

# STATE OF CONNECTICUT

## DEPARTMENT OF ENVIRONMENTAL PROTECTION

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PHONE: 860-424-3001

December 28, 2007

Gina McCarthy  
Commissioner



Robert W. Varney, Regional Administrator  
U.S. Environmental Protection Agency Region 1  
One Congress Street, Suite 1100  
Boston, MA 02114-2023

**Re: Adequacy Determination of the Connecticut State Implementation Plan with Regard to Clean Air Act Section 110(a)(1) and (2) for the 8-Hour Ozone National Ambient Air Quality Standard Program Infrastructure**

Dear Administrator Varney:

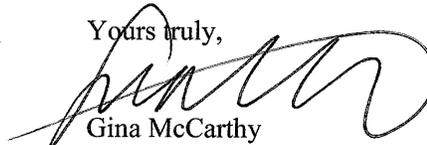
I am pleased to submit the enclosed determination of the adequacy of Connecticut's State Implementation Plan (SIP) in meeting the program infrastructure requirements of Clean Air Act (CAA) Section 110(a)(1) and (2) for the 8-hour ozone national ambient air quality standard (NAAQS). The program infrastructure requirements concern implementation, maintenance and enforcement of the NAAQS. To confirm that states have made the necessary submissions concerning infrastructure, EPA issued a guidance memo on October 2, 2007 directing states to review their existing ozone SIPs for adequacy under CAA Section 110(a), and, after determining such adequacy exists, to state such in a letter to EPA. EPA has requested that states make this determination before January 7, 2008 for 8-hour ozone SIPs and April 4, 2008 for fine particulate matter (PM<sub>2.5</sub>) SIPs.

This submission addresses the adequacy of Connecticut's SIP for the 8-hour ozone NAAQS infrastructure; a similar submission with regard to the PM<sub>2.5</sub> NAAQS requirements will be addressed with the PM<sub>2.5</sub> NAAQS SIP that the Department is planning to submit to EPA in April 2008.

The EPA guidance memo identifies fourteen elements necessary for NAAQS program infrastructure. Attached is a document that identifies with each of these fourteen elements the Connecticut SIP provisions, laws and regulations that satisfy those elements for 8-hour ozone. Upon Connecticut's submittal of its final 8-hour ozone attainment demonstration in 2008, the Connecticut Department of Environmental Protection will fully satisfy all of the CAA Section 110(a)(1) and (2) infrastructure elements for the 8-hour ozone NAAQS.

If we can be of assistance as you review this matter, please contact Anne Gobin, Chief, Bureau of Air Management, Connecticut Department of Environmental Protection at (860) 424-3026. Thank you for your consideration in this matter.

Yours truly,



Gina McCarthy  
Commissioner

Enclosure

cc: David Conroy (EPA Region I)  
Anne Gobin (CT DEP)  
Amey Marrella (CT DEP)

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**State of Connecticut  
Department of Environmental Protection**

**Adequacy Determination of the  
Connecticut State Implementation Plan with Regard to  
Clean Air Act Section 110(a)(1) and (2) for the  
8-Hour Ozone National Ambient Air Quality Standard  
Program Infrastructure**

**December 27, 2007**



## **Adequacy Determination of the Connecticut State Implementation Plan with Regard to Clean Air Act Section 110(a)(1) and (2) for the 8-Hour Ozone National Ambient Air Quality Standard Program Infrastructure**

The purpose of this document is to provide the U.S. Environmental Protection Agency (EPA) with a determination that Connecticut's State Implementation Plan (SIP) for air quality adequately meets the Clean Air Act (CAA) infrastructure requirements of Section 110(a)(1) and (2). This submission was requested in an October 2, 2007 guidance memo from William Harnett, Director of EPA's Air Quality Policy Division.

As discussed in the guidance memo, on July 18, 1997, EPA promulgated new and revised national ambient air quality standards (NAAQS) for ozone and particulate matter (PM). For ozone, EPA revised the NAAQS to provide an 8-hour averaging period (versus a 1-hour averaging period for the pre-existing NAAQS) and set the level of the standard at 0.08 ppm (versus 0.12 ppm for the pre-existing NAAQS). For PM, EPA promulgated a new 24-hour and a new annual NAAQS for PM<sub>2.5</sub> (particles with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers). Pursuant to CAA Section 110(a)(1) and (2), all States are required to submit plans to provide for the implementation, maintenance and enforcement of the 8-hour ozone and PM<sub>2.5</sub> NAAQS, including such basic SIP requirements as emissions inventories, monitoring and modeling to assure attainment and maintenance of the standards. By statute, SIPs meeting the requirements of Section 110(a)(1) and (2) are to be submitted by States within three years after promulgation of a new or revised standard. This being the case, States were required to submit such SIPs for the 1997 standards to EPA no later than July 2000. However, intervening litigation over the 1997 8-hour ozone and PM<sub>2.5</sub> NAAQS created uncertainty about how to proceed and, to date, EPA has not explicitly approved submitted SIPs as meeting the basic or infrastructure requirements enumerated in CAA Section 110(a)(1) and (2).

In March of 2004, Earth Justice initiated a lawsuit against EPA for failure to take action against States that had not made SIP submissions to meet the requirements of Section 110(a)(1) and (2), *i.e.*, failure to make a "finding of failure to submit." On March 10, 2005, EPA entered into a consent decree with Earth Justice that obligated EPA to determine whether States have made SIP submissions required to meet CAA Section 110(a)(2)(D)(i) relating to interstate transport by no later than March 15, 2005. The consent decree also obligated EPA to make a determination whether States have made submissions necessary to meet the remaining Section 110(a)(1) and (2) requirements by December 15, 2007, for the 8-hour ozone NAAQS, and by April 4, 2008, for the PM<sub>2.5</sub> NAAQS. (In a December 14, 2007 ruling by the U.S. District Court (D.C. Circuit), the December 15, 2007 deadline was extended to January 7, 2008.) To the extent that existing SIPs for ozone and PM already meet these requirements, States need only inform EPA.

The Connecticut Department of Environmental Protection (CTDEP) is submitting this document to inform EPA that the original submission of Connecticut's SIP on March 3, 1972 and numerous subsequent SIP revisions, one of which is pending final submission by CTDEP and one of which is now pending final approval by EPA, adequately fulfill the fourteen required Section 110(a)(1) and (2) elements. With CTDEP's submission of Connecticut's final 8-hour

ozone attainment demonstration, Connecticut will fully satisfy all of the 8-hour ozone infrastructure elements.

The attached table sets out in detail those SIP elements and underlying statutory and regulatory authorities that satisfy each of the fourteen required infrastructure elements. *See* 40 CFR 52, Subpart H, for EPA's identification of Connecticut's SIP submissions to date and those regulations included therein.

Of note among the pending SIP revisions mentioned above is the SIP revision addressing the interstate air pollution transport requirements of CAA Section 110(a)(2)(D)(i), which CTDEP submitted to EPA on March 13, 2007 and for which EPA proposed approval of on November 5, 2007 (72 FR 62420). CTDEP considers that submission necessary to complete its infrastructure for 8-hour ozone. In addition, CTDEP has proposed its 8-hour ozone attainment demonstration. *See* <http://www.ct.gov/dep/cwp/view.asp?a=2684&q=385886>. CTDEP's submission of the final 8-hour ozone attainment demonstration will complete Connecticut's 8-hour ozone infrastructure elements as required by CAA Section 110(a)(1) and (2).

## Overview of How Connecticut’s State Implementation Plan Satisfies the CAA Section 110(a)(1) and (2) Program Infrastructure Elements for 8-Hour Ozone\*

CAA Section	Required CAA Element	Corresponding Connecticut Program Element(s)
<b>110(a)(2)(A) Emission limits and other control measures</b>	<p>... “include enforceable emission limitations and other control measures, means, or techniques (including economic incentives such as fees, marketable permits, and auctions of emissions rights), as well as schedules and timetables for compliance...”</p>	<p><b>CGS Section 22a-6(a)(1).</b> The Commissioner is empowered to “adopt, amend or repeal . . . such environmental standards, criteria, and regulations . . . as are necessary and proper to carry out his functions, powers and duties.” It is under this grant of authority that the Commissioner has adopted emissions standards and compliance schedules applicable to municipal waste combustors.</p> <p><b>CGS Section 22a-174g.</b> California motor vehicle emission standards.  <b>CGS Section 22a-174.</b> Powers of the Commissioner. Regulations. Fees. General Permits</p> <p>The sections of the air quality regulations (which may be amended from time to time) with specific emissions limits related to the control of ozone and ozone precursors include RCSA:</p> <ul style="list-style-type: none"> <li><b>22a-174-3a(i)</b> Ambient air quality analysis</li> <li><b>22a-174-3a(j)</b> BACT</li> <li><b>22a-174-3a(k)</b> PSD</li> <li><b>22a-174-3a(l)</b> Non-attainment areas, LAER</li> <li><b>22a-174-22</b> NOx emissions (<i>also included in many single source SIP revisions</i>)</li> <li><b>22a-174-22b</b> NOx budget program</li> <li><b>22a-174-22c</b> CAIR ozone season trading program</li> <li><b>22a-174-27</b> Periodic motor vehicle inspection and maintenance</li> <li><b>22a-174-20</b> Control of organic compound emissions</li> </ul>

\* CAA refers to the Clean Air Act  
CGS refers to the Connecticut General Statutes  
RCSA refers to Regulations of CT State Agencies  
CFR refers to the U.S. Code of Federal Regulations  
CTDEP refers to the Connecticut Department of Environmental Protection

CAA Section	Required CAA Element	Corresponding Connecticut Program Element(s)
		<p><b>22a-174-30</b> Gasoline vapor recovery</p> <p><b>22a-174-32</b> VOC RACT (<i>also included in many single source SIP revisions</i>)</p> <p><b>22a-174-36</b> Low emission vehicles</p> <p><b>22a-174-36b</b> Low emission vehicles II program</p> <p><b>22a-174-40</b> Consumer products (<i>to be submitted with the 8-hr ozone attainment demonstration</i>)</p> <p><b>22a-174-41</b> AIM coatings (<i>with the attainment demonstration</i>)</p> <p><b>22a-174-43</b> Portable fuel containers (<i>with the attainment demonstration</i>)</p> <p><b>22a-174-44</b> Adhesives and sealants (<i>adoption in process</i>)</p>
<b>110(a)(2)(B)</b> <b>Ambient air quality monitoring/data system</b>	... “provide for establishment and operation of appropriate devices, methods, systems, and procedures necessary to (i) monitor, compile, and analyze data on ambient air quality, and (ii) upon request, make such data available to the Administrator.”	<p><b>40 CFR 52.370.</b> A comprehensive air quality monitoring plan, intended to meet requirements of 40 CFR part 58, was submitted by the CTDEP to EPA on June 9, 1980, and November 17, 1980.</p> <p>CTDEP negotiates monitoring network requirements with EPA in the annual Performance Partnership Agreement. The latest annual air monitoring network plan was submitted to EPA on June 19, 2007. CTDEP collects and reports ambient air quality data for O<sub>3</sub>, SO<sub>2</sub>, NO<sub>2</sub>, Pb, CO, PM<sub>10</sub> and PM<sub>2.5</sub>. These data are reviewed and validated before being sent to the EPA air quality system, no later than 90 days after the end of a calendar quarter.</p>
<b>110(a)(2)(C)</b> <b>Program for enforcement of control measures</b>	... “include a program to provide for the enforcement of the measures described in subparagraph (A), and regulation of the modification and construction of any stationary source within the areas covered by the plan as necessary to assure that national ambient air quality standards are achieved, including a permit program as required in parts C and D;”	<p><b>CGS Section 22a-6(a)(5).</b> The commissioner may, in accordance with constitutional limitations, enter at all reasonable times, without liability, upon any public or private property, except a private residence, for the purpose of inspection and investigation to ascertain possible violations of any statute, regulation, order or permit administered, adopted or issued by him and the owner, managing agent or occupant of any such property shall permit such entry . . .</p> <p><b>CGS Section 22a-6b.</b> Imposition of civil penalties by the commissioner.</p> <p><b>CGS Section 22a-7(d).</b> Civil actions.</p> <p><b>CGS Section 22a-171.</b> “The commissioner shall . . . (4) adopt, amend, repeal and enforce regulations . . . and do any other act necessary to enforce</p>

CAA Section	Required CAA Element	Corresponding Connecticut Program Element(s)
		<p>the provisions of [Chapter 446c, entitled “Air Pollution Control,” which encompasses CGS Sections 22a-170 through 22a-206].”</p> <p><b>CGS Section 22a-174.</b> Orders to correct violations.</p> <p><b>CGS Section 22a-175.</b> Penalties for violations.</p> <p><b>CGS Section 22a-176.</b> Consideration in making regulations and issuing orders.</p> <p><b>CGS Section 22a-177.</b> Enforcement of Regulations. Complaints.</p> <p><b>CGS Section 22a-178.</b> Orders to correct violations.</p> <p><b>RCSA section 22a-174-3a.</b> Permit to construct and operate stationary sources. This section provides a permit program for enforceable emission limits and control measures.</p> <p><b>RCSA section 22a-174-12.</b> Violations and Enforcement of the Regulations of Connecticut State Agencies. This section provides that “The Commissioner shall designate employees of DEP to be known as enforcement personnel, who shall, acting with or without complaints, conduct investigations and ascertain whether the Commissioner's regulations are being complied with.”</p> <p><b>NSR Stringency Determination</b> submitted to EPA-Region 1, December 29, 2005.</p>
<p><b>110(a)(2)(D)</b> <b>Interstate transport</b></p>	<p>... “contain adequate provisions - (i) prohibiting, consistent with the provisions of this title, any source or other type of emissions activity within the State from emitting any air pollutant in amounts which will - (I) contribute significantly to nonattainment in, or interfere with maintenance by, any other State with respect to any such national primary or secondary ambient air quality standard, or (II) interfere with measures required to be included in the applicable implementation plan for any other State under part C to prevent significant deterioration of air quality or to protect visibility, (ii) insuring compliance with</p>	<p><b>Revision to the Connecticut State Implementation Plan</b> --Addressing the Interstate Air Pollution Transport Requirements of Clean Air Act Section 110(a)(2)(D)(i), was submitted to EPA on March 13, 2007. EPA is proposing to approve this SIP revision submitted by CTDEP (72 FR 62420, November 5, 2007).</p> <p><b>NSR Stringency Determination</b> submitted to EPA-Region 1, December 29, 2005.</p>

<b>CAA Section</b>	<b>Required CAA Element</b>	<b>Corresponding Connecticut Program Element(s)</b>
	the applicable; requirements of sections 126 and 115 (relating to interstate and international pollution abatement);”	

CAA Section	Required CAA Element	Corresponding Connecticut Program Element(s)
<p><b>110(a)(2)(E)</b> <b>Adequate resources</b></p>	<p>... “provide (i) necessary assurances that the State (or, except where the Administrator deems inappropriate, the general purpose local government or governments, or a regional agency designated by the State or general purpose local governments for such purpose) will have adequate personnel, funding, and authority under State (and, as appropriate, local) law to carry out such implementation plan (and is not prohibited by any provision of Federal or State law from carrying out such implementation plan or portion thereof), (ii) requirements that the State comply with the requirements respecting State boards under section 128, and (iii) necessary assurances that, where the State has relied on a local or regional government, agency, or instrumentality for the implementation of any plan provision, the State has responsibility for ensuring adequate implementation of such plan provision;”</p>	<p><b>CGS Section 22a-171.</b> Duties of Commissioner of Environmental Protection. “The commissioner shall (1) initiate and supervise programs for the purposes of determining the causes, effect and hazards of air pollution; (2) initiate and supervise state-wide programs of air pollution control education; (3) cooperate with and receive money from the federal government and, with the approval of the Governor, from any other public or private source; (4) adopt, amend, repeal and enforce regulations as provided in section 22a-174 and do any other act necessary to enforce the provisions of this chapter and section 14-164c; (5) advise and consult with agencies of the United States, agencies of the state, political subdivisions and industries and any other affected groups in furtherance of the purposes of this chapter.”</p> <p><b>Air Quality Implementation Plan, Chapter 11, Parts A-E (March 3, 1972).</b> Describes the (A) existing organizations; (B) manpower; (C) funding; (D) physical resources and (E) local agencies. It stated, in part, “The Department of Environmental Protection will secure appropriations sufficient, in conjunction with federal assistance, to maintain the projected state funding levels.”</p> <p><i>CTDEP is the sole authority implementing the SIP and does not rely on local or regional governments or agencies to carry out this responsibility.</i></p>
<p><b>110(a)(2)(F)</b> <b>Stationary source emissions monitoring and reporting</b></p>	<p>... “require, as may be prescribed by the Administrator - (i) the installation, maintenance, and replacement of equipment, and the implementation of other necessary steps, by owners or operators of stationary sources to monitor emissions from such sources, (ii) periodic reports on the nature and amounts of emissions and emissions-related data from such sources, and (iii) correlation of such reports by the State agency with any emission limitations or standards established pursuant to this Act, which</p>	<p><b>CGS Section 22a-6(a)(5).</b> “The commissioner may, in accordance with constitutional limitations, enter at all reasonable times, without liability, upon any public or private property, except a private residence, for the purpose of inspection and investigation to ascertain possible violations of any statute, regulation, order or permit administered, adopted or issued by him and the owner, managing agent or occupant of any such property shall permit such entry ...”</p> <p><b>CGS Section 22a-174(c).</b> Various powers of the commissioner related to permitting, inspections, and recordkeeping.</p> <p><b>RCSA section 22a-174-4.</b> Source monitoring, record keeping and reporting. Paragraph (d)(1) states: “The commissioner may, by written</p>

CAA Section	Required CAA Element	Corresponding Connecticut Program Element(s)
	reports shall be available at reasonable times for public inspection;”	<p>notice, require the owner or operator of any source to create, maintain and submit data, records or reports of monitoring data and other information deemed necessary by the commissioner to evaluate compliance with chapter 446c of the Connecticut General Statutes and regulations promulgated thereunder. Such information shall be recorded, compiled and submitted on forms furnished or prescribed by the commissioner. The written notice shall provide the date by which such data, records or reports shall be submitted to the commissioner.”</p> <p><b>RCSA section 22a-174-5.</b> Methods for sampling, emission testing, sample analysis, and reporting.</p> <p>(e)(1) states that “The owner or operator of a stationary source of air pollution with maximum uncontrolled emissions of any particular air pollutant greater than one hundred (100) tons per year shall be required to carry out emission tests as prescribed by the Commissioner. Such test or tests shall be conducted at such intervals as the Commissioner may specify for an individual stationary source.” Subsection (e)(2) states “In addition to the emission tests required in subdivision 22a-174-5(e)(1), the commissioner may require the owner or operator of any stationary source to conduct emission tests of emissions.”</p> <p><b>RCSA section 22a-174-10.</b> Public availability of information. Paragraph (a) states: Any records, reports or other information obtained by the Commissioner or on file with the department shall, pursuant to the provisions of sections 1-7 through 20 of the General Statutes, as amended, be made available to the public.</p>
<b>110(a)(2)(G) Emergency power</b>	... “provide for authority comparable to that in section 303 and adequate contingency plans to implement such authority;”	<p><b>CGS Section 22a-181.</b> Emergency action.</p> <p><b>RCSA section 22a-174-6.</b> Air pollution emergency episode procedures. This section describes the existing emergency episode procedures in place, which are consistent with the significant harm levels as indicated in 40 CFR Part 51.151.</p>
<b>110(a)(2)(H) Future SIP revisions</b>	... “provide for revision of such plan - (i) from time to time as may be necessary to take account of revisions of such national primary or	<b>Air Quality Implementation Plan, Chapter 13, (March 3, 1972).</b> “This implementation plan is intended to be dynamic, not static. To this end, it will be revised when necessary.”

CAA Section	Required CAA Element	Corresponding Connecticut Program Element(s)
	secondary ambient air quality standard or the availability of improved or more expeditious methods of attaining such standard, and (ii) except as provided in paragraph (3)(C), whenever the Administrator finds on the basis of information available to the Administrator that the plan is substantially inadequate to attain the national ambient air quality standard which it implements or to otherwise comply with any additional requirements established under this Act;”	
<b>110(a)(2)(J) Consultation with government officials</b>	... “meet the applicable requirements of section 121 (relating to consultation)	<p><b>CGS Section 22a-171.</b> Duties of Commissioner of Environmental Protection. “(5) advise and consult with agencies of the United States, agencies of the state, political subdivisions and industries and any other affected groups in furtherance of the purposes of this chapter.”</p> <p><b>CGS Section 22a-174(d).</b> “The commissioner shall have all incidental powers to carry out the purposes of [Chapter 446c, entitled “Air Pollution Control,” which encompasses Conn. Gen. Stat. Sections 22a-170 through 22a-206] . . .</p> <p><b>CGS Chapter 54.</b> Uniform Administrative Procedures Act.</p> <p><b>State Implementation Plan Revision Advisory Committee (SIPRAC)</b> established in 1972 and generally meets each month.</p>
<b>110(a)(2)(J) Public notification</b>	... “meet the applicable requirements of section 127 (relating to public notification),	<p><b>CGS Section 4-168.</b> Notice prior to action on regulations.</p> <p><b>CGS Section 22a-171.</b> Duties of Commissioner of Environmental Protection.</p> <p>...“(2) Initiate and supervise state-wide programs of air pollution control education;”</p> <p><b>CGS Section 22a-174(d).</b> “The commissioner shall have all incidental powers to carry out the purposes of [Chapter 446c, entitled “Air Pollution Control,” which encompasses Conn. Gen. Stat. Sections 22a-170 through 22a-206] . . .</p>

CAA Section	Required CAA Element	Corresponding Connecticut Program Element(s)
<b>110(a)(2)(J) PSD and visibility Protection</b>	... “meet the applicable requirements of part C (relating to prevention of significant deterioration of air quality and visibility protection);”	<b>RCSA section 22a-174-3a(k).</b> Permit Requirements for Attainment Areas: Prevention of Significant Deterioration of Air Quality (PSD) Program. This section addresses the prevention of significant deterioration of air quality and visibility protection.
<b>110(a)(2)(K) Air quality modeling/dat a</b>	... “provide for - (i) the performance of such air quality modeling as the Administrator may prescribe for the purpose of predicting the effect on ambient air quality of any emissions of any air pollutant for which the Administrator has established a national ambient air quality standard, and (ii) the submission, upon request, of data related to such air quality modeling to the Administrator;”	<b>RCSA section 22a-174-3a(i).</b> Ambient Air Quality Analysis: “The commissioner may request any owner or operator to submit an ambient air quality impact analysis using applicable air quality models and modeling protocols approved by the commissioner.”
<b>110(a)(2)(L) Permitting fees</b>	... “require the owner or operator of each major stationary source to pay to the permitting authority, as a condition of any permit required under this Act, a fee sufficient to cover - (i) the reasonable costs of reviewing and acting upon any application for such a permit, and (ii) if the owner or operator receives a permit for such source, the reasonable costs of implementing and enforcing the terms and conditions of any such permit (not including any court costs or other costs associated with any enforcement action), until such fee requirement is superseded with respect to such sources by the Administrator's approval of a fee program under title V;”	<b>CGS Section 22a-6(a)(10).</b> The commissioner may . . . by regulations adopted in accordance with the provisions of chapter 54 require the payment of a fee sufficient to cover . . . the reasonable cost of reviewing and acting upon an application for and monitoring compliance with the terms and conditions of any state or federal permit, license, registration, order, certificate or approval required . . . <b>CGS Section 22a-6f. Fees.</b> <b>CGS Section 22a-174(g).</b> “The commissioner shall require, by regulations adopted in accordance with the provisions of chapter 54, the payment of a permit application fee sufficient to cover the reasonable costs of reviewing and acting upon an application for, and monitoring compliance with the terms and conditions of, any state or federal permit, license, order, certificate or approval required pursuant to this section. . . .” <b>RCSA section 22a-174-26(c)(1).</b> “Each person to whom the commissioner issues a permit, or a modification or renewal thereto, under section 22a-174-3a, section 22a-174-2a and section 22a-174-19 of the Regulations of Connecticut State Agencies shall pay a permit fee as prescribed in the fee schedule in subdivision (2) of this subsection.” The fee schedule is set forth

CAA Section	Required CAA Element	Corresponding Connecticut Program Element(s)
<b>110(a)(2)(M) Consultation/ participation by affected local entities</b>	... “provide for consultation and participation by local political subdivisions affected by the plan.”	in Table 26-1 of subsection 2. <b>CGS Section 4-168.</b> Notice prior to action on regulations. <b>Connecticut Air Quality Implementation Plan, Chapter 12 “Intergovernmental Relations” (March 3, 1972).</b> “The State will take immediate action in coordinating and delegating new responsibilities to local agencies that are prepared to accept the responsibility.”