.b].~~

Stringency The Utah County I/M program will adjust tailpipe emission standards as necessary to maintain a stringency rate of at least 22% for pre-81 model year vehicles, the stringency rate used in the Basic I/M performance standard modeling demonstration.

Re-test standards The same test procedure and emission standards are used for initial tests and retests, regardless of which part a vehicle may have failed during an initial test. Utah County's I/M test procedure requires an official test, once initiated, to be performed in its entirety regardless of intermediate outcomes, except in the case of invalid test conditions, unsafe conditions, or the fast pass/fail algorithms.

Anti-tampering provisions Utah County requires a visual emissions control device inspection to determine whether the air system, catalyst, fuel inlet, exhaust gas recirculation (EGR) valve, evaporative system, positive pressure crankcase valve (PCV), and gas cap are present, appear to be properly connected, and appear to be the correct type for the certified vehicle configuration. Regardless of the vehicle model year, Utah County does not allow waivers for tampered vehicles or money spent to repair tampered or missing emission control devices to be applied towards a minimum waiver cost. Utah County requires repair of any catalyst~~[-]~~ and air pump system~~[-, and fuel neck restrictor]~~ tampering on vehicles of model year 1977 through 1989. The county also requires repair of any tampering of the air system, catalyst, fuel inlet, exhaust gas recirculation (EGR) valve, evaporative system, positive pressure crankcase valve (PCV), and gas cap on model year 1990 and newer vehicles. ~~[The catalytic convertor must be replaced on vehicles that fail due to a tampered fuel inlet restrictor.]~~

Engine changes Utah County's proposed I/M ordinance has a section that addresses engine changes performed prior to 1991. After an engine change, vehicles are tested to the tailpipe emission standards and anti-tampering requirements applicable to vehicles of

the chassis model year. Mixing vehicle classes (e.g., light-duty with heavy-duty) and certification types (e.g. California with federal) within a single vehicle is considered tampering.

Fuel switching Vehicles that are switched to a fuel type for which there is no certified configuration are tested according to the most stringent emission standards for that vehicle model year and vehicle type.

7. Test Equipment

TSD Tab (Same # as tab for Section 6 above)___: Utah2000 analyzer specification; certification procedure

Specifications [~~Written technical specifications for t~~]The UTAH[91]2000 Analyzer[;] is a BAR[90]97-type computerized emissions analyzer[; are provided in Section X, Part A, Appendix A.4]. Additional written technical specifications for Utah County's I/M test equipment are specified in Utah County's I/M [~~Enhanced and Basic Vehicle Inspection and Maintenance Program Ordinance January 25, 1995 (Section X, part D, Appendix D.1.a); #EPA-AA-EPSP-IM-93-1, April 1994; and 40 CFR part 51 VII, November 5, 1992.]Program Ordinance]ordinance.~~

[~~UTAH91a~~]Analyzer access restrictions An inspector access code is required to use the UTAH[91]2000 analyzer for official tests, a service access code to repair or service the analyzer, and an auditor access code to access the audit functions. DOS functions are not accessible to station owners[;] or inspectors[; or analyzer service personnel]. Programming changes are made by county I/M auditors from disks supplied by the analyzer manufacturer.

Data security provisions Manual data entry is minimized. For initial inspections, the inspector enters vehicle registration and vehicle information from the keyboard. Data elements are described in the UTAH[91]2000 analyzer specifications. For retests, the inspector calls up the initial test file, compares the vehicle and owner data, and confirms the VIN/license plate data. Data regarding inspections, analyzer calibration and service, lock-out activities, and audit information are [~~stored to a secured disk drive and retrieved by county auditors at least once a quarter~~]downloaded to the county vehicle identification database daily.

[~~UTAH91a~~]Automated test procedure The UTAH[91]2000 analyzer automatically reads all test measurements, records test results in the computer database, determines whether the vehicle has passed or failed a test, and prints vehicle inspection reports and inspection certificates for all subject vehicles. The analyzers are capable of simultaneously sampling dual exhaust vehicles. The analyzer bench includes two non-dispersive infrared (NDIR) analyzers for carbon monoxide, carbon dioxide, and hydrocarbon measurements (one low range and one high range), and one NDIR analyzer for carbon dioxide measurement. The

test procedure is automated to the highest degree practical to minimize the potential for intentional fraud and/or human error.

~~[UTAH91-s]~~ *Security lockouts* The analyzers are programmed to trigger lock-outs when abuse or tampering occur. Lock-outs occur after any security system is tampered, failure to conduct or pass periodic calibration tests, or the data recording medium is full. The analyzer can not be used until the lock-out has been cleared by a Utah County I/M auditor. The analyzer automatically keeps an electronic record of all lock-outs including the date of the lock-out, the reason for the lock-out, and the date and person that cleared the lock-out.

~~[UTAH91-c]~~ *Certified analyzer use restriction* Since September 1, 1991, the Utah County Basic I/M program requires that official emissions tests be conducted only on registered UTAH[91]2000 analyzers jointly certified by Utah, Davis and Weber Counties. A description of the certification procedure is provided in ~~[Section X, Part A, Appendix A.5]~~ the TSD. There have been several updates of the UTAH[91]2000 Analyzer specifications to date and more will follow, as necessary, to accommodate new technology vehicles and changes to the program.

8. Quality Control

General quality control specifications Utah County's ~~[Enhanced]~~ I/M Program, the UTAH[91]2000 Analyzer specifications, and current I/M program ordinances and regulations were carefully designed to insure that emission measurement equipment is calibrated and maintained properly, and that inspection, calibration records, and maintenance records are accurately created, recorded, and maintained. The specifications meet the test equipment quality assurance practices described in 40 CFR 51 Subpart S Sec. 51.359 and Section X, Appendix A.

~~[UTAH91-a]~~ *Automatic electronic quality assurance features* Operational analyzer quality assurance measures such as analyzer calibration, zero and span check, hydrocarbon hang-up check, and leak check are mandatory automatic analyzer capabilities. Gas accuracy tolerances, dilution limits, analyzer warm up requirements, system response time requirements, optical correction factors, and interference effects are also addressed in the analyzer specifications. If the checks are not performed on schedule or identify measurements outside of acceptable limits established in the specifications, a lock-out occurs preventing use of the analyzer until such problems are corrected. See Sections 2.12, 2.13, and 2.18 of the UTAH[91]2000 Analyzer specifications. Records of all quality assurance activities with respect to the analyzer are automatically recorded in the analyzer's electronic database and evaluated by Utah County I/M auditors on a regular basis. Section 1.7 discusses requirements for assurance that unauthorized access to the I/M database in the analyzer is secure. Attempts to deliberately avoid or defeat analyzer or inspection quality assurance provisions result in disciplinary action against the I/M mechanic and/or station.

~~[UTAH91-a]~~Analyzer maintenance Section 1.8 of the UTAH[91]2000 Analyzer specifications describes required services, warranty provisions, and documentation that analyzer manufacturers must provide to customers. It includes ensuring that the analyzer meets the quality assurance specifications at the time of delivery, that routine quarterly preventative maintenance is performed, training on how to use, maintain, and operate the analyzer is provided by the manufacturer, and that if repair of defects can not be made promptly a temporary analyzer replacement is provided. Service activities are recorded in the analyzer's electronic database. Utah County has conducted a survey of analyzer owners to determine compliance with these provisions. Failure of an analyzer manufacturer to meet quality assurance specifications could result in de-certification of the that manufacturer's product for use in Utah.

~~[UTAH91-d]~~Document security Document security was a high priority during the UTAH[91]2000 analyzer design phase. The analyzer tracks the unique certificate numbers and ensures that the certificate printed matches the test number. Missing certificate numbers are stored in the analyzer database for auditor review. The blank certificates are commercially printed on counterfeit-resistant security paper. ~~[The certificates are printed on a dedicated and locked printer. Only permitted inspectors have access to the certificate printer and storage area. Access to the certificates is only possible for the purpose of loading or aligning certificates in the printer. Attempts to access this area at other times or without an access code sets a lock-out that only county auditors can clear. The certificate storage area is designed with redundant security systems including both hardware and software locks. See Section 2.16 of the UTAH 91 analyzer specifications. The blank certificates are commercially printed with sequential and unique serial numbers on counterfeit-resistant security paper.]~~

~~[UTAH91-a]~~Analyzer certification Sound engineering practices were followed during the design and certification of the UTAH[91]2000 analyzer to insure accurate and repeatable inspections under a range of environmental conditions. Manufacturer owner's manuals, operating instructions, and warranty provisions were also reviewed during the certification process. Comprehensive records of the certification process have been maintained.

~~[General UTAH91-a]~~Analyzer security provisions Utah County's I/M ordinance requires use of a certified and registered UTAH[91]2000 analyzer for official inspections. Inspection records include the analyzer registration number. The ordinances and regulations make it illegal to alter analyzer software or hardware without written approval. Analyzer calibration requirements, maintenance, and warranty provisions are also specified in the Utah County I/M ordinance. ~~[Copies are provided in Section X, Part D, Appendix D.1.]~~

9. Waivers

Waiver rate Utah County will take corrective action as needed to maintain a maximum waiver rate of 5% of the initially failed vehicles or the Utah Air Quality Board will revise the SIP and emission reductions claimed based on the actual waiver rate. The conditions for issuing waivers legally authorized and specified in the Utah County I/M ordinance meets the minimum waiver issuance criteria specified in 40 CFR Subpart S 51.360.

Waiver procedures The Vehicle Inspection Report (VIR) printed by the ~~[UTAH91]~~UTAH2000 analyzer after each inspection and provided to the vehicle owner/operator includes warranty and waiver information, if the vehicle failed the emissions inspection. A waiver document may be issued only by Utah County I/M technical center staff and only after verification of required documentation. Any tampered, missing, or inoperable emission control devices must have been replaced or repaired. At least \$100 for 1968 through 1980 model year vehicles, ~~[and]~~ \$200 for 1981 through 1995 and \$400.00 for 1996 and newer model year vehicles must have been spent on acceptable emission repairs as verified by a Utah County I/M program auditor by physical examination of the vehicle and review of the repair documentation. Repair documentation, such as receipts, are copied and retained by auditor to prevent reuse. Utah County requires that emissions-related repairs be made by a Certified Emissions Technician (certified under Section 14.0 of the ~~[proposed]~~ Utah County I/M ordinance). Any vehicle that experiences an increase in all emissions levels is not eligible for an emissions repair waiver regardless of the amount spent to repair the vehicle. Also, before a waiver can be issued, the vehicle must have an improvement in carbon monoxide emissions. Utah County's ~~[proposed]~~ waiver policy on emission standards for carbon monoxide can be found in Appendix [F]E of Utah County's Vehicles Emission Inspection/Maintenance Program Ordinance~~[that is provided in Section X, Part D; Appendix D.1.b]~~. In the state of Utah, vehicles still under the federal emissions warranty are not eligible for a waiver until all warranties are exhausted. Warranted repair and tampering repair may not be applied to the repair cost waiver limits. Waivers are only valid for one test cycle. The vehicle owner surrenders the original waiver document at the time of registration; copies are not accepted for registration purposes. Specific provisions regarding waivers may be found in Utah County's I/M ordinance and the Utah Tax Commission Division of Motor Vehicle policy manual which is available upon request. The I/M program in Utah County does not provide for time extensions to relieve economic hardships in obtaining emission-related repairs.

10. Motorist compliance enforcement

Registration denial Utah County's I/M program is enforced by means of registration denial. Vehicle owners must present proof of compliance with the I/M program, a waiver, or evidence of exemption from the I/M program as a condition precedent to vehicle registration or registration renewal. See ~~[paragraphs]~~sections 4 and 6 above for a more detailed discussion of inspection frequency, inspection scheduling, license plate requirements, and enforcement of the registration requirements. Citations are routinely issued to operators of vehicles with expired or missing license plates during routine

traffic stops, parking lot inspections, and roadblocks. As specified in Section 41-1a-1303 of the Utah Code[(Section X, Part A, Appendix A.1.d)], driving without registration is a Class C misdemeanor. The penalty for a Class C misdemeanor is imprisonment of no more than 90 days and \$750 for persons or up to \$1000 for corporations, associations, partnerships, or government instrumentalities. In addition to paying a fine the motorist must register the vehicle. It is currently a Class B misdemeanor to violate a county I/M regulation or ordinance. The penalty for a Class B misdemeanor is a imprisonment of not exceeding six months and for persons a fine of up to \$1000 or for corporations, associations, partnerships, or government instrumentalities a fine of up to \$5000. [Copies of the relevant statute are provided in Section X, Appendices 1.b and 1.c.] In Utah, the magnitude of such penalties is a judicial rather than an administrative decision. Per Section 41-1a-1315 falsification of evidences of title and registration is a second degree felony.

Certificate of Compliance The Certificate of Compliance is dated by the [UTAH9+]UTAH2000 analyzer [or the Enhanced I/M contractor] in Utah County immediately after a passing inspection is completed. The certificate is only valid for registration purposes for two months. At the same time the analyzer also prints the following information on the certificate to ensure unambiguous vehicle identification: the vehicle identification number (VIN), license number, model year, make, and model. A sample of the Certificate of Compliance is in Appendix C of the [UTAH9+]UTAH2000 specifications. The certificates are only printed in the event that the vehicle passed the emissions inspection. Separate documentation, including the same vehicle information, is used for waivers.

Fuel changes to non-subject status Vehicle changes that would result in registration changes from a subject to exempt status require physical confirmation by Utah County I/M program personnel at the I/M technical center. Falsification of registration or title information is a felony offense.

Title transfers Proof of compliance with the I/M program is required for a title transfer. The system ensures that owners are not able to avoid the program by extending the inspection date through manipulation of the title and registration system.

Utah County I/M program staff, peace officers, and the Utah Tax Commission Motor Vehicle Customer Service Division routinely work together to ensure that motor vehicle owners that move into an I/M program area complete registration transfer including compliance with the I/M program. Except for higher education students and active duty military personnel, people are required to register their vehicles in the county in which they are domiciled. As discussed in the Vehicle Coverage section, although these two exempted classes of vehicle owners do not have to register their vehicles in Utah, they do have to comply with the I/M programs. Employment status, maintenance of a residence, enrollment of children in local schools, and voting districts are considered when identifying persons in violation of this requirement.

The Utah County I/M program staff work with citizens, the Motor Vehicle Customer Service Division and county attorneys to identify and prosecute people that illegally transfer registration to a non-subject area to avoid the I/M program. The process is very labor intensive. There are many legitimate reasons to be operating a vehicle in an I/M program area that is registered elsewhere. Violators must be dealt with on a case-by-case basis. Persons caught are subject to fines. Those prosecuted and convicted could end up with a criminal record and actual jail time. Fraudulent registration of a motor vehicle is a felony offense. Most people confronted with evidence of their guilt and the seriousness of their offense, to date, have complied promptly. The involved agencies are developing more efficient methods of dealing with illegal registrations that result in exemption from the I/M programs.

Utah County is committed to a cooperative aggressive effort to ensure that vehicles operated in the county comply with the I/M program to ensure a compliance rate of at least 95%.

11. Motorist compliance enforcement program oversight

Utah Tax Commission, tax assessors, and county roles The Utah Tax Commission Motor Vehicle Customer Service Division and county tax assessors deny application for vehicle registration or renewal of registration without ~~[submittal]~~ submission of a valid certificate of compliance, waiver, or verified evidence of exemption. Proof is retained by the tax clerk, micro-photo-copied, and then destroyed. Altered or hand-written documents are not accepted. All certificate data is collected by Utah County I/M program auditors and subjected to scrutiny for evidence of any improprieties.

Database quality assurance The vehicle registration database is maintained and quality assured by the Motor Vehicle Customer Service Division. The I/M inspection database is maintained and quality assured by Utah County I/M program staff. See Appendix F of the ~~[UTAH91]~~ UTAH2000 analyzer specifications for a file layout description. The Utah County I/M program has access to the Motor Vehicle Customer Service Division database and utilizes it on a regular basis for quality assurance purposes. The databases are subject to regular auditing, cross-referencing, and analysis. The databases are also evaluated using data obtained during roadblocks and parking lot surveys. Evidence of program effectiveness problems trigger additional joint enforcement activities.

Oversight provisions The oversight program includes verification of exempt vehicle status through inspection, data accuracy through automatic and redundant data entry for most data elements, an audit trail for program documentation to ensure control and tracking of enforcement documents, identification and verification of exemption-triggering changes in registration data, and regular audits of I/M inspection records, I/M program databases, and the Motor Vehicle Customer Service Division database.

Enforcement staff quality assurance I/M program auditors and tax clerks involved in vehicle registration are subject to regular performance audits by their supervisors. All enforcement personnel (direct and indirect) involved in the motorist enforcement program are subject to disciplinary action, additional training, and termination for deviation from procedures. Specific provisions are outlined in the Motor Vehicle Customer Service Division procedures manual [~~which is available upon request~~], the county I/M audit policy documents [~~provided~~ contained in [~~Section X, Part D, Appendix D.1 containing~~] the Utah County I/M ordinances, and Section 3.9 of the [~~UTAH9+~~ UTAH2000] analyzer specifications.

Co-operative enforcement oversight effort Motor Vehicle Customer Service Division, Utah Division of Air Quality, Utah highway patrol, and Utah County I/M program staff meet [~~at least once a month~~] as needed to ensure on-going high quality oversight of joint motorist compliance program. EPA audit of this process is authorized if measures to protect tax-payer confidentiality acceptable to Motor Vehicle Customer Service Division are exercised.

12. I/M Program quality assurance

Station/inspector audits Utah County regularly audits all permitted I/M inspectors and stations to ensure compliance with the Utah County I/M ordinance. Particular attention is given to identifying and correcting any fraud or incompetence with respect to vehicle emissions inspections. Compliance with record keeping, document security, analyzer maintenance, and program security requirements are scrutinized. The inspector's skill level is also evaluated during audits. Another major purpose of the audits is to retrain inspectors, as necessary, as soon as problems are identified. Documentation sufficient to support a legal case to suspend or revoke a permit is also collected in the event of serious and/or repeated violations. Most stations and inspectors are audited every month and all at least quarterly.

Covert audits Utah County, to the extent possible, performs a covert audit of each inspector and station at least once a year. The number of covert audits at least equals the number of permitted inspectors. Covert audits are performed using a variety of vehicles that are representative of the subject fleet that are set to fail across a full range of malfunctions. Suspected problem stations and inspectors are targeted for earlier and more frequent audits. Complaints also trigger additional audits.

Covert performance audits shall include:

Remote visual observation of inspector performance, which may include the use of aids such as binoculars or video cameras, at least once per year per inspector in high-volume stations (i.e., those performing more than 4000 tests per year);

~~ordinance specifies the test assurance procedures. Section 10.27 specifies periodic dynamometer quality assurance checks. Constant volume sampler periodic quality assurance checks are specified in Section 10.28. Section 10.29 specifies analysis system periodic quality assurance checks. Section 10.30 provides quality assurance for on-board diagnostics interrogation equipment periodic quality assurance checks. The ordinance also specifies the minimum elements of the quality assurance plan and required procedures. Section 10.41.6 requires the contractor to submit a quality assurance and maintenance plan for on-highway emissions testing equipment and procedures to the Utah County Health Department for approval. The plan shall include test assurance procedures, periodic quality assurance checks, and, at a minimum, the maintenance procedures specified by the remote sensing equipment manufacturer.]~~

13. Enforcement against stations and inspectors

TSD Tab ___: Penalty schedule

General enforcement provisions The Utah County I/M program is responsible for enforcement action against incompetent or dishonest stations and inspectors. The Utah County I/M ordinance includes a penalty schedule. For serious or repeated offenses, auditors are authorized to immediately suspend the station or inspector by locking out their [UTAH91]UTAH2000 analyzer(s). The County does not have legal authority to impose direct fines on stations or inspectors, but suspension or revocation of a station permit results in a substantial loss of income that is far in excess of \$100 fine suggested by the EPA guidance. Fee settlements are at least as much the station's anticipated income for emissions testing for the time during which the station would be suspended. A station permit may be suspended or revoked even if the owner/operator had no direct knowledge of the violation. In the case of incompetence, re-training is required before the permit is restored.

The County revised its penalty schedule to comply with the more stringent specifications included in 40 CFR 51.364. The Utah Air Quality Board adopted the revised penalty schedule for Utah County on January 30, 1995. [See Section X, Part D, Appendix D.1.] At a minimum, inspector and station permit suspension shall be imposed for at least 6 months (or a fee retainage or settlement penalty equivalent to the inspector's salary for that period) whenever a vehicle is intentionally improperly passed for any portion of the required test.

Suspension and revocation Suspension or revocation effectively bars an individual from further inspections because the auditor removes the inspector's authorization code from the [UTAH91]UTAH2000 analyzer[~~or Enhanced I/M inspection computer (if and when developed)~~]. Evidence of indirect participation in emissions inspections by an individual while suspended or revoked could result in legal action against the station. If the station is suspended or revoked the analyzer is totally locked-out. The analyzers are initialized by an auditor for use at a single permitted station and only by inspectors permitted for that

Site visits at least once per year per number of permitted inspectors (per inspector FTE) using covert vehicles set to fail (this requirement sets a minimum level of activity not a requirement that each inspector be involved in a covert audit); and

For stations that conduct both testing and repairs, at least one covert vehicle visit per station per year including purchase of repairs and subsequent retesting if the vehicle is initially failed for tailpipe emissions.

Electronic audit capabilities The [UTAH91]UTAH2000 performs various analyses to identify statistically inconsistent data indicative of problem stations and inspectors. Overt audit records are maintained electronically in the [UTAH91]UTAH2000. After overt audits the auditor retrieves the data on the analyzer diskette containing the audit, vehicle inspection, and analyzer service, maintenance, and calibration records dating back to the previous audit. The data from each audit is added to the comprehensive central county I/M database. Further analysis of the central database results in identification of stations and inspectors for which additional audits are performed.

Auditor quality assurance Auditors receive on-the-job training in: the use of the [UTAH91]UTAH2000 analyzer; the I/M program regulations; basic air pollution control; basic principles of emissions-related motor vehicle engine repair; emission control systems; evidence gathering; administrative procedures and laws; quality assurance practices; and covert audit procedure. Utah County sends auditors to additional automotive emissions-related training and meetings on a regular basis. Auditor supervisors audit the I/M program auditors by reviewing their documentation and also auditing a number of their stations at least once every year.

Written audit procedures [Copies of t]The Utah County I/M program overt and covert audit procedures are [provided]contained in [Section X, Part D, Appendix D.4 that contains]the Utah County I/M ordinances. A detailed description of the audit capabilities of the [UTAH91]UTAH2000 analyzer are found in Section 3.9 of the [UTAH91]UTAH2000 analyzer specifications. [

~~*Utah County Enhanced I/M quality assurance* In Utah County, after and if the Enhanced I/M ordinance becomes effective, additional quality assurance measures will be required. In addition to the other quality assurance provisions of Section N, Utah County specifies overall systems performance quality assurance requirements for the Enhanced I/M stations, inspectors, and equipment in 10.31 of the Utah County I/M ordinance. It includes statistical oversight of average, median, 10th percentile and 90th percentile values of the emission levels of each pollutant and pass/fail statistics for each test lane for each inspection station and for all inspection stations combined. The use of control charts are specified in 10.32 of the I/M ordinance. Section 10.25 of the Utah County I/M ordinance requires the Enhanced I/M contractor to develop, maintain, and modify a quality assurance plan as required by the Utah County Health Department. Section 10.26 of the~~

station. A record of the serial numbers of all registered analyzers and their locations is maintained by Utah County.

Enforcement records Utah County keeps comprehensive records on all audit activities, warnings, suspensions, and revocations and report enforcement activity statistics to the EPA and the executive secretary on an annual basis.

14. Data collection

~~[Utah County Enhanced If effective, Section 10.33.4 of the Utah County Enhanced and Basic Vehicle Emission I/M ordinance (Section X, Part D, Appendix D.1) requires the contractor to maintain and make available to for inspection by the Health Department records regarding inspections, equipment maintenance, and the required quality assurance activities. Section 10.4 requires inspectors to record tampering data in the emissions analyzer. Section 20.7(d) requires the contractor to maintain a record of the number of vehicles with a default setting, the type of setting, and the test lane Section 10.8 requires the contractor to record the ambient temperature, absolute humidity, and barometric pressure either continuously during the driving cycle or as a single set of readings no more than 4 minutes before the start of the driving cycle. The contractor is required by Section 10.9.1 to sample, measure, and record background concentrations of hydrocarbons, carbon monoxide, oxides of nitrogen, and carbon dioxide in the Enhanced I/M inspection station (if and when developed). Section 10.11.2 requires the contractor to sample and record dilute exhaust hydrocarbon, carbon monoxide, carbon dioxide, and oxides of nitrogen emissions over the driving cycle Section 10.22.4.1 requires the contractor to use an analysis system which automatically samples, integrates, and records dilute exhaust hydrocarbons, carbon monoxide, carbon dioxide, and oxides of nitrogen upon initiation of the transient driving cycle, automatically determines the vehicle pass/fail status, and automatically prints a pass/fail report;~~

I/M data collection Utah County maintains records regarding inspections, equipment maintenance, and the required quality assurance activities.

~~[UTAH91-a]~~Analyzer inspection data The UTAH[91]2000 analyzer creates a detailed record of each emissions inspection performed including, but not limited to the following data, for each vehicle tested: test record number; inspection station number; inspector number; test system number; date of the test; emission test start time; the time final emission scores are determined; vehicle identification number (VIN); license plate number; test certificate number; gross vehicle weight rating (GVWR); model year, make, and type of vehicle; number of cylinders or engine displacement; transmission type; odometer reading; category of test performed (i.e., initial, first retest, or subsequent retest); fuel type of the vehicle; emission scores for HC, CO, and CO₂ at idle and 2500 RPM; and results (pass/fail/not applicable) for visual inspection of the catalytic convertor, air system, gas cap, evaporative system, and positive crankcase (PCV) valve[; and the fuel inlet restrictor]. The tailpipe emission standards for each type of vehicle is included

in a look-up table in the UTAH[91]2000 analyzer. The UTAH[91]2000 analyzer automatically uses appropriate standards for the type of vehicle being tested and makes a pass/fail determination. The inspection data is recorded by the UTAH[91]2000 analyzer during the inspection procedure.

[~~UTAH91-a~~] *Analyzer quality assurance data* Quality assurance data including a detailed history of all calibration (including the concentration values of the calibration gases), service, lockout, and document security events are also recorded and maintained by the UTAH2000 analyzer. Each UTAH[91]2000 record includes, as applicable, station number, mechanic access number, auditor access number, service access number, analyzer serial number, date, and activity time.

[~~UTAH91-a~~] *Analyzer database specifications* The programming criteria for the analyzer database is described in Section 3 of the UTAH[91]2000 analyzer specifications. Appendix [F]A of the UTAH[91]2000 analyzer specifications contains a complete description of the electronic data records. The data [disk]containing inspection and quality assurance information is [~~removed from the UTAH91 analyzer by an auditor at least once a month during overt audits~~] transferred electronically nightly and maintained permanently in the county's central I/M database.

[~~Remote sensing data~~ Remote sensing data will be collected and maintained as described in the Remote Sensing Device specifications provided in Section X, Part A, Appendix A.6 and Utah County remote sensing program policies.]

15. Data analysis and reporting

Annual Reports Utah County shall analyze I/M program data and submit annual reports to the U.S. Environmental Protection Agency and the executive secretary upon request. Beginning in July of 1995, Utah County will submit to EPA and the executive secretary an annual report, for January through December of the previous year, which provides statistics on the testing, quality assurance, and enforcement activities of each I/M program. At a minimum the annual reports will include all of the data elements listed 40 CFR Subpart S 51.366.

Biennial Reports Beginning in July of 1996, and biennially thereafter, Utah County shall submit a report to EPA and the executive secretary discussing all changes made in the program design, funding, personnel levels, procedures, regulations, and legal authority. The report will also supply a detailed discussion of the impact of such changes upon the program, any weaknesses or problems discovered in the program over the previous two-year period, the steps that were taken to address those problems, the result of those corrective actions, and any future efforts planned.

[~~Enhanced I/M real-time data~~] *Data link* [~~If and when the Enhanced I/M program is implemented,~~] Utah County [~~shall~~] requires all certified station owners to provide a real-

time-computer data link between their station(s) and the Utah County health department in a manner approved by the health department and consistent with the requirements of 40 CFR 51 Subpart S.

16. Inspector training and permitting

TSD Tab ___: Description of I/M training and testing

Inspector permitting and initial training No person may conduct an official I/M inspection unless they are certified and subsequently permitted. Utah County requires formal training prior to certifying inspectors. Each class includes at least the following information: the causes and effects of air pollution; the purpose, function, and goal of the I/M program; I/M inspection ordinances, policies, and procedures; technical details of the test procedures and the rationale for their design; emission control device function, configuration, and maintenance; quality control procedures and their purposes; public relations; and safety and health issues related to the I/M inspection process. Inspector candidates will not be issued a permit unless they have passed a written test with at least ~~80%~~70% correct responses and a hands-on test during which the trainee demonstrates the ability to properly conduct all test procedures, calibrate the UTAH~~[91]~~UTAH2000 analyzer, properly utilize equipment, and to follow other I/M program requirements. Utah County will take appropriate steps to insure the security of the testing process.

[Utah County Enhanced I/M] Inspector Training [~~if and when the Enhanced I/M program is implemented, Section 10.33.3 of the Utah County I/M ordinance requires the contractor to develop, maintain, and modify as required by the health department]~~ The Utah County I/M ordinance requires an inspector training program, to include both classroom and hands-on training, with provisions for initial and periodic in-service training. Utah County[’s ordinance also] requires health department approval of the Enhanced I/M training program (if and when developed). Utah County’s contractor must provide the training to each inspector before the inspector may perform inspections and periodic in-service training, over a period established by the health department.] in house training for each inspector before the inspector may perform inspections periodic in-service training, over a period established by the health department.

[Basic-i] Inspector permit renewal Inspector permits are valid for a period of one year, at which point refresher training and testing, are required prior to permit renewal. An auditor enters the inspector’s permit expiration date in the UTAH~~[91]~~2000 analyzer(s) that the inspector is authorized to use. Starting 60 days prior to the inspector’s permit expiration date the analyzer displays the message "Your mechanic permit expires MM/DD/YY". The analyzer locks-out inspectors that attempt to use the UTAH~~[91]~~2000 analyzer after their permit expires and displays the following message. "Your mechanic permit expired (date). You are not authorized to perform any emissions inspections at this time. Please contact your local I/M office." Auditors will not clear the lock-out until the inspector has renewed the permit. Utah County may require evidence of more

comprehensive emissions-related automotive training as a prerequisite to inspector permit renewal.

Inspector permit suspension and revocation A determination of inspector incompetence or failure to comply with I/M program requirements may result in suspension or revocation of an inspector's permit prior to the annual expiration date. A permit to conduct I/M inspections is not a legal right but rather a privilege bestowed by Utah County conditional upon adherence to its I/M program requirements.

Inspector training authority and materials Authority to require mandatory I/M inspector training is established and described in the Utah County I/M ordinances. ~~[A description of the I/M inspector training programs and the written and hands-on tests is provided in Section X, Part D, D.6].~~

17. Public information and consumer protection

General public information The Utah County, along with the Utah Department of Environmental Quality, provides a comprehensive public education and protection program including strategies to educate the public on: Utah's air quality problems; ways that people can reduce emissions; the requirements of state and federal law; the role of motor vehicles in the air quality problem; the need for and benefits of a vehicle emissions inspection program; ways to operate and maintain a vehicle in a low-emission condition; how to find a qualified repair technician; and the requirements of the I/M program. Information is provided via direct response to inquiries for information, reports, classes, pamphlets, fairs, school presentations, workshops, news releases, posters, signs, and public meetings.

County I/M Technical Center Utah County operates an I/M Technical Center staffed with trained auditors and capable of performing emissions tests. A major function of the I/M technical center is to serve as a referee station to resolve conflicts between permitted I/M inspectors, stations, and motorists. Auditors actively protect consumers against fraud and abuse by inspectors, mechanics, and others involved in the I/M program. Complaints made on a confidential basis are investigated and resolved in a manner that conceals the person's identity to ensure protection of whistle blowers. Auditors advise motorists regarding emissions warranty provisions and assist the owners in obtaining warranty-covered repairs for eligible vehicles. Applications for waivers are evaluated by auditors at the I/M technical center and issued only after visual verification that all the requirements for a waiver have been met, including retest of the vehicle. The I/M technical centers also provide motorists with information regarding the I/M program, general air pollution issues, and emissions-related automotive repairs.

Vehicle inspection report A vehicle inspection report (VIR) is printed and provided to the motorist after each vehicle inspection. The VIR includes a public awareness statement about automotive emissions and lists additional ways that the public can reduce

air pollution. The test results are detailed on the VIR. Information about vehicle emissions warranties and the benefits of emissions-related repairs are printed for vehicles that failed the test. Information about waiver requirements and application procedures are printed on the VIR, if the vehicle has failed a retest, including the address and telephone number of the applicable I/M technical center. A ~~[complete]~~ description of the VIR is included in ~~[Appendix E of]~~ the UTAH~~[91]~~2000 analyzer specifications.]

~~Utah County Technician Vehicle Report~~ If effective, Section 10.34 of the Utah County I/M ordinance (Section X, Part D, Appendix D.1.a) requires the contractor to issue a report containing information on test results of a vehicle which has failed an emissions inspection to a person seeking to have repair performed on the vehicle. The contractor must make the report available electronically to repair facilities, and shall provide read-only, convenient, and standardized access. The contractor is required to include the following information in the report: second-by-second emission levels in grams per second for each pollutant, and the corresponding average values for passing vehicles of the same model year, manufacturer, and engine family, and for an on-board diagnostics interrogation failure, fault codes stored in the vehicle on-board diagnostics system related to the emissions control equipment and to the power train.

~~Utah County repair report card~~ Using information in *Technician Vehicle Report*, the Utah County health department proposes to compile report cards for each certified repair facility and technician. The contractor shall distribute a copy of the most recent report card to operators of vehicles that fail an I/M inspection.]

I/M county co-operative public education tools A variety of pamphlets and radio, television, and newspaper advertisements about automotive air pollution issues are developed and distributed by the Utah County I/M program in cooperation with other I/M counties and the Utah Division of Air Quality. ~~[The legislature authorizes funding each year for pass-through money from the state to Utah County for public education to help reduce vehicle emissions.]~~

18. Improving repair effectiveness

High priority [Utah County implemented the Basic I/M program revision described in this SIP revision on September 1, 1991. Shortly thereafter,] Utah County (along with other I/M counties) and the Utah Division of Air Quality staff jointly identified improvement of repair effectiveness as a high priority action item. The Governor's Clean Air Commission also recommended making affordable additional emissions-related training available. Full emission reductions will only be realized if the repair industry is able to competently diagnose and repair emissions-related defects.

Continuing education ~~[To that end,]~~ I/M program managers have worked with Utah's higher education institutions to develop and provide emissions-related automotive technology classes to mechanics. Inspectors are also encouraged to take classes offered

by trade organizations, automobile manufacturers, and dealers. The permit renewal tests are difficult enough to make this provision a good incentive. The classes are advertised in the Utah County I/M technical bulletins.

I/M program repair support activities In initiating improved automotive educational opportunities, Utah County works on a day-to-day basis to ensure that repair information is available. I/M stations are required to have available up-to-date relevant automotive diagnostic references and tools as a condition for obtaining a permit. Utah County maintains a hot line to its I/M technical center so that any mechanic can call for technical assistance related to vehicle inspection, diagnosis, and repair. Technical bulletins are regularly mailed to each permitted inspector with information regarding training schedules, common problems found with particular engine families, and diagnostic tips. [

~~Utah County Enhanced I/M feedback reports to repair facilities~~ If and when the Enhanced I/M program is implemented, the contractor must also make electronically available to the health department information on vehicles which have received emissions related repairs and have been submitted for reinspection. Section 10.35 also requires the contractor to provide a monthly feedback report in a format approved by the health department to vehicle repair facilities which have performed emissions related repairs on vehicles submitted for reinspection. The report shall include, for the reporting period, the following statistics for vehicles submitted for reinspection: the total number; the number failing the first reinspection; the number receiving waivers after the first reinspection; the reinspection failure rate; and the multiple reinspection rate.

19. [Basic] I/M SIP implementation

~~As required by 40 CFR Part 51.373(a) the Basic I/M SIP requirements not included in the September 30, 1993, adoption of Section X by the Utah Air Quality Board have been funded and implemented, including but not limited to the covert audit requirements specified in Section X.E.13 and the penalty provisions specified in Section X.E.15. On January 30, 1995, the Utah Air Quality Board adopted the changes which are documented in the Utah County I/M ordinance found in Section X, Part D, Appendix D.1.]~~
The [Basic] I/M program ordinances or regulations, policies, procedures, and activities specified this [Basic] I/M SIP revision have been implemented and shall continue until a maintenance plan without an I/M program is approved by EPA in accordance with Section 175 of the Clean Air Act as amended. [

20. On-road Testing

~~If effective, Section 10.41 of the Utah County I/M ordinance (Section X, Part D, Appendix D.1.a) requires the Enhanced I/M contractor to conduct on-road emissions testing using a remote sensing device. The contractor must use equipment approved by the Utah County health department and EPA and procedures specified by the equipment manufacturer and the health department. The contractor must measure vehicle exhaust~~

~~emissions of hydrocarbons and carbon monoxide. When technologically feasible, the contractor is required to measure oxides of nitrogen emissions. Section 10.41.2 requires the contractor to conduct testing in each jurisdiction in the inspection area at least once each year, and to test at least 0.5 percent of the affected vehicles in each jurisdiction. The contractor shall submit the schedule of the test date, time, and location to the Utah County health department no less than 5 days and no more than 15 days in advance of the test date. The Utah County Commission adopted a Remote Sensing Program ordinance in 1996. The ordinance is provided in Section X, Part D, Appendix D.1.c.]~~



State of Utah

DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF AIR QUALITY

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MEMORANDUM

TO: Air Quality Board DAQ-044-01

THROUGH: Richard W. Sprott, Executive Secretary

FROM: Colleen Delaney, Environmental Scientist

DATE: April 23, 2001

SUBJECT: Propose for Public Comment: Amend R307-101-2, Definitions, and R307-405, Permits: Prevention of Significant Deterioration of Air Quality (PSD), to adopt the Federal WEPCO New Source Permitting Provisions

On July 21, 1992, EPA adopted changes to the federal new source review (NSR) requirements for attainment and nonattainment areas (40 CFR 51.165 and 40 CFR 51.166) to incorporate a 1989 Federal Appellate Court decision (commonly referred to as WEPCO) as well as provisions to address pollution control projects and clean coal demonstration projects. The attached proposed rule changes would adopt the federal language into Utah's new source review rules for major sources.

The WEPCO rule changes fall into three categories.

1. Definition of Major Modification for Electric Utility Steam Generating Units. The current major source permitting rules require sources that make a major modification to undergo additional review, and may require the installation of more stringent pollution control equipment. Applicability is determined based on the proposed increase in actual emissions at the source. However, because the "future actual" emissions after the modification are not known when a permit application is reviewed, R307-101-2 defines actual emissions as follows:

"...(3) For any source which has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the source on that date."

The result of this language is that an "actual-to-potential" test must be used to determine if a major modification has occurred.

In the WEPCO rule, EPA modified this definition to specify that changes at an electric utility steam generating unit, save those that are an addition of a new unit or constitute a replacement of a unit, should use an "actual to future actual" test to determine if a change qualifies as a major modification. The change was limited to electric utility steam generating units due to the case-by-case nature of determining whether a source "has begun normal operations." EPA stated in the preamble to the WEPCO rule that their "extensive experience with electric generating utilities, and the generally similar nature of operations within this source category provide EPA with an adequate basis on which to predict future actual emissions from such units in most cases."

It is interesting to note that the application of this reasoning to other source categories is the subject of much debate nationally, and is one of the key issues being addressed in EPA's NSR reform effort. EPA proposed changes to the federal regulations in 1996 that would have expanded this concept to all source categories; however, that rulemaking is still mired down, and DAQ does not expect EPA to resolve this issue in the near future.

2. Pollution Control Projects at Electric Utility Generating Units. The WEPCO rule specifies that pollution control projects at electric utility generating units are not considered modifications unless they render the unit less environmentally beneficial.

3. Clean Coal Demonstration Projects. The WEPCO rule implements provisions in sections 409 and 415 of the Clean Air Act that create limited NSR exemptions for temporary and permanent clean coal demonstration projects, and for certain "very clean" units. Temporary projects (5 years or less) are allowed in nonattainment areas, while both temporary and permanent projects are allowed in attainment areas.

✓ The proposed changes to R307-101-2 and R307-405 incorporate the new federal language verbatim, with the exception of a few minor changes to make the requirements consistent with Utah's rules. For example, the term *reviewing authority* is replaced by *executive secretary*.

Staff Recommendation: DAQ staff recommends that the Air Quality Board adopt the proposed revisions to R307-101-2, Definitions, and R307-405, Permits: Prevention of Significant Deterioration of Air Quality (PSD) to incorporate the federal WEPCO rule into Utah's new source review requirements for major sources.

The proposed rule change is expected to facilitate the construction of an experimental cokeless steel process at Geneva Steel that has been funded by the US Department of Energy. In addition, the change will help to streamline the permitting requirements for modifications at existing electric utility generating units in response to the current energy crisis in the West.

R307. Environmental Quality, Air Quality.**R307-101. General Requirements.****R307-101-2. Definitions.**

Except where specified in individual rules, definitions in R307-101-2 are applicable to all rules adopted by the Air Quality Board.

"Actual Area of Nonattainment" means an area which is shown by monitored data or modeling actually to exceed the National Ambient Air Quality Standards (Boundaries are established in the Utah State Implementation Plan).

"Actual Emissions" means the actual rate of emissions of a pollutant from [a source]an emissions unit determined as follows:

(1) In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the [source]unit actually emitted the pollutant during a two-year period which precedes the particular date and which is representative of normal source operations. The Executive Secretary shall allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the [source's]unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period.

(2) The Executive Secretary may presume that source-specific allowable emissions for the [source]unit are equivalent to the actual emissions of the [source]unit.

(3) For any [source]emission unit, other than an electric utility steam generating unit specified in (4), which has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the [source]unit on that date.

(4) For an electric utility steam generating unit (other than a new unit or the replacement of an existing unit) actual emissions of the unit following the physical or operational change shall equal the representative actual annual emissions of the unit, provided the source owner or operator maintains and submits to the executive secretary, on an annual basis for a period of 5 years from the date the unit resumes regular operation, information demonstrating that the physical or operational change did not result in an emissions increase. A longer period, not to exceed 10 years, may be required by the executive secretary if the executive secretary determines such a period to be more representative of normal source post-change operations.

"Acute Hazardous Air Pollutant" means any noncarcinogenic hazardous air pollutant for which a threshold limit value - ceiling (TLV-C) has been adopted by the American Conference of Governmental Industrial Hygienists in its "Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices, pages 15 - 72 (2000)."

"Air Contaminant" means any particulate matter or any gas, vapor, suspended solid or any combination of them, excluding steam and water vapors (Section 19-2-102(1)).

"Air Contaminant Source" means any and all sources of emission of air contaminants whether privately or publicly owned or operated (Section 19-2-102(2)).

"Air Pollution" means the presence in the ambient air of one or more air contaminants in such quantities and duration and under conditions and circumstances, as is or tends to be injurious to human health or welfare, animal or plant life, or property, or would unreasonably interfere with the enjoyment of life or use of property as determined by the standards, rules and regulations adopted by the Air Quality Board (Section 19-2-104).

"Air Quality Related Values" means, as used in analyses under R307-401-4(1), Public

Notice, those special attributes of a Class I area, assigned by a federal Land Manager, that are adversely affected by air quality.

"Allowable Emissions" means the emission rate of a source calculated using the maximum rated capacity of the source (unless the source is subject to enforceable limits which restrict the operating rate, or hours of operation, or both) and the emission limitation established pursuant to R307-401-6.

"Ambient Air" means the surrounding or outside air (Section 19-2-102(4)).

"Appropriate Authority" means the governing body of any city, town or county.

"Asphalt or Asphalt Cement" means the dark brown to black cementitious material (solid, semisolid, or liquid in consistency) of which the main constituents are bitumens which occur naturally or as a residue of petroleum refining.

"Atmosphere" means the air that envelops or surrounds the earth and includes all space outside of buildings, stacks or exterior ducts.

"Authorized Local Authority" means a city, county, city-county or district health department; a city, county or combination fire department; or other local agency duly designated by appropriate authority, with approval of the state Department of Health; and other lawfully adopted ordinances, codes or regulations not in conflict therewith.

"Baseline Date":

(1) Major source baseline date means:

- (a) In the case of particulate matter and sulfur dioxide, January 6, 1975, and
- (b) In the case of nitrogen dioxide, February 8, 1988.

(2) Minor source baseline date means the earliest date after the trigger date on which the first complete application under 40 CFR 52.21 or R307-405 is submitted by a major source or major modification subject to the requirements of 40 CFR 52.21 or R307-405. The minor source baseline is the date after which emissions from all new or modified sources consume or expand increment, including emissions from major and minor sources as well as any or all general commercial, residential, industrial, and other growth. The trigger date is:

- (a) In the case of particulate matter and sulfur dioxide, August 7, 1977, and
- (b) In the case of nitrogen dioxide, February 8, 1988.

"Best Available Control Technology (BACT)" means an emission limitation and/or other controls to include design, equipment, work practice, operation standard or combination thereof, based on the maximum degree or reduction of each pollutant subject to regulation under the Clean Air Act and/or the Utah Air Conservation Act emitted from or which results from any emitting installation, which the Air Quality Board, on a case-by-case basis taking into account energy, environmental and economic impacts and other costs, determines is achievable for such installation through application of production processes and available methods, systems and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of each such pollutant. In no event shall applications of BACT result in emissions of any pollutants which will exceed the emissions allowed by Section 111 or 112 of the Clean Air Act.

"Board" means Air Quality Board. See Section 19-2-102(6)(a).

"Breakdown" means any malfunction or procedural error, to include but not limited to any malfunction or procedural error during start-up and shutdown, which will result in the inoperability or sudden loss of performance of the control equipment or process equipment causing emissions in excess of those allowed by approval order or Title R307.

"BTU" means British Thermal Unit, the quantity of heat necessary to raise the temperature of one pound of water one degree Fahrenheit.

"Calibration Drift" means the change in the instrument meter readout over a stated period of time of normal continuous operation when the VOC concentration at the time of measurement is the same known upscale value.

"Carbon Adsorption System" means a device containing adsorbent material (e.g., activated carbon, aluminum, silica gel), an inlet and outlet for exhaust gases, and a system for the proper disposal or reuse of all VOC adsorbed.

"Carcinogenic Hazardous Air Pollutant" means any hazardous air pollutant that is classified as a known human carcinogen (A1) or suspected human carcinogen (A2) by the American Conference of Governmental Industrial Hygienists in its "Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices, pages 15 - 72 (2000)."

"Chronic Hazardous Air Pollutant" means any noncarcinogenic hazardous air pollutant for which a threshold limit value - time weighted average (TLV-TWA) having no threshold limit value - ceiling (TLV-C) has been adopted by the American Conference of Governmental Industrial Hygienists in its "Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices, pages 15 - 72 (2000)."

"Clean Air Act" means federal Clean Air Act as amended in 1990.

"Clean Coal Technology" means any technology, including technologies applied at the precombustion, combustion, or post combustion stage, at a new or existing facility which will achieve significant reductions in air emissions of sulfur dioxide or oxides of nitrogen associated with the utilization of coal in the generation of electricity, or process steam which was not in widespread use as of November 15, 1990.

"Clean Coal Technology Demonstration Project" means a project using funds appropriated under the heading "Department of Energy-Clean Coal Technology," up to a total amount of \$2,500,000,000 for commercial demonstration of clean coal technology, or similar projects funded through appropriations for the Environmental Protection Agency. The Federal contribution for a qualifying project shall be at least 20 percent of the total cost of the demonstration project.

"Clearing Index" means an indicator of the predicted rate of clearance of ground level pollutants from a given area. This number is calculated by the National Weather Service from daily measurements of temperature lapse rates and wind speeds from ground level to 10,000 feet. The State has been divided into three separate air quality areas for purposes of the clearing index system:

(1) Area 1 includes those valleys below 6500 feet above sea level and west of the Wasatch Mountain Range and extending south through the Wasatch and Aquarius Plateaus to the Arizona border. Included are the Salt Lake, Utah, Skull and Escalante Valleys and valleys of the Sevier River Drainage.

(2) Area 2 includes those valleys below 6500 feet above sea level and east of the Wasatch Mountain Range. Included are Cache Valley, the Uintah Basin, Castle Valley and valleys of the Green, Colorado, and San Juan Rivers.

(3) Area 3 includes all valleys and areas above 6500 feet above sea level.

"Commence" as applied to construction of a major source or major modification means

that the owner or operator has all necessary pre-construction approvals or permits and either has:

- (1) Begun, or caused to begin, a continuous program of actual on-site construction of the source, to be completed within a reasonable time; or
- (2) Entered into binding agreements or contractual obligations, which cannot be canceled or modified without substantial loss to the owner or operator, to undertake a program of actual construction of the source to be completed within a reasonable time.

"Compliance Schedule" means a schedule of events, by date, which will result in compliance with these regulations.

"Construction" means any physical change or change in the method of operation including fabrication, erection, installation, demolition, or modification of a source which would result in a change in actual emissions.

"Control Apparatus" means any device which prevents or controls the emission of any air contaminant directly or indirectly into the outdoor atmosphere.

"Department" means Utah State Department of Environmental Quality. See Section 19-1-103(1).

"Electric Utility Steam Generating Unit" means any steam electric generating unit that is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than 25 MW electrical output to any utility power distribution system for sale. Any steam supplied to a steam distribution system for the purpose of providing steam to a steam-electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the affected facility.

"Emission" means the act of discharge into the atmosphere of an air contaminant or an effluent which contains or may contain an air contaminant; or the effluent so discharged into the atmosphere.

"Emissions Information" means, with reference to any source operation, equipment or control apparatus:

- (1) Information necessary to determine the identity, amount, frequency, concentration, or other characteristics related to air quality of any air contaminant which has been emitted by the source operation, equipment, or control apparatus;
- (2) Information necessary to determine the identity, amount, frequency, concentration, or other characteristics (to the extent related to air quality) of any air contaminant which, under an applicable standard or limitation, the source operation was authorized to emit (including, to the extent necessary for such purposes, a description of the manner or rate of operation of the source operation), or any combination of the foregoing; and
- (3) A general description of the location and/or nature of the source operation to the extent necessary to identify the source operation and to distinguish it from other source operations (including, to the extent necessary for such purposes, a description of the device, installation, or operation constituting the source operation).

"Emission Limitation" means a requirement established by the Board or the Administrator, EPA, which limits the quantity, rate or concentration of emission of air pollutants on a continuous emission reduction including any requirement relating to the operation or maintenance of a source to assure continuous emission reduction (Section 302(k)).

"Emissions Unit" means any part of a stationary source which emits or would have the potential to emit any pollutant subject to regulation under the Clean Air Act.

"Enforceable" means all limitations and conditions which are enforceable by the Administrator, including those requirements developed pursuant to 40 CFR Parts 60 and 61, requirements within the State Implementation Plan and R307, any permit requirements established pursuant to 40 CFR 52.21 or R307-401.

"EPA" means Environmental Protection Agency.

"Executive Director" means the Executive Director of the Utah Department of Environmental Quality. See Section 19-1-103(2).

"Executive Secretary" means the Executive Secretary of the Board.

"Existing Installation" means an installation, construction of which began prior to the effective date of any regulation having application to it.

"Facility" means machinery, equipment, structures of any part or accessories thereof, installed or acquired for the primary purpose of controlling or disposing of air pollution. It does not include an air conditioner, fan or other similar device for the comfort of personnel.

"Fireplace" means all devices both masonry or factory built units (free standing fireplaces) with a hearth, fire chamber or similarly prepared device connected to a chimney which provides the operator with little control of combustion air, leaving its fire chamber fully or at least partially open to the room. Fireplaces include those devices with circulating systems, heat exchangers, or draft reducing doors with a net thermal efficiency of no greater than twenty percent and are used for aesthetic purposes.

"Fugitive Dust" means particulate, composed of soil and/or industrial particulates such as ash, coal, minerals, etc., which becomes airborne because of wind or mechanical disturbance of surfaces. Natural sources of dust and fugitive emissions are not fugitive dust within the meaning of this definition.

"Fugitive Emissions" means emissions from an installation or facility which are neither passed through an air cleaning device nor vented through a stack or could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

"Garbage" means all putrescible animal and vegetable matter resulting from the handling, preparation, cooking and consumption of food, including wastes attendant thereto.

"Gasoline" means any petroleum distillate, used as a fuel for internal combustion engines, having a Reid vapor pressure of 4 pounds or greater.

"Hazardous Air Pollutant (HAP)" means any pollutant listed by the EPA as a hazardous air pollutant in conformance with Section 112(b) of the Clean Air Act. A list of these pollutants is available at the Division of Air Quality.

"Heavy Fuel Oil" means a petroleum product or similar material with a boiling range higher than that of diesel fuel.

"Household Waste" means any solid or liquid material normally generated by the family in a residence in the course of ordinary day-to-day living, including but not limited to garbage, paper products, rags, leaves and garden trash.

"Incinerator" means a combustion apparatus designed for high temperature operation in which solid, semisolid, liquid, or gaseous combustible wastes are ignited and burned efficiently and from which the solid and gaseous residues contain little or no combustible material.

"Indirect Source" means a building, structure or installation which attracts or may attract mobile source activity that results in emission of a pollutant for which there is a national standard.

"Installation" means a discrete process with identifiable emissions which may be part of a larger industrial plant. Pollution equipment shall not be considered a separate installation or installations.

"LPG" means liquified petroleum gas such as propane or butane.

"Major Modification" means any physical change in or change in the method of operation of a major source that would result in a significant net emissions increase of any pollutant. A net emissions increase that is significant for volatile organic compounds shall be considered significant for ozone. Within Salt Lake and Davis Counties or any nonattainment area for ozone, a net emissions increase that is significant for nitrogen oxides shall be considered significant for ozone. Within areas of nonattainment for PM10, a significant net emission increase for any PM10 precursor is also a significant net emission increase for PM10. A physical change or change in the method of operation shall not include:

- (1) routine maintenance, repair and replacement;
- (2) use of an alternative fuel or raw material by reason of an order under section 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974, or by reason of a natural gas curtailment plan pursuant to the Federal Power Act;
- (3) use of an alternative fuel by reason of an order or rule under section 125 of the federal Clean Air Act;
- (4) use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste;
- (5) use of an alternative fuel or raw material by a source:
 - (a) which the source was capable of accommodating before January 6, 1975, unless such change would be prohibited under any enforceable permit condition; or
 - (b) which the source is otherwise approved to use;
- (6) an increase in the hours of operation or in the production rate unless such change would be prohibited under any enforceable permit condition;
- (7) any change in ownership at a source
- (8) the addition, replacement or use of a pollution control project at an existing electric utility steam generating unit, unless the executive secretary determines that such addition, replacement, or use renders the unit less environmentally beneficial, or except:
 - (a) when the executive secretary has reason to believe that the pollution control project would result in a significant net increase in representative actual annual emissions of any criteria pollutant over levels used for that source in the most recent air quality impact analysis in the area conducted for the purpose of Title I of the Clean Air Act, if any, and
 - (b) the executive secretary determines that the increase will cause or contribute to a violation of any national ambient air quality standard or PSD increment, or visibility limitation.
- (9) the installation, operation, cessation, or removal of a temporary clean coal demonstration project, provided that the project complies with:
 - (a) the Utah State Implementation Plan; and
 - (b) other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.

"Major Source" means, to the extent provided by the federal Clean Air Act as applicable to R307:

- (1) any stationary source of air pollutants which emits, or has the potential to emit, one

hundred tons per year or more of any pollutant subject to regulation under the Clean Air Act; or

(a) any source located in a nonattainment area for carbon monoxide which emits, or has the potential to emit, carbon monoxide in the amounts outlined in Section 187 of the federal Clean Air Act with respect to the severity of the nonattainment area as outlined in Section 187 of the federal Clean Air Act; or

(b) any source located in Salt Lake or Davis Counties or in a nonattainment area for ozone which emits, or has the potential to emit, VOC or nitrogen oxides in the amounts outlined in Section 182 of the federal Clean Air Act with respect to the severity of the nonattainment area as outlined in Section 182 of the federal Clean Air Act; or

(c) any source located in a nonattainment area for PM10 which emits, or has the potential to emit, PM10 or any PM10 precursor in the amounts outlined in Section 189 of the federal Clean Air Act with respect to the severity of the nonattainment area as outlined in Section 189 of the federal Clean Air Act.

(2) any physical change that would occur at a source not qualifying under subpart 1 as a major source, if the change would constitute a major source by itself;

(3) the fugitive emissions and fugitive dust of a stationary source shall not be included in determining for any of the purposes of these R307 rules whether it is a major stationary source, unless the source belongs to one of the following categories of stationary sources:

- (a) Coal cleaning plants (with thermal dryers);
- (b) Kraft pulp mills;
- (c) Portland cement plants;
- (d) Primary zinc smelters;
- (e) Iron and steel mills;
- (f) Primary aluminum or reduction plants;
- (g) Primary copper smelters;
- (h) Municipal incinerators capable of charging more than 250 tons of refuse per day;
- (i) Hydrofluoric, sulfuric, or nitric acid plants;
- (j) Petroleum refineries;
- (k) Lime plants;
- (l) Phosphate rock processing plants;
- (m) Coke oven batteries;
- (n) Sulfur recovery plants;
- (o) Carbon black plants (furnace process);
- (p) Primary lead smelters;
- (q) Fuel conversion plants;
- (r) Sintering plants;
- (s) Secondary metal production plants;
- (t) Chemical process plants;
- (u) Fossil-fuel boilers (or combination thereof) totaling more than 250 million British Thermal Units per hour heat input;
- (v) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;
- (w) Taconite ore processing plants;
- (x) Glass fiber processing plants;

(y) Charcoal production plants;
(z) Fossil fuel-fired steam electric plants of more than 250 million British Thermal Units per hour heat input;

(aa) Any other stationary source category which, as of August 7, 1980, is being regulated under section 111 or 112 of the federal Clean Air Act.

"Modification" means any planned change in a source which results in a potential increase of emission.

"National Ambient Air Quality Standards (NAAQS)" means the allowable concentrations of air pollutants in the ambient air specified by the Federal Government (Title 40, Code of Federal Regulations, Part 50).

"Net Emissions Increase" means the amount by which the sum of the following exceeds zero:

(1) any increase in actual emissions from a particular physical change or change in method of operation at a source; and

(2) any other increases and decreases in actual emissions at the source that are contemporaneous with the particular change and are otherwise creditable. For purposes of determining a "net emissions increase":

(a) An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if it occurs between the date five years before construction on the particular change commences; and the date that the increase from the particular change occurs.

(b) An increase or decrease in actual emissions is creditable only if it has not been relied on in issuing a prior approval for the source which approval is in effect when the increase in actual emissions for the particular change occurs.

(c) An increase or decrease in actual emission of sulfur dioxide, nitrogen oxides or particulate matter which occurs before an applicable minor source baseline date is creditable only if it is required to be considered in calculating the amount of maximum allowable increases remaining available. With respect to particulate matter, only PM10 emissions will be used to evaluate this increase or decrease.

(d) An increase in actual emissions is creditable only to the extent that the new level of actual emissions exceeds the old level.

(e) A decrease in actual emissions is creditable only to the extent that:

(i) The old level of actual emissions or the old level of allowable emissions, whichever is lower, exceeds the new level of actual emissions;

(ii) It is enforceable at and after the time that actual construction on the particular change begins; and

(iii) It has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change.

(iv) It has not been relied on in issuing any permit under R307-401 nor has it been relied on in demonstrating attainment or reasonable further progress.

(f) An increase that results from a physical change at a source occurs when the emissions unit on which construction occurred becomes operational and begins to emit a particular pollutant. Any replacement unit that requires shakedown becomes operational only after a reasonable shakedown period, not to exceed 180 days.

"New Installation" means an installation, construction of which began after the effective

date of any regulation having application to it.

"Nonattainment Area" means for any pollutant, "an area which is shown by monitored data or which is calculated by air quality modeling (or other methods determined by the Administrator, EPA to be reliable) to exceed any National Ambient Air Quality Standard for such pollutant" (Section 171, Clean Air Act). Such term includes any area designated as nonattainment under Section 107, Clean Air Act.

"Offset" means an amount of emission reduction, by a source, greater than the emission limitation imposed on such source by these regulations and/or the State Implementation Plan.

"Opacity" means the capacity to obstruct the transmission of light, expressed as percent.

"Open Burning" means any burning of combustible materials resulting in emission of products of combustion into ambient air without passage through a chimney or stack.

"Owner or Operator" means any person who owns, leases, controls, operates or supervises a facility, an emission source, or air pollution control equipment.

"PSD" Area means an area designated as attainment or unclassifiable under section 107(d)(1)(D) or (E) of the federal Clean Air Act.

"PM10 Nonattainment Area" means Salt Lake County, Utah County, or Ogden City.

"PM10 Particulate Matter" means particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by an EPA reference or equivalent method.

"PM10 Precursor" means any chemical compound or substance which, after it has been emitted into the atmosphere, undergoes chemical or physical changes that convert it into particulate matter, specifically PM10. It includes sulfur dioxide and nitrogen oxides.

"Part 70 Source" means any source subject to the permitting requirements of R307-415.

"Peak Ozone Season" means June 1 through August 31, inclusive.

"Person" means an individual, trust, firm, estate, company, corporation, partnership, association, state, state or federal agency or entity, municipality, commission, or political subdivision of a state. (Subsection 19-2-103(4)).

"Pollution Control Project" means any activity or project at an existing electric utility steam generating unit for purposes of reducing emissions from such unit. Such activities or projects are limited to:

(1) The installation of conventional or innovative pollution control technology, including but not limited to advanced flue gas desulfurization, sorbent injection for sulfur dioxide and nitrogen oxides controls and electrostatic precipitators;

(2) An activity or project to accommodate switching to a fuel which is less polluting than the fuel used prior to the activity or project, including, but not limited to natural gas or coal reburning, or the cofiring of natural gas and other fuels for the purpose of controlling emissions;

(3) A permanent clean coal technology demonstration project conducted under Title II, sec. 101(d) of the Further Continuing Appropriations Act of 1985 (sec. 5903(d) of title 42 of the United States Code), or subsequent appropriations, up to a total amount of \$2,500,000,000 for commercial demonstration of clean coal technology, or similar projects funded through appropriations for the Environmental Protection Agency; or

(4) A permanent clean coal technology demonstration project that constitutes a repowering project.

"Potential to Emit" means the maximum capacity of a source to emit a pollutant under its

physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation or the effect it would have on emissions is enforceable.

Secondary emissions do not count in determining the potential to emit of a stationary source.

"Process Level" means the operation of a source, specific to the kind or type of fuel, input material, or mode of operation.

"Process Rate" means the quantity per unit of time of any raw material or process intermediate consumed, or product generated, through the use of any equipment, source operation, or control apparatus. For a stationary internal combustion unit or any other fuel burning equipment, this term may be expressed as the quantity of fuel burned per unit of time.

"Production Equipment Exhaust System" means a device for collecting and directing out of the work area VOC fugitive emissions from reactor openings, centrifuge openings, and other vessel openings for the purpose of protecting employees from excessive VOC exposure.

"Reactivation of a Very Clean Coal-Fired Electric Utility Steam Generating Unit" means any physical change in the method of operation associated with the commencement of commercial operations by a coal-fired utility unit after a period of discontinued operation where the unit:

(1) Has not been in operation for the two-year period prior to the enactment of the Clean Air Act Amendments of 1990, and the emissions from such unit continue to be carried in the emission inventory at the time of enactment;

(2) Was equipped prior to shutdown with a continuous system of emissions control that achieves a removal efficiency for sulfur dioxide of no less than 85 percent and a removal efficiency for particulates of no less than 98 percent;

(3) Is equipped with low-NOx burners prior to the time of commencement of operations following reactivation; and

(4) Is otherwise in compliance with the requirements of the Clean Air Act.

"Reactor" means any vat or vessel, which may be jacketed to permit temperature control, designed to contain chemical reactions.

"Reasonable Further Progress" means annual incremental reductions in emission of an air pollutant which are sufficient to provide for attainment of the NAAQS by the date identified in the State Implementation Plan.

"Refuse" means solid wastes, such as garbage and trash.

"Regulated air pollutant" means any of the following:

- (a) Nitrogen oxides or any volatile organic compound;
- (b) Any pollutant for which a national ambient air quality standard has been promulgated;
- (c) Any pollutant that is subject to any standard promulgated under Section 111 of the Act, Standards of Performance for New Stationary Sources;
- (d) Any Class I or II substance subject to a standard promulgated under or established by Title VI of the Act, Stratospheric Ozone Protection;
- (e) Any pollutant subject to a standard promulgated under Section 112, Hazardous Air Pollutants, or other requirements established under Section 112 of the Act, including Sections 112(g), (j), and (r) of the Act, including any of the following:

(i) Any pollutant subject to requirements under Section 112(j) of the Act, Equivalent Emission Limitation by Permit. If the Administrator fails to promulgate a standard by the date established pursuant to Section 112(e) of the Act, any pollutant for which a subject source would be major shall be considered to be regulated on the date 18 months after the applicable date established pursuant to Section 112(e) of the Act;

(ii) Any pollutant for which the requirements of Section 112(g)(2) of the Act (Construction, Reconstruction and Modification) have been met, but only with respect to the individual source subject to Section 112(g)(2) requirement.

"Repowering" means replacement of an existing coal-fired boiler with one of the following clean coal technologies: atmospheric or pressurized fluidized bed combustion, integrated gasification combined cycle, magnetohydrodynamics, direct and indirect coal-fired turbines, integrated gasification fuel cells, or as determined by the Administrator, in consultation with the Secretary of Energy, a derivative of one or more of these technologies, and any other technology capable of controlling multiple combustion emissions simultaneously with improved boiler or generation efficiency and with significantly greater water reduction relative to the performance of technology in widespread commercial use as of November 15, 1990.

(1) Repowering shall also include any oil and/or gas-fired unit which has been awarded clean coal technology demonstration funding as of January 1, 1991, by the Department of Energy.

(2) The executive secretary shall give expedited consideration to permit applications for any source that satisfies the requirements of this definition and is granted an extension under section 49 of the Clean Air Act.

"Representative Actual Annual Emissions" means the average rate, in tons per year, at which the source is projected to emit a pollutant for the two-year period after a physical change or change in the method of operation of unit, (or a different consecutive two-year period within 10 years after that change, where the executive secretary determines that such period is more representative of source operations), considering the effect any such change will have on increasing or decreasing the hourly emissions rate and on projected capacity utilization. In projecting future emissions the executive secretary shall:

(1) Consider all relevant information, including but not limited to, historical operational data, the company's own representations, filings with the State of Federal regulatory authorities, and compliance plans under title IV of the Clean Air Act; and

(2) Exclude, in calculating any increase in emissions that results from the particular physical change or change in the method of operation at an electric utility steam generating unit, that portion of the unit's emissions following the change that could have been accommodated during the representative baseline period and is attributable to an increase in projected capacity utilization at the unit that is unrelated to the particular change, including any increased utilization due to the rate of electricity demand growth for the utility system as a whole.

"Residence" means a dwelling in which people live, including all ancillary buildings.

"Residential Solid Fuel Burning" device means any residential burning device except a fireplace connected to a chimney that burns solid fuel and is capable of, and intended for use as a space heater, domestic water heater, or indoor cooking appliance, and has an air-to-fuel ratio less than 35-to-1 as determined by the test procedures prescribed in 40 CFR 60.534. It must also have a useable firebox volume of less than 6.10 cubic meters or 20 cubic feet, a minimum burn

rate less than 5 kilograms per hour or 11 pounds per hour as determined by test procedures prescribed in 40 CFR 60.534, and weigh less than 800 kilograms or 362.9 pounds. Appliances that are described as prefabricated fireplaces and are designed to accommodate doors or other accessories that would create the air starved operating conditions of a residential solid fuel burning device shall be considered as such. Fireplaces are not included in this definition for solid fuel burning devices.

"Salvage Operation" means any business, trade or industry engaged in whole or in part in salvaging or reclaiming any product or material, including but not limited to metals, chemicals, shipping containers or drums.

"Secondary Emissions" means emissions which would occur as a result of the construction or operation of a major source or major modification, but do not come from the major source or major modification itself.

Secondary emissions must be specific, well defined, quantifiable, and impact the same general area as the source or modification which causes the secondary emissions. Secondary emissions include emissions from any off-site support facility which would not be constructed or increase its emissions except as a result of the construction or operation of the major source or major modification. Secondary emissions do not include any emissions which come directly from a mobile source such as emissions from the tailpipe of a motor vehicle, from a train, or from a vessel.

Fugitive emissions and fugitive dust from the source or modification are not considered secondary emissions.

"Significant" means:

(1) In reference to a net emissions increase or the potential of a source to emit any of the following pollutants, a rate of emissions that would equal or exceed any of the following rates:

Carbon monoxide: 100 ton per year (tpy);

Nitrogen oxides: 40 tpy;

Sulfur dioxide: 40 tpy;

PM10 Particulate matter: 15 tpy;

Particulate matter: 25 tpy;

Ozone: 40 tpy of volatile organic compounds;

Lead: 0.6 tpy.

(2) For purposes of R307-405 it shall also additionally mean for:

(a) A rate of emissions that would equal or exceed any of the following rates:

Asbestos: 0.007 tpy;

Beryllium: 0.0004 tpy;

Mercury: 0.1 tpy;

Vinyl Chloride: 1 tpy;

Fluorides: 3 tpy;

Sulfuric acid mist: 7 tpy;

Hydrogen Sulfide: 10 tpy;

Total reduced sulfur (including H₂S): 10 tpy;

Reduced sulfur compounds (including H₂S): 10 tpy;

Municipal waste combustor organics (measured as total tetra- through octa-chlorinated dibenzo-p-dioxins and dibenzofurans): 3.2 grams per year (3.5×10^{-6} tons per year);

Municipal waste combustor metals (measured as particulate matter): 14 megagrams per year (15 tons per year);

Municipal waste combustor acid gases (measured as sulfur dioxide and hydrogen chloride): 36 megagrams per year (40 tons per year);

Municipal solid waste landfill emissions (measured as nonmethane organic compounds): 45 megagrams per year (50 tons per year);

(b) In reference to a net emissions increase or the potential of a source to emit a pollutant subject to regulation under the Clean Air Act not listed in (1) and (2) above, any emission rate.

(c) Notwithstanding the rates listed in (1) and (2) above, any emissions rate or any net emissions increase associated with a major source or major modification, which would construct within 10 kilometers of a Class I area, and have an impact on such area equal to or greater than 1 ug/cubic meter, (24-hour average).

"Solid Fuel" means wood, coal, and other similar organic material or combination of these materials.

"Solvent" means organic materials which are liquid at standard conditions (Standard Temperature and Pressure) and which are used as dissolvers, viscosity reducers, or cleaning agents.

"Source" means any structure, building, facility, or installation which emits or may emit any air pollutant subject to regulation under the Clean Air Act and which is located on one or more continuous or adjacent properties and which is under the control of the same person or persons under common control. A building, structure, facility, or installation means all of the pollutant-emitting activities which belong to the same industrial grouping. Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same "Major Group" (i.e. which have the same two-digit code) as described in the Standard Industrial Classification Manual, 1972, as amended by the 1977 Supplement (US Government Printing Office stock numbers 4101-0065 and 003-005-00176-0, respectively).

"Stack" means any point in a source designed to emit solids, liquids, or gases into the air, including a pipe or duct but not including flares.

"Standards of Performance for New Stationary Sources" means the Federally established requirements for performance and record keeping (Title 40 Code of Federal Regulations, Part 60).

"State" means Utah State.

"Synthesized Pharmaceutical Manufacturing" means the manufacture of pharmaceutical products by chemical synthesis.

"Temporary" means not more than 180 calendar days.

"Temporary Clean Coal Demonstration Project" means a clean coal technology demonstration project that is operated for a period of 5 years or less, and which complies with the Utah State Implementation Plan and other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.

"Threshold Limit Value - Ceiling (TLV-C)" means the airborne concentration of a substance which may not be exceeded, as adopted by the American Conference of Governmental Industrial Hygienists in its "Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices, pages 15 - 72 (2000)."

"Threshold Limit Value - Time Weighted Average (TLV-TWA)" means the time-

weighted airborne concentration of a substance adopted by the American Conference of Governmental Industrial Hygienists in its "Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices, pages 15 - 72 (2000)."

"Total Suspended Particulate (TSP)" means minute separate particles of matter, collected by high volume sampler.

"Toxic Screening Level" means an ambient concentration of an air contaminant equal to a threshold limit value - ceiling (TLV- C) or threshold limit value -time weighted average (TLV-TWA) divided by a safety factor.

"Trash" means solids not considered to be highly flammable or explosive including, but not limited to clothing, rags, leather, plastic, rubber, floor coverings, excelsior, tree leaves, yard trimmings and other similar materials.

"Vertically Restricted Emissions Release" means the release of an air contaminant through a stack or opening whose flow is directed in a downward or horizontal direction due to the alignment of the opening or a physical obstruction placed beyond the opening, or at a height which is less than 1.3 times the height of an adjacent building or structure, as measured from ground level.

"Vertically Unrestricted Emissions Release" means the release of an air contaminant through a stack or opening whose flow is directed upward without any physical obstruction placed beyond the opening, and at a height which is at least 1.3 times the height of an adjacent building or structure, as measured from ground level.

"Volatile Organic Compound (VOC)" as defined in 40 CFR Subsection 51.100(s)(1), as published on July 1, 1998, is hereby adopted and incorporated by reference.

"Waste" means all solid, liquid or gaseous material, including, but not limited to, garbage, trash, household refuse, construction or demolition debris, or other refuse including that resulting from the prosecution of any business, trade or industry.

"Zero Drift" means the change in the instrument meter readout over a stated period of time of normal continuous operation when the VOC concentration at the time of measurement is zero.

KEY: air pollution, definitions*

[2000]2001

19-2-104

R307. Environmental Quality, Air Quality.**R307-405. Permits: Prevention of Significant Deterioration of Air Quality (PSD).****R307-405-1. Definitions.**

The following additional definitions apply to R307-405:

"Baseline Area" means any intrastate area (and every part thereof) designated as attainment or unclassifiable under Section 107(d)(1)(D) or (E) of the federal Clean Air Act in which the major source or major modification establishing the minor source baseline date would construct or would have an air quality impact equal to or greater than 1 ug/m³ (annual average) of the pollutant for which the minor source baseline date is established.

(1) Area redesignations under section 107(d)(1) (D) or (E) of the federal Clean Air Act cannot intersect or be smaller than the area of impact of any major stationary source or major modification which:

- (a) Establishes a minor source baseline date; or
- (b) Is subject to 40 CFR 52.21 or R307-405, and would be constructed in the same state as the state proposing the redesignation.

"Baseline Concentration" means that ambient concentration level which exists in the baseline area at the time of the applicable minor source baseline date.

"Major Modification" means any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the Clean Air Act.

(1) Any net emissions increase that is significant for volatile organic compounds shall be considered significant for ozone.

(2) A physical change or change in the method of operation shall not include:

- (a) routine maintenance, repair, and replacement;
- (b) use of an alternative fuel or raw material by reason of an order under section 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation), or by reason of a natural gas curtailment plan pursuant to the Federal Power Act;
- (c) use of an alternative fuel by reason of an order or rule under section 125 of the Clean Air Act;

(d) use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste;

(e) use of an alternative fuel or raw material by a source which:

(i) the source was capable of accommodating before January 6, 1975, unless such change would be prohibited under any federally enforceable permit condition; or

(ii) the source is approved to use;

(f) an increase in the hours of operation or in the production rate, unless such change would be prohibited under any federally enforceable permit condition;

(g) any change in ownership at a source

(h) the addition, replacement or use of a pollution control project at an existing electric utility steam generating unit, unless the executive secretary determines that such addition, replacement, or use renders the unit less environmentally beneficial, or except:

((i) when the executive secretary has reason to believe that the pollution control project would result in a significant net increase in representative actual annual emissions of any criteria pollutant over levels used for that source in the most recent air quality impact analysis in the area

conducted for the purpose of Title I of the Clean Air Act, if any, and

((ii)) the executive secretary determines that the increase will cause or contribute to a violation of any national ambient air quality standard or PSD increment, or visibility limitation.

(i) the installation, operation, cessation, or removal of a temporary clean coal demonstration project, provided that the project complies with:

((i)) the Utah State Implementation Plan; and

((ii)) other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.

(j) the installation or operation of a permanent clean coal technology project that constitutes repowering, provided that the project does not result in an increase in the potential to emit of any regulated pollutant emitted by the unit. This exemption shall apply on a pollutant-by-pollutant basis.

(k) the reactivation of a very clean coal-fired electric utility steam generating unit.

"Major Source" means:

(1) any of the following sources of air pollutants which emits, or has the potential to emit, 100 tons per year or more of any pollutant subject to regulation under the Clean Air Act: Fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input, coal cleaning plants (with thermal dryers), kraft pulp mills, portland cement plants, primary zinc smelters, iron and steel mill plants, primary aluminum ore reduction plants, primary copper smelters, municipal incinerators capable of charging more than 250 tons of refuse per day, hydrofluoric, sulfuric, and nitric acid plants, petroleum refineries, lime plants, phosphate rock processing plants, coke oven batteries, sulfur recovery plants, carbon black plants (furnace process), primary lead smelters, fuel conversion plants, sintering plants, secondary metal production plants, chemical process plants, fossil fuel boilers (or combination thereof) totaling more than 250 million British thermal units per hour heat input, petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels, taconite ore processing plants, glass fiber processing plants, and charcoal production plants;

(2) any other source which emits, or has the potential to emit, 250 tons per year or more of any air pollutant; or

(3) a source which does not otherwise qualify as a major source as defined in this paragraph, but which is physically changed, which change itself would constitute a major source.

(4) a source which is major for volatile organic compounds is major for ozone.

(5) The fugitive emissions and fugitive dust of a stationary source shall not be included in determining for any of the purposes of this section whether it is a major stationary source, unless the source belongs to one of the following categories of stationary sources:

(a) Coal cleaning plants (with thermal dryers);

(b) Kraft pulp mills;

(c) Portland cement plants;

(d) Primary zinc smelters;

(e) Iron and steel mills;

(f) Primary aluminum ore reduction plants;

(g) Primary copper smelters;

(h) Municipal incinerators capable of charging more than 250 tons of refuse per day;

(i) Hydrofluoric, sulfuric, or nitric acid plants;

- (j) Petroleum refineries;
- (k) Lime plants;
- (l) Phosphate rock processing plants;
- (m) Coke oven batteries;
- (n) Sulfur recovery plants;
- (o) Carbon black plants (furnace process);
- (p) Primary lead smelters;
- (q) Fuel conversion plants;
- (r) Sintering plants;
- (s) Secondary metal production plants;
- (t) Chemical process plants;
- (u) Fossil-fuel boilers (or combination thereof) totaling more than 250 million British thermal units per hour heat input;
- (v) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;
- (w) Taconite ore processing plants;
- (x) Glass fiber processing plants;
- (y) Charcoal production plants;
- (z) Fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input;
- (aa) Any other stationary source category which, as of August 7, 1980, is being regulated under section 111 or 112 of the Federal Clean Air Act.

KEY: air pollution, PSD*, Class I area*
[1998]2001

19-2-104



State of Utah

DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF AIR QUALITY

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MEMORANDUM

TO: Air Quality Board DAQ-046-01

THROUGH: Richard W. Sprott, Executive Secretary

FROM: John Jenks, Environmental Engineer

DATE: April 23, 2001

SUBJECT: Approval Order Request: Holnam Incorporated

On March 4, 1999, Holnam Incorporated was granted a variance pursuant to Utah Administrative Code (UAC) R307-102-4. This variance was for Condition 8 of their Devil's Slide plant Approval Order DAQE-552-96 which gives a limitation of 251 lbs/hr of NOx emitted by the cement kiln baghouse. This variance was granted by the Air Quality Board in DAQE-283-99, and most recently extended on February 7, 2001. This variance was granted to provide time for Holnam Inc. to prepare and submit a Notice of Intent for a Prevention of Significant Deterioration major modification approval order.

Holnam Inc. has recently completed all the steps required in obtaining the required PSD permit. A public comment period was held and only comments from the source were received. These comments were mostly minor wording and format changes and did not require a new comment period.

Pursuant to UAC R307-401-6(3), the approval of the Air Quality Board is required prior to issuing an AO to any source which consumes more than 50% of the increments listed in R307-405-4. Holnam Inc.'s modeling analysis, submitted as part of the requirements of a PSD NOI, shows that up to 97% of the increment is consumed in areas of elevated terrain surrounding the Devil's Slide plant. These areas are not open to industrial development since steep slope angles make building in these areas prohibitive. Increment consumption along the valley floor in developable areas is less than 50% and should not inhibit minor source growth.

Staff recommends that Holnam Inc. be granted an AO for their Devil's Slide plant PSD major modification.



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MEMORANDUM

TO: Air Quality Board DAQ-045-01

THROUGH: Richard W. Sprott, Executive Secretary

FROM: Milka M. Radulovic, Environmental Engineer

DATE: April 23, 2001

SUBJECT: Amendment to Approval Order: DAQE-0063-94, PacifiCorp Gadsby Power Plant

PacifiCorp has submitted a notice of intent to install and operate a temporary portable power generation facility adjacent to the existing Gadsby Power Plant located at 1407 West North Temple, Salt Lake City, Salt Lake County. For this project they obtained approval order (AO) DAQE-250-01. The UAC R307-403-5 required offsets for PM₁₀ emissions for the proposed temporary project. To fulfill the required offset of 16.92 tons for PM₁₀ for the operation of the temporary project, PacifiCorp has lowered their current Gadsby Plant PM₁₀ emissions by 16.92 tons per year from those as listed in the AO DAQE-0063-94, dated February 3, 1994. For this emission change to be enforceable, an administrative amendment to the AO was required. New PM₁₀ allowable emissions for the existing Gadsby Plant, after the reduction, are 44.39 tons.

A public comment period was not required since there were no emission increases or equipment added.

Since the Gadsby Plant is a State Implementation Plan regulated source, as required by the Utah Administrative Code, this project requires approval of the Air Quality Board.

The staff recommends approval of this amendment.



State of Utah

DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF AIR QUALITY

Michael O. Leavitt
Governor

Dianne R. Nielson, Ph.D.
Executive Director

Richard W. Sprott
Director

150 North 1950 West
P.O. Box 144820
Salt Lake City, Utah 84114-4820
(801) 536-4000 Voice
(801) 536-4099 Fax
(801) 536-4414 T.D.D.

MEMORANDUM

TO: Air Quality Board

DAQ-047-01

THROUGH: Richard W. Sprott, Executive Secretary

FROM: E. Q. He, Environmental Engineer

DATE: April 23, 2001

SUBJECT: Approval Order Modifications: Asphalt Materials

Asphalt Materials operates an asphalt recycling plant located at 7961 South 1300 West in West Jordan, and a sand quarry site in Bluffdale, Salt Lake County. The two sites are in a non-attainment area for PM₁₀, SO₂, and a maintenance area for ozone. The company has proposed to increase annual production for the asphalt recycling plant to 200,000 tons per year from 50,000 tons per year for the West Jordan site, and to add a recycling plant to process road base at the Bluffdale site. The source is included in the PM₁₀ SIP, Section IX, Part H.2.b.B and C; therefore, the projects require approval of the Air Quality Board before the issuance of the approval orders (AO) for the proposed modifications. The emissions, in tons per year, will change as follows:

Pollutants	West Jordan Site		Bluffdale Site	
	Emission Increases	Emissions	Emission Increases	Emissions
PM10	1.12	15.05	3.41	14.17
NOx	1.86	14.78	4.88	10.93
SO2	0.12	1.47	0.42	1.00
CO	0.40	29.75	1.32	3.15
VOC	0.16	5.85	0.55	1.35

The emission increases are considered minor modifications to the company's existing AOs. The net emission increases are less than the thresholds to trigger the offset requirements. Because of the small emission increases, there will be little impact on the Salt Lake County PM₁₀ SIP attainment demonstration and Ozone Maintenance Plan. A 30-day public comment period was held for the modifications, and no comments were received.

As any changes to the conditions imposed by the SIP must be approved by the Utah Air Quality Board as required by R307-305-2, UAC, the staff recommends the AOs be approved.

Table 1. Average metal concentrations in 10-tailings samples collected in late April, 2001. Tailing samples are compared to EPA remedial action levels.

Metal	Average Concentration In Tailings (ppm)	Typical Human Health Protection Levels (ppm)
Arsenic	30.7	100
Lead	16.5	500
Cadmium	1.11	40
Copper	716	>2000

Table 2. Results of Magna soil samples analyzed by EPA in 1994

Metal	Average Concentration In Tailings (ppm)	Typical Human Health Protection Levels (ppm)
Arsenic	9.0	100
Lead	114	500
Cadmium	4.8	40
Copper	228	>2000

Previous studies and comments attesting to low human health concern for tails and soils in the Magna area:

- (1) US EPA Soil Sampling and Analysis Report Operable Unit 9 – Kennecott North Soils, October, 1994, ATSDR.

“Good news! Based on overall results, we have determined that there is no substantial danger from metals in the soils.”

- (2) Kennecott North Zone Magna, Salt Lake County, Utah, June 28, 1996.

“Soil exposures – Exposure situations for the Magna vicinity appear to pose no public health hazard.”



State of Utah

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MEMORANDUM

TO: Air Quality Board DAQC-597-2001
FROM: Richard W. Sprott, Acting Executive Secretary
DATE: April 17, 2001
SUBJECT: COMPLIANCE ACTIVITIES - March 2001

Annual Inspections Conducted:	
A	12
SM	15
B	20
Initial Compliance Inspections Conducted:	
A	2
SM	2
B	9
On-Site stack test audits conducted:	6
Stack test report reviews:	18
On-site CEM audits conducted:	1
Emission reports reviewed:	0
Oxy fuels inspections conducted:	0
* Miscellaneous inspections conducted:	19
Complaints received:	29
VOC inspections:	
Tankers	0
Degreasers	14
Paint Booths	18

* Miscellaneous inspections include, e.g., surveillance, level I inspections, complaints, onsite training, tanker vapor certifications, dust patrol, smoke patrol, open burning, etc.

Source Compliance Action Notice issued	2
Notices of Violation issued	1
Settlement Agreements resolved	2
Penalties Collected	\$3,900

Notices of Violations issued to:

 Wasatch Energy Systems

Settlement Agreements Reached:

Salt Lake County Public Works	\$3,000
Intermountain Power Service Corp	\$900



State of Utah

DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF AIR QUALITY

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MEMORANDUM

TO: Utah Air Quality Board DAQH-0246-01

FROM: Richard W. Sprott, Executive Secretary

DATE: April 24, 2001

SUBJECT: Hazardous Air Pollutant Section Compliance Activities - March, 2001

	2/01	3/01
Asbestos Demolition/Renovation Inspections.....	15	13
Asbestos in Schools Inspections.....	1	4
MACT Compliance Inspections.....	6	1
Other NESHAP Inspections.....	0	2
State Rules (Only) Inspections.....	0	0
Asbestos Notifications Approved.....	51	64
Asbestos Phone Calls Answered.....	288	300
Asbestos Individual Certifications: Approved/Disapproved.....	58/0	45
Company Certifications/Re-certifications.....	0/3	4/1
Alternate Asbestos Work Practices: Approved/Disapproved.....	0	0
Lead Based Paint (LBP) Inspections.....	0	0
LBP Notifications Approved.....	0	0
LBP Phone Calls Answered.....	177	121
LBP Letters prepared and mailed.....	146	31
LBP Courses Received/Approved.....	0/0	0/0
LBP Course Audits.....	0	0
LBP Certifications Approved/Disapproved.....	6/0	11/0
LBP Company Certifications.....	3	5
Notices of Violation Issued.....	1	0
Notices of Noncompliance (NON).....	0	1
SCANS (warning letters) Issued.....	3	1
Settlement Agreements Finalized.....	0	2
Penalties Agreed to.....	\$0	\$618,500
Notice of Violation issued to:		

Settlement Agreements Reached: Chevron Products - Bulk Terminal
Clean Express - Dry Cleaner MACT

UTAH STATE DIVISION OF AIR QUALITY

47mm Partisol: PM10 Concentration Adjusted to Sea Level (24-hr average) in Micrograms per Cubic Meter
2001 March

Date	Cottonwood	Hawthorn	Lindon	Logan 4	Magna(W)	Moab	NProvo	NProvo-X	NSL	NSL-X	Ogden
03/01		33	30		18				43		
03/02	23	26	21	63		14	20	20	43	41	
03/03		14	17						15		
03/04		14	14						24		
03/05	18	14	24	75	10		19		49		
03/06		27	6						68		
03/07		14	31						57		
03/08	29	32	38	79	26	19	27	28	85	79	
03/09		24	21								
03/10		19	20						20		
03/11	18	12	10	9	6		11		11		
03/12		16	15						25		
03/13		19	24						27		
03/14	65	63	56	27	201	24	49	33	136	137	
03/15		30	31						61		
03/16		13	12						19		
03/17	19	16	24	13	11		24		18		
03/18		11	18						16		
03/19		20	21						25		
03/20	28	29	26	13	13	24	20	19	56	57	
03/21		16	21						43		
03/22		17	24						54		
03/23	23	21	27	27	16		15		35		
03/24		18	21						29		
03/25		16	20						32		
03/26	17	16		23	6	12	20	18	37	36	
03/27		10							34		
03/28		13			4				22		
03/29	8	10		12					10		
03/30		16							35		
03/31		22							36		
04/01	14			17	6				17	17	
Arith Mean	24	20	23	33	29	18	23	24	38	61	
Max 24-hr Avg	65	63	56	79	201	24	49	33	136	137	
Std. Dev	15	10	10	27	57	5	11	7	26	42	
Days of Data	11	31	25	11	11	5	9	5	31	6	
Days >150					1						
Yearly	31	31	34	31	25	20	28	29	47	48	

UTAH STATE DIVISION OF AIR QUALITY

PM2.5 Actual Concentration (24-hr average) in Micrograms per Cubic Meter
2001 March

Date	BR	BT	BX	CW	GV	HE	HW	HG	HV	LN	LX	L4	NP	N2	OG	SF	WT	WX	WV	VX
03/01							20.8			19.1										
03/02	15.5	11.5	11.4	13.0	8.4	10.9	13.7	10.1	13.6	12.3	12.5	37.6	11.5	14.6		8.5	13.7	13.9	13.2	13.6
03/03							9.5			11.8										
03/04							7.5			9.4										
03/05	3.0	3.9		5.6	2.5	2.8	3.7	4.6	2.0	7.9		30.7	5.1	8.2		2.9	5.2		5.8	
03/06							8.5													
03/07							5.7			10.3										
03/08	7.9	9.1	9.3	13.5	10.2	9.8	10.0	12.0	10.6	14.4		31.1	11.8			8.0	10.3	9.9	15.2	15.2
03/09							8.0			7.6				20.8						
03/10							12.3			15.2										
03/11	3.3	6.3		13.4	4.7		8.8	5.3	3.0	6.1		5.5	6.5	5.8		5.5	4.9		5.3	
03/12							5.7			6.7										
03/13							4.3			8.0										
03/14	3.0	4.3	4.3	5.3	12.2	3.3	5.3	3.8			5.1	3.5	4.7	8.0		4.6		6.2	6.0	5.7
03/15							4.6			5.3										
03/16							8.5			6.6										
03/17	8.6	10.0		14.5	10.3		10.2	11.5		15.0		9.4	16.4	11.5		13.3	10.8		11.2	
03/18							5.8			10.3										
03/19							4.8			6.2										
03/20	2.2	4.8	4.6	7.0	6.1	4.2	6.2	5.2	2.8	6.6	7.7	3.6	6.2	9.7		4.1	4.5	5.2	6.2	6.2
03/21							4.1			6.1										
03/22							4.1			5.1										
03/23	3.0	5.1		7.2	5.0	3.7	28.9	6.4	3.5	6.4		6.0	4.9	9.5		3.1	5.6		7.0	
03/24							6.7			7.1										
03/25							4.7			5.4										
03/26	3.0	3.2	2.9	3.1	4.1	2.5	3.7	2.5	3.5	4.3		6.0		5.2		6.9	4.3	4.6		3.5
03/27							3.3			3.9										
03/28							4.0			4.3										
03/29		1.9		3.5	4.3		3.1	2.6	4.6	3.4		3.1	4.9	3.5			3.3		3.4	
03/30							3.8			4.6										
03/31							4.0			4.5										

Arith Mean	5.5	6.0	6.5	8.6	6.5	5.3	7.5	6.4	5.4	8.1	8.5	13.7	8.0	9.7		6.3	7.0	8.0	8.1	8.8
Max 24-hr Avg	15.5	11.5	11.4	14.5	12.2	10.9	28.9	12.0	13.6	19.1	12.5	37.6	16.4	20.8		13.3	13.7	13.9	15.2	15.2
Std. Dev	4.4	3.2	3.7	4.5	3.2	3.5	5.5	3.5	4.2	4.0	3.7	13.7	4.2	5.0		3.3	3.7	3.9	4.0	5.2
Days of Data	9	10	5	10	11	7	31	10	8	29	3	10	9	10		9	9	5	9	5
Yearly Mean	11.7	10.9	10.8	14.4	8.9	11.0	15.1	9.9	14.5	12.5	11.3	16.1	12.4	16.4		9.8	9.8	10.9	14.4	13.6

UTAH STATE DIVISION OF AIR QUALITY

47mm Partisol: PM10 Concentration Adjusted to Sea Level (24-hr average) in Micrograms per Cubic Meter

2001 April

Date	Cottonwood	Hawthorn	Lindon	Logan 4	Magna(W)	Moab	NProvo	NProvo-X	NSL	NSL-X	Ogden
04/01	6	14	27						32		
04/02		16	21						32		
04/03		23	31						24		
04/04	23	26	16	21	12		18		33		
04/05		17	16						24		
04/06		11	5						13		
04/07	8	12	7	6		11	5	5	16	16	
04/08		5	3						6		
04/09		10	17						25		
04/10	16	10	16		13		11		28		
04/11		13	14						34		
04/12		6	7						7		
04/13	13	17	18		10				25	26	
04/14		42	39						44		
04/15		49	50						55		
04/16	63	73	74		61						
04/17		45	47								
04/18		70	47								
04/19	56	48	38								
04/20		23	40								
04/21		11	9								
04/22	6	7	13		156						
04/23			18								
04/24		21									
04/25											
04/26											
04/27											
04/28											
04/29											
04/30											

Arith Mean	24	25	25	14	50	11	11	5	26	21	
Max 24-hr Avg	63	73	74	21	156	11	18	5	55	26	
Std. Dev	23	20	18	10	63		7		13	7	
Days of Data	8	23	23	2	5	1	3	1	15	2	
Days >150					1						
Yearly	33	33	33	33	28	21	29	28	47	49	

UTAH STATE DIVISION OF AIR QUALITY

PM2.5 Actual Concentration (24-hr average) in Micrograms per Cubic Meter
2001 April

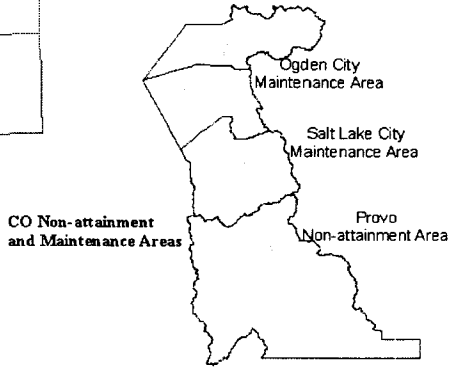
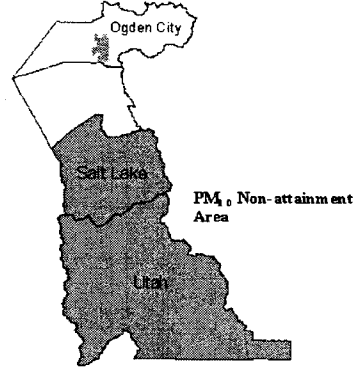
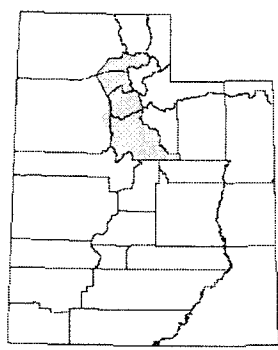
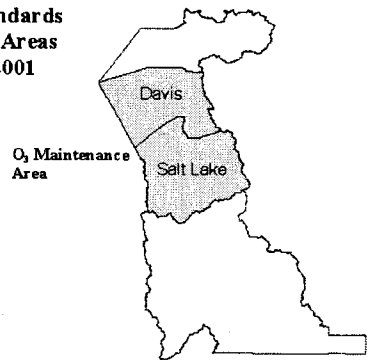
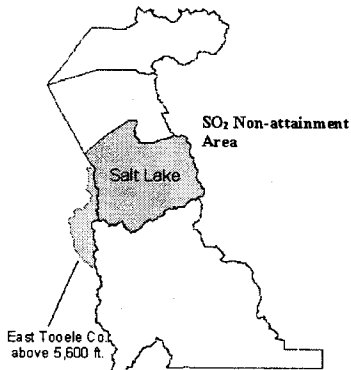
Date	BR	BT	BX	CW	GV	HE	HW	HG	HV	LN	LX	L4	NP	N2	OG	SF	WT	WX	WV	VX
04/01		3.6	3.3	3.8		3.1		4.0	3.4	6.3		3.6	5.1	4.8		5.4	4.8	3.6	3.5	
04/02							5.7			4.7										
04/03							9.1			11.3										
04/04	9.2	17.7			9.3	12.1	14.4	8.1	11.8	12.4			9.8	15.4		12.7		11.2		
04/05							12.5			14.2										
04/06							6.0			4.3										
04/07	3.0	3.8	4.1		2.9	2.7	4.1	4.9	3.2	5.3		4.8	6.0	7.5	3.7	4.8	5.6	3.7	5.1	
04/08							2.9			3.1										
04/09							4.5			9.7										
04/10		3.7			3.1	4.0	3.5	6.8	0.8	8.4			9.4	6.7	7.6	5.8		4.7		
04/11							5.1			6.6										
04/12							3.4			6.4										
04/13		4.7	4.6	5.9	2.9	3.6	5.2	5.7	0.8	9.4				6.9		4.1	4.3	6.9	6.6	
04/14							10.0			11.2										
04/15							11.3			13.9										
04/16				18.3	12.9	14.9	15.0	20.0	5.1			20.9					18.3		18.1	
04/17																				
04/18																				
04/19																			5.5	5.8
04/20																				
04/21																				
04/22																			3.3	
04/23																				
04/24																				
04/25																				
04/26																				
04/27																				
04/28																				
04/29																				
04/30																				

Arith Mean	6.1	6.7	4.0	9.3	6.2	6.7	7.5	8.2	4.2	8.5		9.8	7.6	8.3		5.6	8.5	4.9	7.1	5.3
Max 24-hr Avg	9.2	17.7	4.6	18.3	12.9	14.9	15.0	20.0	11.8	14.2		20.9	9.8	15.4		7.6	18.3	5.6	18.1	6.6
Std. Dev	4.4	6.2	0.6	7.8	4.6	5.3	4.2	5.9	4.1	3.4		9.7	2.4	4.1		2.8	5.7	0.7	5.2	1.3
Days of Data	2	5	3	3	5	6	15	6	6	16		3	4	5		2	6	3	8	4
Yearly Mean	11.7	11.6	11.4	15.9	9.4	10.6	16.3	10.7	13.2	13.6	12.4	18.0	13.5	17.4		10.5	10.5	11.7	14.8	14.4

South Tailings Impoundment Dust Control/Reclamation Efforts

- Drill seed
- Apply polymer and hydromulch
- Construct access roads
- Flood area with tailings and water
- Install additional spigot pipe
- Helicopter water drop
- Irrigation
- Introduction of soil amendments
- Investigate aerial application of polymer and seed (airplanes and/or helicopters)
- Over 60 people implementing activities

**National Ambient Air Quality Standards
Non-attainment and Maintenance Areas
in the State of Utah
May, 2001**



STATUS OF STATE IMPLEMENTATION PLANS, MAINTENANCE PLANS, REDESIGNATION REQUESTS, AND RULES CHANGES

May 2, 2001

*Changes from previous month are in **bolditalics**.*

SUBJECT	AREA	ATTAINMENT STATUS	ITEM	DAQ in progress		
				Submit to EPA	EPA Approve Date	
Ozone	Salt Lake and Davis County Maintenance Area	Attainment.	Revoke 1-hour standard			June 5, 1998
			Revoke 1-hour standard			<u>Fed Reg Jul 20, 00; eff Oct 18, 00</u>
			Maintenance plan and redesignation request, originally submitted Nov 12, 1993, with revisions and resubmittals on July 28, 1994, Jan 13, 1995, July 17, 1995, Oct 2, 1995, June 18, 1996, and March 1, 1996			July 18, 1997 Eff. Aug 18, 1997
			Inventory rule, R307-1-3.5	Complete	Feb 21, 97	
			NOx, VOC RACT provisions added to plan, rules.		Jun 28, 94	Partial Approval July 18, 97 Eff. Aug 18, 1997
			Inventory and monitored data to be submitted to demonstrate attainment date by Dec 31, 01.	Comment closed Mar 16, 01		
			Road salting and contingency measures update	Complete	Feb 3, 95	State withdrew the submittal Nov 98
			Update SIP and emission limits		Jul 11, 96	
			Update contingency measures		Oct 6, 94	State withdrew the submittal Nov 98
			PM10	Salt Lake County (and Davis County)	Non-attainment: moderate	Update SIP and emission limits
Update contingency measures	Complete	Feb 3, 95				
Other Areas	Complete	May 11, 95; Mar 27, 96				Published <u>Fed Reg</u> Sept 21, 00 for public comment
Grant Extension of Attain Dates for SL, Utah Co	Extensions requested					

SUBJECT	AREA	ATTAINMENT STATUS	ITEM	DAQ in progress	Submit to EPA	EPA Approve Date	
Sulfur dioxide	Salt Lake, east Tooele County	Non attainment	Maintenance plan and redesignation request	Support modeling in progress			
			Maintenance plan and redesignation request		Jan 13, 97	Fed Reg Mar 9, 01, eff May 8, 01	
	Ogden City	Attainment	Maintenance plan and redesignation request		Dec 16, 96	Fed Reg January 21, 1999. Effective March 22, 1999	
	Salt Lake City	Attainment	Maintenance plan and redesignation request	Complete			
	Salt Lake and Davis County			Delete oxyfuel requirement		Aug 16, 96	Fed Reg Mar 9, 01, eff May 8, 01
				Add oxyfuel and trip reduction program as a contingency measure		Jan 14, 97	Fed Reg Mar 9, 01, eff May 8, 01
	Carbon monoxide	Provo Non-Attainment Area	Non-attainment	Require 3.1% oxygen content in gasoline	Drafting rule change		Superseded
				Require 2.1% oxygen content in gasoline			
				Revise Basic IM plan (Fed Highway Act submittal on Mar 25, 1996). Documentation submitted to EPA on May 27, 1999. Letter of July 26, 1999 expressed intent to approve.	<i>AQB propose for public comment</i>	Mar 25, 96	
				Revise IM program	Complete	Oct 18, 95	
SIP revision, revise oxyfuel program, add woodburning restrictions					Jul 13, 94		
Revise oxyfuel rule to reflect 1st year experience					June 2, 94	Superseded	
			Revise oxyfuel rules and SIP to clarify triggering provisions		June 10, 98	Fed Reg Mar 9, 01, eff May 8, 01	

* If no date is noted, no action has been taken

SUBJECT	AREA	ATTAINMENT STATUS	ITEM	DAQ in progress		
				Submit to EPA	EPA Approve Date	
All criteria pollutants	Statewide		Streamline permit process for small sources	Complete	Oct 9, 98	
			Correct small source permit rule	Effective Sept 2, 97	Oct 9, 98	
			Incorporate New Source Performance Standards by reference	Complete	Dec 3, 96	Fed Reg May 7, eff July 7, 1997
			Amend dispersion modeling rule for criteria pollutants		Dec 3, 96	
			Reduce inventory reporting requirements for small sources		Sept 9, 96	
			Break up R307-1-4 into 4 additional rules		Feb 16, 96	
			Expand R307-2 to create one section for each major SIP component.		Feb 16, 96	
			Cleanup required by Legislature		Jan 30, 95	
			Renumbering SIP components		June 28, 94	
			Revise used oil exemption		Feb 5, 97	
			Revise inventory rule to require submittal every 3rd year for large sources, small sources every 6th year	Effective Feb 5, 98	July 9, 98	
			Add park and ride lots to Utah County Transportation Control Measures	Eff Feb. 10, 2000		Fed Reg June 14, 00, eff Aug 14, 00
Visibility	Statewide		SIP review due	Public comment		
Regional Haze	Statewide		Final rule published Jul 1, 99. Annex submitted Oct 1, 2000; SIP due Dec 31, 2003.			
General Conformity	All nonattainment areas		Incorporate by reference federal requirements	Complete	Oct 12, 1995	Fed Reg Nov 19, 99; effective 1-18-00.

* If no date is noted, no action has been taken

SUBJECT	AREA	ATTAINMENT STATUS	ITEM			
				DAQ in progress	Submit to EPA	EPA Approve Date
Transportation Conformity	All nonattainment areas		Third Round of Amendments Finalized by EPA - must be incorporated into draft rules by State, adopted by the AQB, and submitted to EPA. Sanction Clock will be forthcoming for non-submittal.	Retracted		