

## 2.0 RESPONSE TO COMMENTS

This section of the Final EIR contains comment letters received during the public review period for the Draft EIR, which began on August 11, 2011 and concluded on September 26, 2011. This section also includes the oral comments received during the Rocklin City Council and Rocklin Planning Commission Special Joint Meeting held on September 6, 2011 to receive comments on the Draft EIR. In conformance with State CEQA Guidelines Section 15088 (a), written responses to comments on environmental issues received from reviewers of the Draft EIR were prepared and are provided in this document. The responses address both written and oral comments.

### 2.1 LIST OF COMMENTS ON THE DRAFT EIR

Table 2-1 identifies a number for each comment letter received, the author of the comment letter, the comment letter date, and the comment topic.

Table 2-1 Written and Oral Comments Received on the Draft EIR				
Letter Number	Commenter	Date	Comment Number	Comment Topic
1	State of California, Native American Heritage Commission, Katy Sanchez	8/17/11	1-1	Cultural Resources
			1-2	Cultural Resources
			1-3	Cultural Resources
			1-4	Cultural Resources
2	South Placer Municipal Utility District, Richard Stein	8/31/11	2-1	Utilities and Service Systems
3	Friends of Rocklin Open Space, Frank Geremia	9/6/11	3-1	Open Space
4	Placer County Association of Realtors, Dean Anderson	9/6/11	4-1	Climate Action Plan
			4-2	General
5	State of California, Regional Water Quality Control Board, Central Valley Region, Genevieve Sparks	9/15/11	5-1	General
			5-2	Hydrology/Water Quality
			5-3	Hydrology/Water Quality
			5-4	Hydrology/Water Quality
			5-5	Hydrology/Water Quality
			5-6	Hydrology/Water Quality
			5-7	Hydrology/Water Quality
			5-8	General
6	Rocklin Area Chamber of Commerce, Dave Butler	9/20/11	6-1	Climate Action Plan
			6-2	Climate Action Plan
			6-3	Climate Action Plan
			6-4	Climate Action Plan

7	City of Roseville, Community Development	9/23/11	7-1 7-2 7-3 7-4 7-5 7-6 7-7 7-8 7-9	General Transportation/ Circulation Transportation/Circulation Utilities and Service Systems Utilities and Service Systems Utilities and Service Systems Utilities and Service Systems Utilities and Service Systems General
8	Ken Yorde	9/25/11	8-1 8-2 8-3 8-4	Transportation/Circulation Transportation/Circulation Biological Resources Hydrology/Water Quality
9	Yankee Hill Estates Homeowners Association, Franklin Burris	9/26/11	9-1 9-2 9-3 9-4 9-5 9-6 9-7 9-8 9-9 9-10 9-11 9-12 9-13 9-14 9-15 9-16 9-17 9-18	General Noise Transportation/Circulation Noise Noise Noise Noise Noise Noise Noise Noise Noise Noise Noise Noise Noise Noise (Vibration) Transportation/Circulation General
10	Western Placer Waste Management Authority, Chris Hanson	9/26/11	10-1 10-2 10-3 10-4 10-5 10-6 10-7 10-8 10-9 10-10 10-11 10-12 10-13 10-14 10-15	Utilities and Service Systems Utilities and Service Systems Utilities and Service Systems Utilities and Service Systems Utilities and Service Systems Utilities and Service Systems Utilities and Service Systems Utilities and Service Systems Utilities and Service Systems Utilities and Service Systems Utilities and Service Systems Utilities and Service Systems Utilities and Service Systems Utilities and Service Systems Utilities and Service Systems

10 (cont.)	Western Placer Waste Management Authority, Chris Hanson (cont.)		10-16 10-17 10-18	Utilities and Service Systems Utilities and Service Systems Utilities and Service Systems
11	Placer County Association of Realtors, Dave Johnson	9/26/11	11-1 11-2 11-3 11-4 11-5 11-6 11-7 11-8 11-9 11-10 11-11 11-12 11-13 11-14 11-15 11-16 11-17 11-18 11-19 11-20 11-21 11-22 11-23 11-24 11-25	General Climate Action Plan Climate Action Plan Climate Action Plan General Climate Action Plan
12	Rediscover Rocklin, Dan Gayaldo	9/26/11	12-1 12-2 12-3 12-4	General Land Use Noise Land Use/General
13	Placer County Air Pollution Control District, Angel Green	9/26/11	13-1 13-2 13-3 13-4 13-5 13-6 13-7 13-8 13-9 13-10 13-11 13-12 13-13 13-14 13-15 13-16	General General General General Air Quality Air Quality Air Quality Air Quality Air Quality Air Quality Air Quality Air Quality Air Quality Climate Change Climate Change Climate Change



## **2.2 COMMENTS AND RESPONSES ON THE DRAFT EIR**

The comments received on the Draft EIR and the responses to those comments are provided in this section commencing with master responses. Following the master responses, each comment letter is reproduced in its entirety and is followed by the response(s) to the letter. Where a commenter has provided multiple comments, each comment is indicated by a line bracket and an identifying number in the margin of the comment letter. In cases where multiple comments are made on the same topic, cross-references to prior responses are made.

## **2.3 MASTER RESPONSES**

### MASTER RESPONSE FOR CLIMATE ACTION PLAN (CAP) COMMENTS

While the City is committed to reducing greenhouse gas emissions consistent with the direction of AB32 and Executive Order S-03-05, the City has determined that implementation of its draft Climate Action Plan (CAP) should be temporarily suspended at this time. The General Plan Update Environmental Impact Report (EIR) will be modified accordingly to reflect this decision.

In absence of an adopted CAP, the City will continue to address the reduction of greenhouse gas emissions through a multitude of City-wide programs, through the application of General Plan goals and policies and with project-level assessments for greenhouse gas emission impacts as a part of the California Environmental Quality Act (CEQA) process.

The determination to temporarily suspend the CAP was made for a number of reasons, as discussed below:

- The City received a substantial number of comments on its draft Climate Action Plan when it was circulated for a public review period. Responding to these comments, some of them being very technical in nature, will require significant effort in terms of both time and finances.
- The topic of greenhouse gas emissions is subject to ever-evolving methods and approaches used to examine, analyze, predict and quantify greenhouse gas emissions, including reductions thereof. There are new modeling techniques and new sources of data and information to help determine greenhouse gas emissions inventories and reduction efforts that were not previously available to the City when it conducted its initial efforts to inventory greenhouse gas emissions and determine the effectiveness of proposed reduction measures. In particular, it is the City's understanding that the Placer County Air Pollution Control District (PCAPCD) desires the use of the CalEEMod modeling tool for performing greenhouse gas emission analyses.

- For overall City budgetary reasons, the financial resources that are necessary to continue CAP-related efforts are unavailable. The State of California's recent decision to dissolve Redevelopment Agencies further exacerbates the situation by committing the City to rely solely on General Fund finances for all of its functions, thus forcing the City to re-evaluate and re-prioritize use of the General Fund and limiting the scope of efforts (such as a CAP). In addition, there is a lack of readily available and non-encumbered outside funding sources that would allow the City to continue its work on the draft CAP.
- The topic of greenhouse gas emissions is subject to an ever-evolving regulatory environment at the federal, state and local level. Examples include SACOG's SB375 Metropolitan Transportation Plan/Sustainable Communities Strategy Plan; anticipated federal greenhouse gas regulations under the Clean Air Act following the endangerment finding that greenhouse gases pose a threat to public health and welfare; Executive Order S-3-05's requirement for the Secretary of CALEPA to submit biannual reports to the governor and state legislature through the Climate Action Team (CAT); the California Air Resources Board's (CARB) Advanced Clean Cars Program; CARB's Cap and Trade program as part of AB32 and potential additional legal challenges to that program, and pending CARB determination of the amount of greenhouse gas reductions it will be recommending from local government operations.
- A goal for the City's General Plan Update EIR and the CAP was to address future development of the City at a programmatic level to help streamline the process for the future review of projects. Given the current economy which has resulted in a reduction in the number of development projects, the immediate value of providing such streamlining has been diminished.

As discussed above, further development and implementation of the CAP is currently suspended. However, the draft CAP is intended to be a flexible document that is re-evaluated and updated on a regular basis. The draft CAP includes a recommended timeline for activation of each greenhouse gas emissions reduction measure, with three concurrent phases going out to the year 2030. The City plans to update its greenhouse gas emissions inventory at the beginning of each phase to see how emissions have changed over time. As a result of the updated inventories, the CAP and its corresponding reduction measures will be revisited such that attention can be shifted towards emission generators reflecting faster growth rates than others and to the emission reduction measures that are having greater success at reducing emissions with less cost than other measures. If an energy conservation ordinance remains a part of the CAP's reduction measures, then prior to such an ordinance going forward, the City will re-inventory emissions and re-assess the steps necessary to meet the City's greenhouse gas emissions reduction goals. Available emission reduction measures will be evaluated for their economic impacts and consistency with actions taken by surrounding jurisdictions, and they will be discussed through the public hearing process required for ordinance adoption. Should the City choose not to implement a form of energy conservation ordinance, alternative emission reduction measures will have to be

identified that will allow the City to meet its greenhouse gas emissions reduction goals. There are no reasons to believe that the above-stated processes and protocol and would not be the same at such time that the City re-initiates its efforts towards the completion of the CAP.

The CAP included an Appendix A, the City of Rocklin 2008 Community-Wide Baseline Greenhouse Gas Emissions Inventory. Although the CAP is being temporarily suspended, the City still has an obligation under CEQA Guidelines Section 15064.4 to quantify emissions resulting from a project. Appendix A has been amended to respond to comments received on it from the public review process and is now included as Appendix C as a part of this Final EIR.

To further demonstrate the City's commitment towards reducing greenhouse gas emissions consistent with the direction of AB32 and Executive Order S-03-05, the City has utilized the California Air Pollution Control Officers Association (CAPCOA) June 2009 document titled "Model Policies for Greenhouse Gases in General Plans", to incorporate the following additional goal and policies into its General Plan document (subject to City Council approval):

Goal for Greenhouse Gas Emission Reduction: Promote land use strategies that decrease reliance on automobile use, increase the use of alternative modes of transportation, maximize efficiency of services provision and reduce emissions of greenhouse gases.

LU-68 Adopt and implement land use strategies that utilize existing infrastructure, reduce the need for new roads, utilities and other public works in newly developing areas, and enhance non-automobile transportation.

LU-69 Encourage high-density, mixed-use, infill development and creative use of brownfield and under-utilized properties.

LU-70 Increase densities in core areas to support public transit.

LU-71 Add bicycle facilities to City streets and public spaces.

LU-72 Promote infill, mixed-use, higher density development and the creation of affordable housing in mixed use zones.

LU-73- Identify sites suitable for mixed-use development within existing service areas and establish appropriate site-specific standards to accommodate the mixed uses.

LU-74 Promote greater linkage between land uses and transit, as well as other modes of transportation.

LU-75 Promote development and preservation of neighborhood characteristics that encourage walking and bicycle riding in lieu of automobile-based travel.

In addition, at such time that the City re-initiates its efforts towards the completion of the CAP, the City will take all of the comments related to the CAP that were made through the Draft EIR public review process and address them as necessary and appropriate.

Comments that have been addressed through this master response include 4-1, 6-1, 6-2, 6-3, 6-4, 11-2, 11-3, 11-4, 11-6, 11-7, 11-8, 11-11, 11-12, 11-13, 11-14, 11-15, 11-16, 11-17, 11-18, 11-19, 11-20, 11-21, 11-22, 11-23, 11-24, 11-25, 13-1, 13-3, 13-4, 13-5, 13-8, 13-14, 13-15, 13-16, 13-17, 13-18, 13-19, 13-20, 13-21, 13-22, 13-23, 13-24, 13-25, 13-26, 13-27, 13-28, 13-29, 13-30, 13-31, 13-32, 13-33, 13-34, 13-35, 13-36, 13-37, 13-38, 13-39, 13-40, 13-41, 13-42, 13-43, 13-44, 13-45, 13-46, 13-47, 13-48, and 13-49.

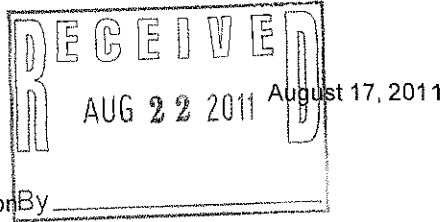
#### MASTER RESPONSE FOR REDEVELOPMENT AGENCY AND REDEVELOPMENT PLAN REFERENCES

The Draft EIR contains numerous references to the City's Redevelopment Agency and the Sixth Amendment to the Redevelopment Plan. As of February 2012, the City of Rocklin Redevelopment Agency no longer exists. Because it is uncertain at this time whether Redevelopment Agencies will be re-established, the decision has been made to keep all such references in the Draft EIR. The discussion of the City's Redevelopment Agency and the Sixth Amendment to the Redevelopment Plan has no bearing on the impact analysis or conclusions made within the Draft EIR, and this Draft EIR is not a draft environmental impact report being prepared by a Redevelopment Agency in conflict with the prohibition on such activities set forth in the new Cal. Health and Safety Code subsection 34165(h). Any future Redevelopment Area activities, including the future activities of the Successor Agency to the Redevelopment Agency of the City of Rocklin and all land uses are required by law to be consistent with the General Plan.



NATIVE AMERICAN HERITAGE COMMISSION

915 CAPITOL MALL, ROOM 364  
SACRAMENTO, CA 95814  
(916) 653-4082  
(916) 657-5390 - Fax



Laura Webster  
City of Rocklin Planning Division  
3970 Rocklin Road  
Rocklin, CA 95677

RE: SCH# 2008072115 City of Rocklin General Plan Update; Placer County.

Dear Ms. Webster:

The Native American Heritage Commission (NAHC) has reviewed the Notice of Completion (NOC) referenced above. The California Environmental Quality Act (CEQA) states that any project that causes a substantial adverse change in the significance of an historical resource, which includes archeological resources, is a significant effect requiring the preparation of an EIR (CEQA Guidelines 15064(b)). To comply with this provision the lead agency is required to assess whether the project will have an adverse impact on historical resources within the area of project effect (APE), and if so to mitigate that effect. To adequately assess and mitigate project-related impacts to archaeological resources, the NAHC recommends the following actions:

1-1

- ✓ Contact the appropriate regional archaeological information Center for a record search. The record search will determine:
  - If a part or all of the area of project effect (APE) has been previously surveyed for cultural resources.
  - If any known cultural resources have already been recorded on or adjacent to the APE.
  - If the probability is low, moderate, or high that cultural resources are located in the APE.
  - If a survey is required to determine whether previously unrecorded cultural resources are present.
- ✓ If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
  - The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure.
  - The final written report should be submitted within 3 months after work has been completed to the appropriate regional archaeological information Center.
- ✓ Contact the Native American Heritage Commission for:
  - A Sacred Lands File Check. **USGS 7.5 minute quadrangle name, township, range and section required.**
  - A list of appropriate Native American contacts for consultation concerning the project site and to assist in the mitigation measures. **Native American Contacts List attached.**
- ✓ Lack of surface evidence of archeological resources does not preclude their subsurface existence.
  - Lead agencies should include in their mitigation plan provisions for the identification and evaluation of accidentally discovered archeological resources, per California Environmental Quality Act (CEQA) §15064.5(f). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American, with knowledge in cultural resources, should monitor all ground-disturbing activities.
  - Lead agencies should include in their mitigation plan provisions for the disposition of recovered artifacts, in consultation with culturally affiliated Native Americans.
  - Lead agencies should include provisions for discovery of Native American human remains in their mitigation plan. Health and Safety Code §7050.5, CEQA §15064.5(e), and Public Resources Code §5097.98 mandates the process to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery.

1-2

1-3

1-4

Sincerely,  
*Katy Sanchez*  
Katy Sanchez  
Program Analyst  
(916) 653-4040

cc: State Clearinghouse

**Native American Contact List**

Placer County

August 17, 2011

Shingle Springs Band of Miwok Indians

John Tayaba, Vice Chairperson

P.O. Box 1340

Shingle Springs, CA 95682

Miwok

Maidu

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(530) 676-8033 Fax

United Auburn Indian Community of the Auburn Rancheria

Marcos Guerrero, Tribal Preservation Committee

10720 Indian Hill Road

Auburn, CA 95603

Maidu

Miwok

mguerrero@auburnrancheria.com

530-883-2364

530-883-2320 - Fax

Rose Enos

15310 Bancroft Road

Auburn, CA 95603

Maidu

Washoe

(530) 878-2378

April Wallace Moore

19630 Placer Hills Road

Colfax, CA 95713

Nisenan - So Maidu

Konkow

Washoe

530-637-4279

United Auburn Indian Community of the Auburn Rancheria

David Keyser, Chairperson

10720 Indian Hill Road

Auburn, CA 95603

Maidu

Miwok

530-883-2390

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United Auburn Indian Community of the Auburn Rancheria

Gregory S. Baker, Tribal Administrator

10720 Indian Hill Road

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530-883-2390

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Shingle Springs Band of Miwok Indians

Nicholas Fonseca, Chairperson

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Shingle Springs Band of Miwok Indians

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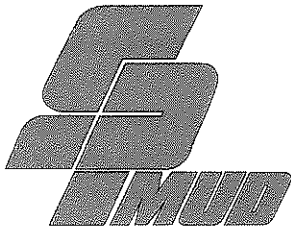
(530) 676-8010

(530) 676-8033 Fax

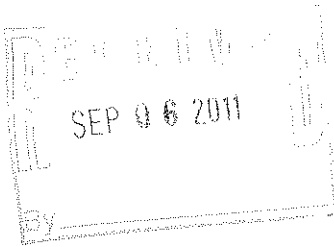
This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH# 2008072115 City of Rocklin General Plan Update; Placer County.



**SOUTH PLACER  
MUNICIPAL UTILITY DISTRICT**



August 31, 2011

City of Rocklin  
Planning Division  
3970 Rocklin Road  
Rocklin, CA 95677

Attention: Laura Webster  
Acting Planning Services Manager

Subject: Draft Environmental Impact Report for City of Rocklin  
Draft General Plan Update (SCH# 2008072115),  
City of Rocklin Draft General Plan Update (2011), and  
Associated Draft Climate Action Plan Document

Dear Laura:

Thank you for the opportunity to review the above documents. Our comments, of a general nature, are as follows.

Wastewater service is provided to the City of Rocklin by South Placer Municipal Utility District. All sewer service which the District provides or may hereafter provide under the General Plan Update will be subject to all ordinances, resolutions, rules and regulations, taxes, charges, fees and assessments of the SPMUD which may now or hereafter be in effect.

As developments occur under the General Plan Update, the design and construction of all sewer facilities which may be required will be the responsibility of the respective developers/owners. All work shall conform to the Standard Specifications of SPMUD.

Regional wastewater treatment service is provided to the city by the District through a series of regional agreements between the South Placer Wastewater Authority, SPMUD, City of Roseville and Placer County. The agreements provide, among other things, that capacity at the regional plants is available on a first come first serve basis. The District may be rendered unable to provide service due to prohibitions or restrictions which may be imposed upon it by federal or state regulatory agencies having jurisdiction or due to conditions caused by an Act of God. Prohibitions and/or restrictions may be imposed at the regional wastewater treatment plant on the plant's capacity in accordance with existing agreements. No prohibitions or restrictions currently exist under the agreements.

Sincerely,

Richard R. Stein  
Project Manager

RRS:bms

2-1



September 6, 2011

Rocklin City Council Members  
Rocklin City Planning Commissioners

Dear City Leaders:

The authors of the Rocklin's existing General Plan had a vision for the future of Rocklin which preserves Open Space. The authors understood that Open Space is what makes a City a nice place. The language in the **Current General Plan** is clear and unequivocal as it states:

Areas in the existing City area currently designated for open space, conservation and recreation uses will remain in those designations. There will be no reduction in present land use designations for these purposes, and the City will protect them from conversion to urban uses.

The purpose of the open space/conservation action plan is to help assure the adequate provision of recreational areas, the "protection" of existing and future open space areas, and the conservation of important natural resources.

The **Proposed General Plan Update**, which we are discussing tonight, does not contain this strong language which protects Open Space. In addition, the Proposed Update actually goes in the **opposite direction** and states the following:

Goal: To designate, protect, and conserve open space land in a manner that protects Natural Resources and **balances needs for** the economic, physical, and social **development** of the City.

OCR -2 Recognizing that balancing the need for economic, physical, and social development of the City may lead to some modification of existing open space and natural resource areas during the development process.

Clearly this proposed General Plan Update is taking Rocklin down a damaging path when it comes to Protecting Open Space.

3-1



The Friends of Rocklin Open Space believe the language in the Proposed General Plan Update would create a “Crack in the Dam” which protects Open Space, Recreation and Conservation Lands in the City of Rocklin. Loosening these protections will empower developers to force conversions based on this “new” proposed language. Developers could potentially sue the City to force a conversion. They could say they purchased property based on General Plan Provisions which acknowledge conversions will be allowed if they are based on economic “need”. If the City cracks the door open for Development of Open Space, developers will drive a fleet of Trucks through that door and flatten all the good ground work performed by the drafters of the Existing General Plan.

The drafters of the Existing General Plan clearly had the foresight to set aside and Protect Open Space in the City of Rocklin.

The Citizens of Rocklin clearly place Open Space as “very important” as indicated by the City’s own Survey.

We need to honor the foresight of original City Planning and the desires of current residents and maintain the integrity of the Existing Open Space, Recreation and Conservation Land Protections well into the Future.

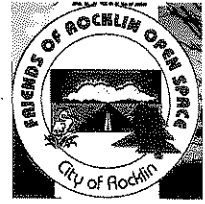
We have collected over 500 signatures on a Petition which we have previously submitted to you. The Petition basically objects to provisions of the Proposed General Plan Update which clearly degrade the existing General Plan Goals and Policies which protect Open Space.

Basically our organization requests and expects the following changes be made in order to maintain the integrity of the City’s Open Space Protections.

#### Goal for the Protection of Open Space Land for Natural Resources

1. Delete the part of Goal that indicates the City should “balance” protecting and conserving Open Space Goals with needs for economic, physical and social development of the City.
2. Delete OCR-2 which says that we should recognize that economic, physical, and social development needs may lead to Urban Development of Open Space during the development process.
3. Change OCR-25 to read : “Protect designated outdoor recreation sites from all Urban Development.

3-1  
cont'd



4. Add Existing General Plan Provisions IV.B.3 and IV B.4 which read as follows:

**Areas in the existing City area currently designated for open space, conservation and recreation uses will remain in those designations. There will be no reduction in present land use designations for these purposes, and the City will protect them from conversion to urban uses.**

**The purpose of the open space/conservation action plan is to help assure the adequate provision of recreational areas, the protection of existing and future open space areas, and the conservation of important natural resources.**

Let's preserve the rural character of our nice City by preserving and protecting open space well into the future!

Let's take positive and immediate action on this very important issue!

Thanks you,

Frank Geremia  
General Representative

3-1  
cont'd



LETTER 4

Submitted 9/6/11  
for council and  
Commissioner

September 6, 2011

Mayor George Magnuson & City Council  
Rocklin Planning Commission

City of Rocklin  
3970 Rocklin Road  
Rocklin, CA 95677

RE: September 6th Discussion of Rocklin General Plan Update & Climate Action Plan

Dear Mayor, Councilmembers, and Planning Commissioners:

The Placer County Association of REALTORS® has reviewed your draft Climate Action Plan and wishes to express deep concerns about your consultant's proposal for your city to commit to prepare and adopt a mandatory point of sale measure to achieve water and energy efficiency on already-built homes, apartments and commercial buildings before those buildings can be sold to a new owner. It is well understood that almost 70% of the County's residential sales transactions are sales of distressed properties. Retrofits costing anywhere from \$5,000 to \$30,000, depending on the age of the home, simply do not work in this economy.

4-1

The Placer County Association of REALTORS® asks that your Council and Planning Commission request your staff to facilitate a robust discussion of this consultant recommendation with affected property owners and interest groups prior to additional discussion of this proposal by your Planning Commission. We also ask that you request your consultant to prepare alternatives for meeting his proposal's goals via alternative measures which may be less onerous.

We would appreciate notice of future meetings regarding this subject.

4-2

Sincerely,

Dean Anderson  
Executive Vice President

cc: Susan Rohan, Government Affairs Director



# California Regional Water Quality Control Board

## Central Valley Region

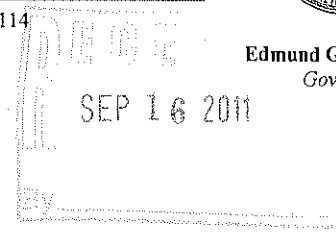
Katherine Hart, Chair



11020 Sun Center Drive, #200, Rancho Cordova, California 95670-6114  
(916) 464-3291 • FAX (916) 464-4645  
<http://www.waterboards.ca.gov/centralvalley>

Matthew Rodriguez  
Secretary for  
Environmental Protection

Edmund G. Brown Jr.  
Governor



### LETTER 5

15 September 2011

Laura Webster, Acting Planning Services Manager  
City of Rocklin Planning Division  
3970 Rocklin Road  
Rocklin, CA 95677

CERTIFIED MAIL  
7010 3090 0001 4843 3333

#### COMMENTS TO DRAFT ENVIRONMENTAL IMPACT REPORT, CITY OF ROCKLIN GENERAL PLAN UPDATE PROJECT, SCH NO. 2008072115, PLACER COUNTY

Pursuant to the State Clearinghouse's 11 August 2011 request, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) has reviewed the *Draft Environmental Impact Report* for the City of Rocklin General Plan Update Project, located in Placer County.

5-1

Our agency is delegated with the responsibility of protecting the quality of surface and groundwaters of the state; therefore our comments will address concerns surrounding those issues.

#### Construction Storm Water General Permit

Dischargers whose project disturb one or more acres of soil or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Storm Water Discharges Associated with Construction Activities (Construction General Permit), Construction General Permit Order No. 2009-009-DWQ. Construction activity subject to this permit includes clearing, grading, grubbing, disturbances to the ground, such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP).

5-2

For more information on the Construction General Permit, visit the State Water Resources Control Board website at:

[http://www.waterboards.ca.gov/water\\_issues/programs/stormwater/constpermits.shtml](http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml)

#### Phase I and II Municipal Separate Storm Sewer System (MS4) Permits<sup>1</sup>

The Phase I and II MS4 permits require the Permittees reduce pollutants and runoff flows from new development and redevelopment using Best Management Practices (BMPs) to the

5-3

<sup>1</sup> Municipal Permits = The Phase I Municipal Separate Storm Water System (MS4) Permit covers medium sized Municipalities (serving between 100,000 and 250,000 people) and large sized municipalities (serving over 250,000 people). The Phase II MS4 provides coverage for small municipalities, including non-traditional Small MS4s, which include military bases, public campuses, prisons and hospitals.



maximum extent practicable (MEP). MS4 Permittees have their own development standards, also known as Low Impact Development (LID)/post-construction standards that include a hydromodification component. The MS4 permits also require specific design concepts for LID/post-construction BMPs in the early stages of a project during the entitlement and CEQA process and the development plan review process.

5-3  
cont'd

For more information on which Phase I MS4 Permit this project applies to, visit the Central Valley Water Board website at:

[http://www.waterboards.ca.gov/centralvalley/water\\_issues/storm\\_water/municipal\\_permits/](http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/municipal_permits/)

#### **Industrial Storm Water General Permit**

Storm water discharges associated with industrial sites must comply with the regulations contained in the Industrial Storm Water General Permit Order No. 97-03-DWQ.

5-4

For more information on the Industrial Storm Water General Permit, visit the Central Valley Water Board website at:

[http://www.waterboards.ca.gov/centralvalley/water\\_issues/storm\\_water/industrial\\_general\\_permits/index.shtml](http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/industrial_general_permits/index.shtml).

#### **Clean Water Act Section 404 Permit**

If the project will involve the discharge of dredged or fill material in navigable waters or wetlands, a permit pursuant to Section 404 of the Clean Water Act may be needed for the United States Army Corps of Engineers (USACOE). If a Section 404 permit is required by the USACOE, the Central Valley Water Board will review the permit application to ensure that discharge will not violate water quality standards. If the project requires surface water drainage realignment, the applicant is advised to contact the Department of Fish and Game for information on Streambed Alteration Permit requirements.

5-5

If you have any questions regarding the Clean Water Act Section 404 permits, please contact the Regulatory Division of the Sacramento District of USACOE at (916)557-5250.

#### **Clean Water Act Section 401 Permit – Water Quality Certification**

If an USACOE permit, or any other federal permit, is required for this project due to the disturbance of waters of the United States (such as streams and wetlands), then a Water Quality Certification must be obtained from the Central Valley Water Board prior to initiation of project activities. Water Quality Certification must be obtained prior to initiation of project activities. There are no waivers for 401 Water Quality Certifications.

5-6

#### **Waste Discharge Requirements**

If USACOE determines that only non-jurisdictional waters of the State (i.e., “non-federal” waters of the State) are present in the proposed project area, the proposed project will require a Waste Discharge Requirement (WDR) permit to be issued by Central Valley Water Board. Under the California Porter-Cologne Water Quality Control Act, discharges to all waters of the State, including all wetlands and other waters of the State including, but not limited to, isolated wetlands, are subject to State regulation.

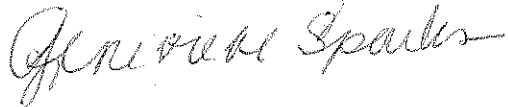
5-7

For more information on the Water Quality Certification and WDR processes, visit the Central Valley Water Board website at:

[http://www.waterboards.ca.gov/centralvalley/water\\_issues/water\\_quality\\_certification/](http://www.waterboards.ca.gov/centralvalley/water_issues/water_quality_certification/)

5-8

If you have questions regarding these comments, please contact me at (916) 464-4745 or [gsparks@waterboards.ca.gov](mailto:gsparks@waterboards.ca.gov).



Genevieve (Gen) Sparks  
Environmental Scientist  
401 Water Quality Certification Program

cc: State Clearinghouse Unit, Governor's Office of Planning and Research, Sacramento

# LETTER 6



AREA CHAMBER OF COMMERCE

*Promoting business, building community*

September 20, 2011

Hon. George Magnuson, Mayor  
And Hon. City Council Members  
City of Rocklin  
3970 Rocklin Road  
Rocklin CA 95677

**RE: Climate Action Plan**

Dear City Council Members:

Rocklin Area Chamber of Commerce is opposed to language in the proposed Climate Action Plan related to point-of-sale retrofits for either residential or commercial properties in Rocklin.

If a regulatory body determines a policy is important enough to impose, in fairness, it should be placed on everyone, not just those who wish to sell a residential or commercial property.

A point-of-sale retrofit mandate has the potential to discourage investment and turnover of properties, and could put Rocklin homeowners and businesses at a competitive disadvantage within our region due to audit/retrofit costs being reflected in the cost of housing and goods and services. This could adversely affect not only our economic development goals, but also cause employees in Rocklin to possibly find housing outside of Rocklin, forcing them to drive longer distances and therefore releasing more CO<sub>2</sub> in the atmosphere. When would a point of sale mandate take effect for commercial and residential properties?

6-1

The Chamber would encourage the City as an alternative to develop a program to educate property owners on the importance and benefits of such efficiency improvements, and to offer incentives to encourage these investments in efficiency measures. For example, the city of Lompoc provides \$80 towards the purchase of a low flush toilet, and \$50 to assist with installation cost. Why is a voluntary and/or educational program not an option?

6-2

To our knowledge this is not required by any other jurisdiction in our region, with or without a Climate Action Plan or Policy, and would discourage investment and economic revitalization that our community is striving to achieve. Even in jurisdictions like Berkeley, CA, which has such a policy, there is a cost ceiling to mitigate the financial burden imposed on owners of such policy. Would Rocklin consider a cost ceiling in their policy?

6-3

The Chamber urges removal of this mandate from the Climate Action Plan being proposed.

6-4

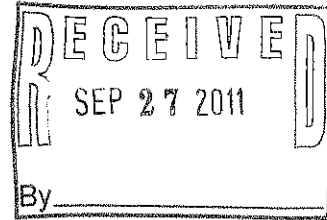
A handwritten signature in cursive script that reads 'Dave Butler'.

Dave Butler  
2011 Chairman  
Rocklin Area Chamber of Commerce



# LETTER 7

Community Development  
311 Vernon Street  
Roseville, California 95678-2649



September 23, 2011

Sherri Abbas  
City of Rocklin  
Planning Department  
3970 Rocklin Road  
Rocklin, CA 95677

**Subject: City of Rocklin General Plan Update 2011 and Associated Climate Action Plan – Draft EIR Comments**

Dear Ms. Abbas:

The City of Roseville appreciates the opportunity to review and comment on the draft EIR prepared for the 2011 City of Rocklin General Plan Update and associated draft Climate Action Plan.

### Transportation and Circulation

The City of Roseville's September 3, 2008 NOP comment letter (attached) requested the City's traffic model be used to assess project impacts to City of Roseville intersections. The letter also requested an opportunity to meet with Rocklin staff to discuss traffic model assumptions for the EIR traffic analysis.

7-1

1. When evaluating cumulative impacts to Roseville intersections it's important that the most recent Roseville 2025 CIP base model be used. The current model was updated with the approval of the Sierra Vista Specific Plan EIR and is based on full City buildout. The draft EIR's cumulative analysis uses a base year of 2030 which only captures 60% build out of both the Creekview and Sierra Vista Specific Plans. Because of this the City of Roseville is concerned that the LOS levels listed in Table 4.4-32 may be understated. As a result, at minimum the pre-project cumulative build out LOS referenced in Table 4.4-32 for the intersections of Pleasant Grove/ Fairway Drive and Sierra College/Secret Ravine Parkway are inconsistent with the City's current base model. Consequently the City requests the analysis of these intersections be updated using the City's current 2025 base model assumptions and appropriate mitigation measures be included in the final EIR for any new impacts that may be identified. Roseville traffic engineers are available to confer with the EIR's traffic consultant to ensure the appropriate current model assumptions are included in the updated analysis.

7-2

2. Table 4.4-13 on page 4.4-48 of the draft EIR lists intersection 205, Sunset & SR 65 as a signalized intersection. An interchange has been constructed and opened to the public at this location and the final EIR should reflect the current condition.

7-3

**Wastewater**

The City of Roseville owns and operates the Dry Creek and Pleasant Grove Wastewater Treatment Plants on behalf of the South Placer Wastewater Authority (SPWA) partners. To project future regional wastewater needs, SPWA prepared the *South Placer Regional Wastewater and Recycled Water Systems Evaluation Project Report (Systems Evaluation Report)* dated June 2007. This report, referenced below, can be found on the City of Roseville's website at:

[http://www.roseville.ca.us/eu/wastewater\\_utility/south\\_placer\\_wastewater\\_systems\\_evaluation.asp](http://www.roseville.ca.us/eu/wastewater_utility/south_placer_wastewater_systems_evaluation.asp)

7-4

The SPWA's September 3, 2008 NOP comment letter (attached) outlined the information and analysis that would be needed in the draft EIR to evaluate potential impacts to wastewater conveyance and treatment. Based on our review, it appears that some requested information was not included in the draft EIR. Accordingly, as the treatment plant operator on behalf of the SPWA, the City of Roseville has the following comments on the draft EIR:

- 3. Clearly document and depict the General Plan Update boundaries as they relate to the 2005 South Placer Wastewater Authority Service Area Boundary (SAB) shown in the Systems Evaluation Report. As a suggestion, this could be accomplished by adding the SAB to Figure 4.13-1 of the EIR. We can provide graphics and mapping information to assist with this if needed.

7-5

If areas are identified in the General Plan Update that are not within the boundaries of the 2005 SPWA Service Area Boundary, the General Plan Update should be modified to add flow projections and information listed in Section 7.3 and Appendix T of the Systems Evaluation Report.

- 4. On page 4.13-2, last paragraph: The EIR states that "both plants are well within their permitted effluent discharge flow rates of 30 mgd each." The current permitted capacity of the plants is 30 mgd total. Treatment capacity is correctly shown for each plant in Table 4.13.1-1.

7-6

- 5. On page 4.13-11, first complete paragraph: The EIR states that the "...wastewater flows associated with the General Plan Update are consistent with anticipated flows for wastewater treatment plants that have already been analyzed and approved." It appears this conclusion is drawn based on the analysis provided in the Systems Evaluation Report. However, the EIR does not appear to state that the land use patterns analyzed in the Systems Evaluation Report are consistent with or equivalent to the land use described in the EIR. The Systems Evaluation Report did analyze intensification and rezoning plans that were provided within the 2005 Service Area Boundary at the time the report was developed, however assurance is needed that this plan information has not changed since the report was issued in 2007.

7-7

- 6. On page 4.13-11 the draft EIR states that 0.25 MGD of additional flow will be generated in the Dry Creek Wastewater Treatment Plant sewer shed area as a result of intensified land use within Rocklin. This additional flow was examined within the Systems Evaluation Report and will not require future unplanned expansion of treatment facilities as stated in the EIR. Also, the treatment plant presently has sufficient available capacity to allow for this incremental flow without further CEQA analysis. However, this incremental flow increase has not yet individually undergone CEQA analysis for impacts downstream of the treatment plant. As other growth

7-8

occurs, additional CEQA analysis will be needed to expand the treatment plant to provide capacity for all intensification and rezoning plans in Rocklin, Roseville, and Placer County. The City of Roseville, in conjunction with South Placer Municipal Utility District and Placer County, (SPWA Partners) will approach the SPWA Board to establish a project that will evaluate all intensification and rezoning areas identified in the Systems Evaluation Report for the purpose of CEQA compliance.

7-8  
cont'd

Thank you for your consideration of our comments. Should you have any questions regarding Transportation and Circulation comments please contact Scott Gandler at 774-5331. For questions regarding wastewater comments contact Ken Glotzbach at 746-1820.

7-9

Sincerely,



Mark Morse  
Environmental Coordinator

Attachments: 1) September 3, 2008 South Placer Wastewater Authority NOP Comment Letter; 2) September 3, 2008 City of Roseville NOP Comment letter.



**Community Development**

311 Vernon Street  
Roseville, California 95678-2649

September 3, 2008

David Mohlenbrok  
City of Rocklin  
Community Development Department  
3970 Rocklin Road  
Rocklin, CA 95677

Via: *Fax and Regular Mail*

*Fax No. 916/625.5195*

*Page 1 of 1*

**Subject: 2008 City of Rocklin General Plan Update - NOP Comments**

Dear Mr. Mohlenbrok:

The City of Roseville appreciates the opportunity to review and comment on the Notice of Preparation (NOP) issued for the 2008 City of Rocklin General Plan Update.

We request that the EIR include an analysis of the impacts of the proposed project on the City of Roseville's transportation system using the City of Roseville's traffic model. Appropriate mitigation measures need to be identified where applicable to reduce or avoid impacts. Prior to finalizing the scope of work for the EIR, we request the opportunity to meet with City staff to discuss a full range of appropriate traffic analysis alternatives and traffic model assumptions to be included as part of the EIR analysis.

The EIR should also address how future development will impact regional transportation facilities and discuss policies to implement fair-share funding, including improvements to Highway 65 north of I-80 (mainline & interchanges), Placer Parkway and other regionally significant facilities.

Thank you for your consideration of our comments. Should you have any questions, feel free to contact me at 774-5499. It should be noted that in addition to the comments provided here, a separate letter signed by Derrick Whitehead, Environmental Utilities Director, addressing wastewater and recycled water issues has also been submitted.

Sincerely,

Mark Morse  
Environmental Coordinator

## SOUTH PLACER WASTEWATER AUTHORITY

2005 Hilltop Circle  
Roseville, CA 95747  
916-774-5770  
fax 916-774-5690

September 3, 2008

Mr. Dave Mohlenbrok  
Senior Planner - City of Rocklin  
Community Development Department, Planning Division  
3970 Rocklin Road  
Rocklin, CA 95677

Subject: Notice of Preparation (NOP) of a Draft Environmental Impact Report for the Adoption of the 2008 City of Rocklin General Plan Update

Dear Mr. Mohlenbrok:

The South Placer Wastewater Authority (SPWA) appreciates the opportunity to comment on the subject NOP. The SPWA is a joint powers authority formed to fund regional wastewater and recycled water facilities in southwestern Placer County for three partner agencies (the "participants"): the City of Roseville, the South Placer Municipal Utility District (SPMUD), and portions of Placer County. The regional facilities funded by the SPWA thus far include recycled water facilities, trunk sewer lines, and two wastewater treatment plants (WWTPs). All three participants transmit wastewater to these WWTPs. SPWA also monitors compliance with operational criteria established in the Funding and Operations Agreements among the participants.

The Funding Agreement outlines each participant's responsibility for debt service on SPWA's bonds and funding of regional facilities. The Operations Agreement documents maintenance and operations responsibilities for regional facilities (primarily the wastewater treatment plants) and establishes the City of Roseville as the owner and operator of the two WWTPs on behalf of the participants.

The Operations Agreement also identifies a regional service area boundary which delineates the area served by SPWA-funded regional facilities. Projects that require wastewater treatment using SPWA-funded regional facilities – especially projects outside the existing service area boundary – require appropriate environmental analyses. The SPWA Board considers the adequacy of the environmental documentation for such projects to ensure that regional facilities needs are met. Once that review has occurred, the participants may agree to modify the service area boundary identified in the Operations Agreement.

To project future regional wastewater needs, SPWA prepared the *South Placer Regional Wastewater and Recycled Water Systems Evaluation Project* Report (Systems Evaluation Report) dated June 2007. This report, and report updates, can be found on the City's website at: [http://www.roseville.ca.us/eu/wastewater\\_utility/south\\_placer\\_wastewater\\_systems\\_evaluation.asp](http://www.roseville.ca.us/eu/wastewater_utility/south_placer_wastewater_systems_evaluation.asp).




This report documents the wastewater facilities needs for the "2005 Service Area Boundary" (SAB) and provides the necessary technical information to analyze projects under CEQA. The information includes engineering evaluations for regional trunk sewer, recycled water, and treatment facilities which were based on the City of Rocklin's General Plan (1991) for areas inside the 2005 SAB.

For the SPWA Board to consider the impact of the General Plan Update on wastewater treatment capacity, treatment conveyance, and funding, we request that the environmental impact report (EIR) for the Update include the following:

1. Clearly document and depict the General Plan Update boundaries as they relate to the 2005 SAB shown in the Systems Evaluation Report.
2. For all parcels inside the 2005 SAB on which the zoning remains unchanged, the Update and EIR should rely on the 1996 Master Plan and Master Plan EIR, and build on that documentation using information in the Systems Evaluation Report. For purposes of evaluating wastewater conveyance, this may require your project to upsize Roseville-owned trunk sewers that collect wastewater flow from SPMUD trunk sewers and convey it through Roseville.
3. For all parcels inside the 2005 SAB and for which the proposed General Plan Update zoning increases the projected wastewater generation above the flow included in the Systems Evaluation Report, the Update and EIR should analyze the impacts and necessary mitigation measures, to the level of detail consistent with, and appropriate for, SPWA to use when expanding the wastewater treatment plants in the future. Again, for purposes of evaluating wastewater conveyance, this may require your project to upsize Roseville-owned trunk sewers that collect wastewater flow from SPMUD trunk sewers and convey it through Roseville. Attachment A provides specific guidance on the preparation of the CEQA document.
4. For all parcels outside the 2005 SAB, identify issues relating to the construction and installation of wastewater collection and conveyance facilities, and treated wastewater discharges that could result in, or contribute to, exceeding currently permitted wastewater capacity and/or discharge limits. To the extent that the Systems Evaluation Report can provide the basis for the needed technical evaluation, please feel free to use it. Emphasis also must be placed on cumulative impacts. Again, Attachment A provides specific guidance on the preparation of the CEQA document.

Please do not hesitate to contact us if you have any further questions.

Sincerely,



Derrick Whitehead  
Executive Director

cc: Art O'Brien/City of Roseville  
Mark Morse/City of Roseville  
Charlie Clark/SPMUD  
Jim Durfee/Placer County

## **ATTACHMENT A**

### **GUIDANCE FOR ENVIRONMENTAL AND TECHNICAL ANALYSES**

#### **Background**

The City of Roseville (City), the South Placer Municipal Utility District (District), and the County of Placer (County) entered into a Joint Powers Agreement (JPA) and formed the South Placer Wastewater Authority (SPWA) in October 2000. The SPWA was created for the purposes of, among other duties, funding and financing of Regional Wastewater Facilities. The SPWA and the Participants (City, District, and County) entered into a Funding Agreement and an Operations Agreement. The Funding Agreement established the revenue, debt service, and flow obligations among the Participants. The Operations Agreement recognized the City's role in owning, operating, and maintaining the Regional Wastewater Facilities.

The 1996 *Roseville Regional Wastewater Treatment Service Area Master Plan EIR* (WWMP EIR) was certified by the City of Roseville in November 1996 and was considered by the SPWA in October 2000 as part of the formation of the JPA. The Master Plan identifies the wastewater service area and contains the assumptions used to identify and design for wastewater conveyance and treatment facilities. Wastewater service within the current service area is based on a first come, first served basis, as outlined in the Funding Agreement.

The above agreements outline responsibilities and approval authorities among SPWA Participants relating to CEQA. The purpose of this document is to provide SPWA Participants and local agencies that prepare CEQA documents with the process and scoping guidance they will need to ensure adequate CEQA analysis is prepared for discretionary approvals of projects impacting Regional Wastewater Facilities .

For the purpose of this guidance document, Urban Growth Areas (UGAs) are defined as areas located wholly or partially outside the current service area. Densification/Intensification projects (D/I Projects) are defined as areas located within the current service area where proposed zone changes would result in an increase in wastewater generation compared to the assumptions in the WWMP EIR.

#### **Process for SPWA and Participant Involvement in UGA and/or D/I Projects**

When local agencies with land use authority propose new UGAs or D/I Projects, it is appropriate for the local jurisdiction to consult with SPWA and Participant staff to ensure a comprehensive analysis of related wastewater impacts, including appropriate CEQA documentation. This effort should proceed in two phases and be based on the most recent available information as discussed below.

Phase 1: Early Consultation. The first phase should involve early consultation between the Lead Agency, SPWA, and Participant staff. The goal of early consultation is to

identify and agree upon the project's wastewater treatment and recycled water demands, parameters for cumulative flow analysis, and potential impacts to conveyance and treatment facilities. This effort should rely on the technical analyses contained in the *Regional Wastewater and Recycled Water Systems Evaluation Report*, which can be reviewed at the City of Roseville's website at: [http://www.roseville.ca.us/eu/wastewater\\_utility/south\\_placer\\_wastewater\\_systems\\_evaluation.asp](http://www.roseville.ca.us/eu/wastewater_utility/south_placer_wastewater_systems_evaluation.asp). Once agreement is reached on project generated wastewater, and related conveyance, treatment and storage requirements, system upgrades necessary to accommodate the project can be identified.

Phase 2: CEQA Documentation. Phase two of the consultation process focuses on CEQA documentation. During this phase, upgrades to the wastewater system identified during Phase I would be incorporated in the CEQA document prepared by the local lead agency. It is recommended that any new or modified Regional Wastewater Facilities identified during Phase I, as needed to serve the UGA or D/I Project, be incorporated into CEQA document project description and identified as off-site improvements. The related CEQA analysis should address construction and operation of these facilities at a "project-level" so that no subsequent or supplemental CEQA review is required.

This phased process helps to ensure that CEQA documentation will be adequate for any and all discretionary actions as discussed below.

### **CEQA Responsibility and Approval Authority Among Local Agencies with Land Use Authority, the SPWA, and the Participants**

As discussed above, the CEQA process for UGA and/or D/I Projects is initiated by the local jurisdiction with land use authority. This could include any of the following agencies that receive sewer service from the SPWA: Placer County, the City of Roseville, the City of Rocklin, and the Town of Loomis. These agencies are collectively referred to as "local Lead Agencies."

Local Lead Agencies. Local Lead Agencies are the first agency to take discretionary action relating to the approval of a proposed UGA and/or D/I Project. As a result, they are the **CEQA Lead Agency** and are responsible for preparation of the first tier CEQA document for the UGA or D/I Project.

Local Lead Agencies should carefully follow the guidance provided herein to ensure the CEQA documentation for wastewater issues is adequate for all future related discretionary actions on the project. To ensure proper coordination, distribution of the CEQA Notice of Preparation (NOP) and/or any early consultation materials initiated or distributed by the local Lead Agency in accordance with CEQA Guidelines Section 15063 (g), shall include the SPWA and SPWA Participants. This coordination is extremely important to ensure that the local Lead Agency CEQA document is adequate for any future SPWA and Participant discretionary actions subject to CEQA necessary to

support the project. It is also important to ensure that the most current cumulative wastewater flow scenario is used for related analyses (to be provided by the SPWA as discussed below).

Since the UGAs and D/I Projects will generate wastewater flow and may require recycled water supply, capital facilities (e.g. wastewater treatment plants) will need to be modified, expanded, or constructed to accommodate the UGAs and possibly D/I Projects. Impacts from new or modified capital facilities that are required to serve new UGAs or D/I Projects, including any increased discharge of treated wastewater to the creeks, must be analyzed in the CEQA documentation prepared for the UGA or D/I Project.

The SPWA. The SPWA serves as a funding and financing authority for the construction of Regional Wastewater Facilities. In doing so, the SPWA acts as a **CEQA Responsible Agency**. As a Responsible Agency, the SPWA relies on the UGA or D/I Project CEQA documentation prepared by local Lead Agencies when taking discretionary actions related to funding or financing. The SPWA does not act as a Lead Agency.

In the capacity of a Responsible Agency, the SPWA will respond to CEQA notices for early consultation, including NOPs or other similar consultation requests, and will comment, as appropriate, to ensure the local Lead Agency's CEQA document includes the proper scope and analysis for wastewater issues. This includes providing the local Lead Agency with the most current assumptions for wastewater cumulative analysis. The SPWA will similarly comment on draft CEQA documents, as necessary, to ensure that the documentation is adequate to support any discretionary actions by the SPWA, including but not limited to future funding or financing discretionary actions, or modifications to the Funding and Operations Agreements.

The City of Roseville. The City of Roseville owns and operates the Regional Wastewater Facilities on behalf of the Participants. In this capacity, the City maintains the necessary permits to process and discharge treated wastewater (i.e., NPDES permits from the Regional Water Quality Control Board), and approves the design and carries out construction of any new or expanded Regional Wastewater Facilities. This includes approvals such as construction documents, bid authorizations, and the award of construction contracts. In this role, the City acts as a **CEQA Lead Agency**. However, when taking discretionary actions related to Regional Wastewater Facilities, the City relies on the UGA or D/I Project CEQA document prepared by the local Lead Agency. As such, the City of Roseville needs to review UGA and/or D/I Project NOPs or other similar consultation requests issued by local Lead Agencies to ensure the CEQA document includes the appropriate scope and "project-level" analysis of Regional Wastewater Facilities. The City of Roseville will similarly comment on the draft CEQA document to ensure that the documentation is adequate to support any discretionary actions by the City, including but not limited to construction and operation-related approvals, and modifications to the Funding and Operations Agreements.

The City of Roseville relies on the SPWA, acting as a CEQA Responsible Agency, for related construction financing approvals.

Other SPWA and Participant Approvals needed for UGA Projects. For those UGAs located outside (in whole or in part) the current regional service area boundary, it is important to recognize that the service area boundary is only modified by agreement of the SPWA and the Participants. It is, therefore, paramount that CEQA documentation for UGAs and D/I Projects be adequate to support discretionary actions by the SPWA and the Participants to modify, if necessary, the Funding and Operations Agreements to include land area outside the current service area or flows beyond those assumed at the formation of the SPWA, and as documented in the WWMP EIR. As such, Participant agencies should also review UGA or D/I Project NOPs, or other similar consultation requests issued by local Lead Agencies, to ensure the proposed scope and analysis for CEQA documents will be adequate for this future action. Participant agencies will similarly comment on the draft CEQA document to ensure that it is adequate to support future discretionary actions.

### **Guidance to Ensure Adequate CEQA Review by Local Lead Agencies**

The following is intended to assist local Lead Agencies when determining the proper scope and analysis for CEQA documentation of UGA and D/I Project wastewater issues.

Wastewater Issues of Concern. In general, the following conditions create CEQA issues of concern for the SPWA, the City of Roseville, and the Participants when fulfilling their future CEQA responsibilities related to their approval authorities discussed above:

- The creation of conditions that may exceed the capacity of Regional Wastewater Facilities;
- The creation of conditions that may exceed the wastewater quantity analyzed or certified in the WWMP EIR;
- Installation of new Regional Wastewater Facilities;
- Expansion of existing Regional Wastewater Facilities, including conveyance infrastructure;
- Modifications of approved SPWA service area boundaries; and
- The creation of conditions that exceed permitted discharges from the Regional Wastewater Treatment Plants or exceed the ability to handle offsite disposal or reuse of biosolids.

The Scope of CEQA Analysis. In order for the CEQA document prepared for a UGA and/or D/I Project to be complete and adequate for use by subsequent SPWA and Participant agencies as discussed above, it must contain project-level analyses of the following, at a minimum:

- Construction and Operation of new wastewater collection and conveyance facilities;
- Alteration of the quality and/or quantity of discharges from wastewater treatment facilities beyond discharge levels permitted under the current NPDES discharge permits, and production of biosolids needing offsite disposal and/or reuse in excess of current permitted capacity;

- Construction and operation of additional wastewater treatment facilities required to serve the proposed UGA or D/I Project (beyond those considered in current documents);
- Delineation of areas in each UGA that are outside the current service area boundary and documentation of wastewater flow and recycled water demands in quantities greater than what is included in the WWMP EIR or reallocation of wastewater flow and recycled water demands as compared to those shown in the WWMP EIR or more current documents;
- Inducing growth as a result of removing obstacles to growth;
- Potential cumulative effects associated with other past, present, or foreseeable future projects;
- Alternatives analysis for each of the systems (wastewater collection, treatment, disposal, and recycled water storage and distribution) listed above.

Mitigation Measures for Significant Adverse Impacts. It is expected that CEQA documents prepared by local Lead Agencies will identify and provide project-level CEQA analysis for all Regional Wastewater Facilities necessary to implement the UGA or D/I Project. Local Lead Agency CEQA documents prepared for UGA and D/I Projects may not include mitigation that defers to a future date analysis of the construction and operation of required Regional Wastewater Facilities. Project-level analysis of these facilities is required in the local Lead Agency CEQA document in order to fulfill the other related SPWA and Participant CEQA actions as discussed in this guidance document.

Although no deferred wastewater mitigation should be included in local Lead Agency CEQA documents, it is possible that mitigation may be required to ensure that required Regional Wastewater Facilities are permitted, constructed, and operational prior to their need. Although the City of Roseville would serve as applicant for any required modification to Regional Water Quality Control Board waste discharge permits, the local Lead Agency needs to ensure through CEQA mitigation that building permits for related UGA and/or D/I Projects are withheld until all required permit modifications are secured and financing for Regional Wastewater Facilities has been approved by the SPWA.

# LETTER 8

25 Sept 2011

City of Rocklin

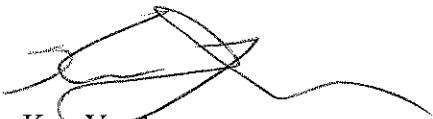
Re: Rocklin General Plan Update

Interested Parties,

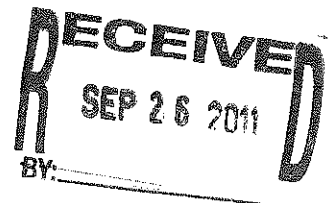
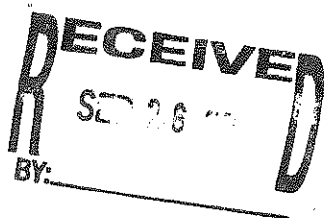
I would like to provide several comments on the Rocklin General Plan Update, 2011.

1. Circulation Element. Include the use of traffic circles as they can provide an effective and safe method of handling intersection cross traffic. | 8-1
2. Circulation Element. Something needs to be done to provide secondary access to the Yankee Hill Subdivision. Independence Place crosses a creek, which in time of flooding or washout or other closure could preclude citizen egress from the subdivision. This road segment also crosses a petroleum line which if ruptured would block access. | 8-2
3. Section 4B-32,33 I feel that this section should a definite statement relating to setbacks from creeks. Some jurisdiction use 50 feet or more. | 8-3
4. Section 4D-8 should include a definite statement requiring project review by Placer County Flood Control and Water Conservation to ensure a regional approach to flood protection. | 8-4

Thank You,

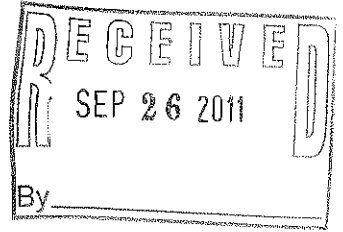


Ken Yorde  
4335 Midas Ave.  
Rocklin, Ca. 95677  
ph 916.624.0375



# LETTER 9

Yankee Hill Estates Homeowners Association  
c/o P.O. Box 3486, Rocklin, CA 95677



Monday, September 26, 2011

Hon. George Magnuson, Mayor  
And Hon. City Council Members  
City of Rocklin  
3970 Rocklin Road  
Rocklin CA 95677

**RE: Draft Rocklin General Plan**

Dear City Council Members:

The Yankee Hill Estates Homeowners Association welcomes this opportunity to comment on the City of Rocklin General Plan Draft Environmental Impact Report (DEIR). Our association discussed the report at our September 19th Board Meeting and our Board unanimously approved submitting comments along these lines for your consideration. We are hopeful that you will recognize our concerns and be able to address them as we request when you prepare the ultimate General Plan.

9-1

The citizens of Yankee Hill Estates have a unique concern as to their environmental setting that relates to train noise and its impact on our residents. We have expressed our concerns to the City before. Our neighborhood consists of 188 homes framed by the confluence of the two Union Pacific Railroad (UPRR) tracks that join to make the double track that extends southward in an east-west direction, located parallel to and north of Pacific Street in Rocklin. As such, our residents are impacted not by a single track or a more concentrated double track - but by a "Y" of two single tracks converging with overlapping noise impacts. As the DEIR notes, within the City of Rocklin, railroad noise levels are highly influenced by the sounding of locomotive warning horns and that exposure to (such) noise as would be considered a significant impact. Our residents and home owners have suffered and complained to the City about these impacts for a number of years and are making these comments again, as now is the City's best possible opportunity to do something about this problem and make things right..

9-2

Yankee Hill Estates has also suffered with only one access point (Pacific Street at Americana Way) which has negatively affected residents and air quality (due to idling of vehicles) as daily trains block the at-grade crossing caused by railroad operations servicing Sierra Pine via the rail spur across Pacific Street. This condition also similarly blocks and interrupts Pacific Street traffic. Beyond the frustration and public safety risks of this condition, we want to emphasize that this causes multiple (additional) train horns and signal gate soundings - a unique circumstance not addressed in the DEIR, nor adequately in our opinion, disclosed to residents have had to wait up to an hour for trains blocking the roadway to move, despite our understanding that under state law, trains are not permitted to occupy or block crossings for longer than 10 minutes unless they are continuously moving through the crossing in the same direction, or there is no vehicle or pedestrian waiting at the crossing. This means that if a train stops, or begins moving backwards, while it is passing through a crossing, the train then has 10 minutes to completely clear the crossing (see attachment :*Public Utilities Commission of the State of California- Grade Crossings*).

9-3

The DEIR notes that "Residential dwellings are of primary concern because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise levels." It further identifies "railroad operations" as a significant source of ambient noise. We are told train

9-4



horns are required to sound at between 96 and 110 dBA measured 100 feet in front of the locomotive within 0.25 miles of each grade crossing. Each train sounds their horn, four to six times in our experience regardless of the time of day. As the frequency and length of trains continues to increase this is a great (and growing) impact on our quality of life (see Bloomberg article attached “*No sign of Recession With Rail Shipments Showing Growth Trend*”).

9-4  
cont'd

The DEIR under “4.5.3 Regulatory Framework, Federal Railroad Administration,” is out of date and makes no reference to the final federal train horn rule that became effective on June 24, 2005 (see attached *Federal Register - Department of Transportation, Part IV, Federal Railroad Administration 49CFR Parts 222 and 229* attached). This rule provides local communities affected by train horn noise the option of silencing horns by establishing “quiet zones.” Neither the draft general plan nor the DEIR include ‘quiet zones’ as a possible mitigation measure. There is no discussion of their potential inclusion. This seems like a feasible, appropriate and beneficial mitigation. Please include the establishment of a ‘quiet zone’

9-5

The DEIR notes ambient noise measurement surveys were conducted in late 2008 and January 2009 with only two 24 hour noise measurements, one at Highway 65 and one along Interstate 80 (Appendix D). The informational 2001 and 2002 noise measurement results included eleven 24 hour noise measurement sites (Appendix E). The 01 and 02 measurements seem far more robust and appropriate. Why would the City only include two 24 hour measurements to base conclusions on in this important DEIR? The omission of any 24 hour noise measurement along any UPRR at grade crossing (see Figure 4.5.2) which would have train horn soundings, which the DEIR notes is a primary example of an instance of Maximum Noise Level and/or the Single Event Noise Exposure Level (see Table 4.5.1) makes this DEIR inadequate in both terms of omission of data/evidence for its conclusions and inconsistency with the City’s own prior analysis methodology from the 2001/2002 noise measurements. Why did many of the locations of measurement change from 2001/02 to the 2008/09 measurements? Why did the number of 24 hour measurement sites go from eleven to only two? Was there any noise measurement on weekends? Why would the City rely on 2009 data, which is almost three years old? Given the high prices of gasoline driving freight from semi-tractor trailers to railroad delivery, this data would seem to ignore the increase in train activity since 2009. Did UPRR assert there is no increase in the number or length of trains since 2009? The Appendix E noise measurement sites related to railroad are better locations, as so many are not included in the 2008/09 very little comparison can be made. Measurements at Americana Way and Pacific Road for 24 hours should be included in a revised noise measurement study - Given Yankee Hill’s unique environmental setting data points specific to its circumstance would seem to be an obvious duty for the City to meet? This is especially so given we have raised this issue on numerous prior occasions. Who performed the October 28th and 29th, 2008; November 11 and 13, 2008; and January 30, 2009 noise measurements? Was this work completed as a part of some study? If so please produce that report. The early 2001/02 Figure 4-14 of Appendix E clearly identifies consultant Quad Knopf, as doing the work while Figure 4.5-2 does not cite a source.

9-6

9-7

Under Transportation Sources, Railroads, the DEIR asserts that approximately 16 freight transport trains per day and approximately 10 Amtrak passenger trains per day traverse Rocklin. This is based on “site reconnaissance surveys.” There is no distinction given to how these trips distribute over a day or along which track alignments after the divergence of tracks beyond Pine Street. We could not locate the “site reconnaissance surveys” mentioned and would like copies of such surveys. Why would the City not get confirmation of these numbers directly from the railroad? We do not believe that the City should be relying on 2009 data for the reasons cited above. This section further notes that “train lengths can vary from approximately 85 railcars for freight trains to approximately 8 passenger cars for Amtrak trains.” Comparing freight to passenger is misleading and not informative. What is the length that a freight train can vary? What is the length a passenger train can vary? Can UPRR provide more recent and accurate

9-8

**Yankee Hill Estates Homeowners Association**

c/o P.O. Box 3486, Rocklin, CA 95677

information about train frequency, length and scheduling? The City should require this information in order to properly evaluate the potential impacts.

9-8  
cont'd

Table 4.5-3 notes in the footnotes that Noise levels were “calculated...”, why were more accurate actual measurements not used to make determinations instead of calculations?

9-9

We question the two diagrams (figure 4.5.-3 and figure 4.5-4) which don't appear to show the impact of train horn noise (despite the description) as they are linear noise corridors without any noticeable differences at any of the at-grade crossings (which the DEIR admits have greater noise impacts). The DEIR (and our experience) clearly indicates that the sounding of train horns and roadside signaling devices contributes to the overall noise levels and single event noise levels. Are the data files in Appendix D used or related to the mapping of these figures or are there other files that are not provided? These diagrams which are described as and intended to show the noise contours in fact do not show them accurately or as they should be portrayed. The outline of the contours does not adjust to reflect the impact of at-grade crossings and the substantially louder noise generated by horn use at those particular locations.. Please revise the contours to accurately show these impact zones.. We would note, that our neighborhood's location in relation to the tracks does have an impact of overlapping contours with an event on both tracks - this is also not mentioned or addressed anywhere in the DEIR. Please remedy this and offer mitigation (Quiet Zone!) It is clear from the only two noise measurements to include horn soundings (#22 and #23 of Table 4.5-2) that the Lmax impact above 100 dBA exceeds the maximum allowable noise exposure for transportation noise sources as referenced in Table 2-2. Given, this fact, the Leq Noise Level measurement and the CNEL Noise Level measurement for these two locations should be measured and provided - we note “NM,” which we are left to presume means not measured? Why are these the only two noise measurement location points without these measurements? Why is train horn noise not included in Figure 4.5-1 given the acknowledgement in the report of it's significant impact?

9-10

9-11

In the discussion of UPRR, under Exposure to Surface Transportation Noise, Impact 4.5-3, the report notes “projected volumes for future years are not currently available” for freight trains and Amtrak trains from (presumably) the 2009 reports cited. This is important information and yet there is no explanation as to why it is not available. Get the information and include it. What is the change in volumes from 2009 survey to present? Was UPRR asked for this information?

9-12

Under Cumulative Transportation Noise Impact within the Planning Area, we note there is no mention of UPRR operations. Why is there no discussion or inclusion of railroad operations in the cumulative analysis? This omission is very disturbing given the significant impact of railroad operations, at-grade crossing train horn noise and roadside signaling devices. Again, this would be an appropriate opportunity to include a horn quiet zone as a mitigation measure related to cumulative impacts.

9-13

We agree that exposure to noise levels in excess of standards established in the local general plan or noise ordinance or of applicable standards of other agencies is a **significant** impact (Impact 4.5-1). We believe this has not been adequately addressed in the past and is currently not being mitigated to the City's best ability. In fact, none of the policies (Policy N-1 thru N-5, or N-7 thru N-9) address train horn noise or roadside signaling devices. Why is this significant impact not mitigated? Is there any mitigation related to train horn sounding proposed? Train horn noise is significant (Impact 4.5-3), but it is also avoidable or at least mitigatable with a quiet zone.

9-14

We request that a train horn quiet zone from Del Mar to Ferron Street (including the emergency only access at grade crossing at Gayaldo Park) be established and enforced by the City of Rocklin as a mitigation measure for Impact 4.5-4 and to support and encourage further( residential) development in Rocklin's downtown. **The City should commit to limit the use of train horns and other audible warning devices by installing crossing controls that meet FRA**

9-15

**requirements and obtain Quiet Zone designations for crossings from Del Mar to Ferron Street.**

9-15  
cont'd

The report discussion of UPRR groundborne vibration is brief and unclear in what information is used to make such assertions, referencing only information from a 2002 Caltrans "measurement data." Where is this data included in the DEIR? Where was this data or study conducted? Did the City's noise consultant peer review and agree with this Caltrans report and its conclusions? Did the City's noise consultant agree that the conditions in the report are similar and applicable to the Rocklin area? Given the report notes groundborne vibration is greatly influenced by local geology (which Rocklin is unique) and railroad operations (which is inadequately addressed in the report) we can find no way to substantiate the conclusions made for vibration impacts.

9-16

Yankee Hill Estates residents do support the elimination of the Argonaut overpass which would land in our neighborhood adjacent to Gayaldo Park. The delay of the General Plan update and this decision not being made earlier has caused this "no man's land" to remain a donut hole in our community, an area that would have otherwise been developed residential with the rest of the neighborhood. We would strongly encourage the City to allow this property to be developed as residential in the future and condition such residences to join the Yankee Hill Estates Homeowners Association as they would enjoy and benefit from all the common area improvements we currently maintain. It is clear that except for the designation of the Argonaut Road extension on this land, this would have been the case when our community was originally developed, and that it clearly benefits from our HOA's responsibilities as delegated by the City or Rocklin.

9-17

Yankee Hill Estates Homeowners Association thanks you for allowing our comments on DEIR for the Rocklin General Plan. Please provide us with copies of any further actions regarding this project. Thank you for your thoughtful consideration of our concerns.

9-18

Sincerely,



**Franklin Burris**  
President

**CC:** Yankee Hill Estates HOA Board  
Kelly, Avery, Oliver Management Network, Inc. (OMNI)  
Baydaline & Jacobsen LLP, Attorneys at Law

**Attachments:**

*Federal Railroad Administration Train Horn Rule Fact Sheet*  
*RTD Fastracks Train Horns at Grade Crossing Fact Sheet*  
*Federal Register - DOT Part IV, FRA 49CFR Parts 222 and 229*  
*Bloomberg article "No sign of Recession With Rail Shipments Showing Growth Trend"*  
*Public Utilities Commission of the State of California- Grade Crossings*



M O V I N G T H E  
**AMERICAN  
ECONOMY**

**Federal Railroad Administration  
Train Horn Rule Fact Sheet**

**Purpose:**

The goal of the Federal Railroad Administration (FRA) in developing the train horn rule is to ensure safety for motorists at highway-rail grade crossings while allowing communities the opportunity to preserve or enhance quality of life for their residents by establishing areas/times in which train horns are silenced.

**Historical Background:**

Since their inception, railroads have sounded locomotive horns or whistles in advance of grade crossings and under other circumstances as a universal safety precaution. During the 20<sup>th</sup> century, nearly every state in the nation enacted laws requiring railroads to do so. Some states allowed local communities to create whistle bans where the train horn was not routinely sounded.

In the early 1990's, the FRA observed a significant increase in train-vehicle collisions at certain gated grade crossings in Florida which coincided with a statewide whistle ban on the Florida East Coast Railroad (FECR). In 1993, FRA issued Emergency Order #15 requiring trains on the FECR to sound their horns again, pre-empting the 1984 Florida statute that created the ban. The number and rate of collisions at affected crossings returned to pre-whistle ban levels.

In 1994, Congress mandated that the FRA issue a federal regulation requiring the sounding of locomotive horns or whistles at all public highway-rail grade crossings; and to provide for exceptions to that requirement by allowing communities to establish "quiet zones." In 1996, Congress added that special consideration be given to communities with long-standing or legacy whistle bans.

Before finalizing the rule, FRA held public meetings around the country and solicited comment from scores of affected communities and stakeholders. Based upon the voluminous input received, FRA published an Interim Final Rule in December 2003, refining its original proposal and inviting additional public comment. The final federal train horn rule became effective on June 24, 2005.

The rule provides the first opportunity ever for many local communities around the country affected by train horn noise the option of silencing horns by establishing quiet zones.

**Sounding the Locomotive Horn:**

Under the Train Horn Rule, locomotive engineers must sound train horns for a minimum of 15 seconds, and a maximum of 20 seconds, in advance of all public grade crossings, except:

- If a train is traveling faster than 45mph, engineers will not sound the horn until it is within ¼ mile of the crossing, even if the advance warning is less than 15 seconds.
- If a train stops in close proximity to a crossing, the horn does not have to be sounded when the train begins to move again.
- There is a "good faith" exception for locations where engineers can't precisely estimate their arrival at a crossing.

Wherever feasible, train horns must be sounded in a standardized pattern of 2 long, 1 short and 1 long. The horn must continue to sound until the lead locomotive or train car occupies the grade crossing.

For the first time, a maximum volume level for the train horn has been established at 110 decibels. The minimum sound level remains 96 decibels. Railroads have until 2010 to fully comply with the maximum volume level requirement.

**Establishing a New Quiet Zone:**

A new quiet zone must be at least ½ mile in length and have at least one public highway-rail grade crossing. Every public grade crossing in a new quiet zone must be equipped at minimum with the standard or conventional flashing light and gate automatic warning system. A quiet zone may be established to cover a full 24-hour period or only during the overnight period from 10:00 P.M. to 7:00 A.M.

Local governments must work in cooperation with the railroad that owns the track, and the appropriate state transportation authority to form a diagnostic team to assess the risk of collision at each grade crossing where they wish to silence the horn. An objective determination is made about where and what type of additional safety engineering improvements are necessary to effectively reduce the risk associated with silencing the horns based on localized conditions such as highway traffic volumes, train traffic volumes, the accident history and physical characteristics of the crossing, including existing safety measures.

Examples of additional safety engineering improvements that may be necessary to reduce the risk of collisions include: medians on one or both sides of the tracks to prevent a motorist from driving around a lowered gate; a four-quadrant gate system to block all lanes of highway traffic; converting a two-way street into a one-way street; permanent closure of the crossing to highway traffic; or use of wayside horns posted at the crossing directed at highway traffic only.

Once all necessary safety engineering improvements are made, the local community must certify to FRA that the required level of risk reduction has been achieved. A quiet zone becomes effective and train horns go silent only when all necessary additional safety measures are installed and operational.

**Quiet Zone Exceptions:**

In a quiet zone, engineers have no legal duty to sound the horn, but do have discretion to do so during emergency situations (i.e. the presence of a vehicle or a person on the track).

Under federal regulations, engineers must sound the horn to warn railroad maintenance employees or contractors working on the tracks.

**Monitoring Quiet Zones:**

If a railroad or particular engineer is observed failing to sound horns as required or is repeatedly and unnecessarily sounding the horn in an established quiet zone, FRA will seek to remedy the situation or take enforcement action.

**Effect of the Rule on Pre-Existing Whistle Bans:**

Legacy whistle bans were established by local ordinance or through agreements with specific railroads in accordance with existing state law, or through informal agreements honored or abided by a railroad. The new rule required communities with whistle bans to affirmatively state their intention to preserve it by submitting specific paperwork converting the ban to a "pre-rule quiet zone." Those that failed to do so by a specified deadline lost their special status and railroads resumed routine sounding of horns.

Pre-rule quiet zone communities that completed the required paperwork have been granted an extended grace period (from 5 to 8 years) to achieve compliance with certain rule requirements. During the grace period, local communities must periodically file paperwork to demonstrate their progress toward compliance or the horns will start sounding again.

The Chicago area's numerous pre-existing whistle bans are temporarily excepted from compliance with the rule because of their unique experience with this issue. After an ongoing collaborative review is completed, the FRA will determine the final status of the Chicago pre-rule quiet zones.

**For a list of key terms and definitions click here**

**To view the Federal Register posting of the Train Horn Rule click here**

**For more detailed information about the Train Horn Rule click here**

For additional information, please contact  
FRA Public Affairs (202) 493-6024 or [www.fra.dot.gov](http://www.fra.dot.gov).  
December 2006

## Train Horns at Grade Crossings Fact Sheet

### BACKGROUND

In June 2005, the Federal Railroad Administration (FRA) issued laws governing the use of train horns at grade crossings throughout the United States. These laws, included in the Final Rule on the Use of Locomotive Horns at Highway-Rail Grade Crossings, state that a train crew must sound the locomotive's horn when approaching a grade crossing. This practice has been common for many years, and was required internally by railroads prior to the federal law. However, communities were looking for ways to reduce the noise associated with the horns and the FRA stepped in to develop an overall policy. In addition to requiring that train horns must be sounded, the FRA Rule now provides a nationally consistent methodology for establishing, maintaining, and enforcing "Quiet Zones". Quiet Zones are segments of railroad lines where train crews are exempt from sounding the horn at grade crossings. It should be noted that train crews are still permitted to sound the horn within a Quiet Zone for railroad-related reasons or for safety reasons. For more information, refer to the FRA's Quiet Zone website at [www.fra.dot.gov/us/content/1318](http://www.fra.dot.gov/us/content/1318)

### DEFINITIONS

**Municipality** – Under the train horn rule, the public agency with authority over the roadway that crosses the tracks must apply for the quiet zone. Under this definition, cities, counties, and special districts with roadway authority could apply for quiet zones within Colorado. In cases where roads within the quiet zone are managed by different authorities, the affected agencies must collaborate and choose a lead agency to apply for the quiet zone.

**Supplemental Safety Measure (SSM)** - a measure intended to improve grade crossing safety when train horns are not sounded and that is defined as effective in the FRA rule.

**Alternate Safety Measure (ASM)** – a measure intended to improve grade crossing safety (when train horns are not sounded) that does not fall under the FRA definition of an SSM. ASMs are subject to FRA review and analysis as to effectiveness.

#### SUPPLEMENTAL SAFETY MEASURES

- Four Quadrant Gate System;
- Gates with Medians;
- Gates with Channelization;
- One Way Street with Gate(s);
- Close (permanently) Railroad Crossing;
- Close (temporarily) Railroad Crossing.

**Wayside Horn** – A horn mounted along the roadway at a grade crossing used to replace the train horn.

**Power Out Indicator** – A wayside device that notifies an approaching train crew whether or not the active warning system at a grade crossing has appropriate power.

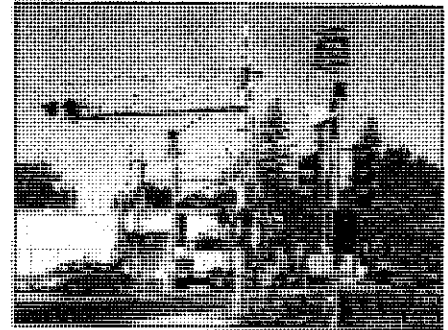
**Constant Warning Time Circuitry** – Railroad signal system elements that use a train’s approach speed to determine when it will reach a grade crossing, and then start the crossing gate cycle a specified time before the train reaches the crossing.

**Dual Gates** – Crossing gates provided along the approaches to the railroad crossing (often one in each direction, or two total).

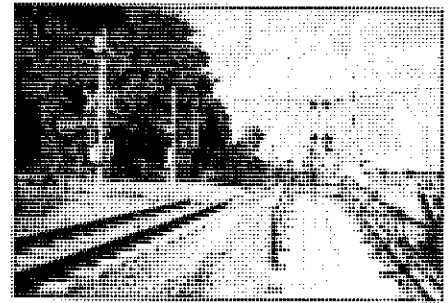
**Quad Gates** – Crossing gates provided along the approaches to and departures from the railroad crossing (often one on each side of the tracks in each direction, or four total).

**Electric Multiple Unit (EMU)** – a commuter rail technology that uses overhead electric systems to power self-contained electric railcars.

**Diesel Multiple Unit (DMU)** – a commuter rail technology that uses a diesel engine to power self-contained railcars.



Wayside horn and sign at crossing in Roseville, CA



Wayside horn at crossing adjacent to New Jersey Transit Commuter Rail station



Four quadrant gates at a crossing in Illinois

#### APPLICABILITY

The new train horn rule generally applies to railroads operating as part of the nation’s general railroad system of transportation. This includes freight railroads across the U.S., Amtrak, and transit systems (typically commuter rail) that fall under FRA oversight. It typically does not include heavy rail systems (subways) or light rail (LRT) systems that operate outside of freight rail corridors. Although the title of the



rule refers to locomotives, it applies to any vehicles operating on the national system, including locomotive-hauled coaches, EMUs and DMUs.

**IMPLEMENTATION**

*Under the FRA Rule, a municipality wishing to implement a Quiet Zone needs to:*

- Define the group of crossings to be included in the Quiet Zone. The crossings must be adjacent, and at least a ½ mile segment of railroad must be included.
- Review and evaluate existing conditions at the crossings within the segment. This includes updating the FRA’s grade crossing inventory for each crossing.
- All crossings within the Quiet Zone must be improved to certain baseline criteria, generally including flashing lights and gates; power out indicators; constant warning time circuitry; and audible warning for pedestrians.
- Based on the existing condition evaluation and implementation of the baseline requirements, a Risk Index is calculated, both with and without the train horns at the crossings.
- The municipality must then develop an enhancement plan that improves the Risk Index without train horns back to the level of the Risk Index with train horns.
  - o The FRA has defined a group of improvements that can be used to improve the Risk Index called Supplemental Safety Measures (SSMs). If these are used to reach the Risk Index with train horns, the application can be submitted and the Quiet Zone can be established (assuming FRA approval).
  - o If the community does not wish to use SSMs, Alternate Safety Measures (ASM) are available, which also improve the Risk Index. A community can also propose modified SSMs to help improve the Risk Index. If ASMs or modified SSMs are specified in the Quiet Zone application, any resulting approval will be conditional. A Quiet Zone resulting from this process will be subject to annual FRA review.
  - o Grade crossing modifications (SSMs, modified SSMs, or ASMs) are subject to approval by the Colorado Public Utilities Commission and the owning railroad.
- Once FRA approval of the Quiet Zone has been obtained, the community must implement the identified safety measures before the Quiet Zone can be put into place. There is currently no Federal funding for Quiet Zone improvements, so communities must be ready to pay for their safety measures in order to obtain a Quiet Zone. Costs for quiet zone improvements vary widely depending on the measures

All photos from Railroad Control Limited ([www.railroadcontrols.com](http://www.railroadcontrols.com)).

used and existing conditions at the crossings. Typical improvements can cost between \$200,000 and \$300,000, meaning a 4- to 8-crossing quiet zone can cost \$1 to \$2 million.

- The FRA reserves the right to remove the Quiet Zone if safety conditions deteriorate after installation.

#### COLORADO QUIET ZONES

There are currently no Quiet Zones in Colorado. Three Front Range communities are working with the FRA to evaluate Quiet Zones, and one mountain community has prepared and then withdrawn an application. Quiet Zones are most common in the midwestern and eastern states, including Minnesota, Wisconsin, Massachusetts, and Maine.

## No Sign of Recession With Rail Shipments Showing Growth Trend

Railroads shipments are the highest in almost three years, helping to defy concerns about a double-dip recession.

Total rail volumes excluding grain and coal averaged 381,831 carloads in August, the most since October 2008, according to data from the [Association of American Railroads in Washington](#). These shipments represent the bulk of materials for industrial production, so rising volumes show the economy is still growing, according to Art Hatfield, a transportation analyst in Memphis, Tennessee, at Morgan Keegan & Co.

“We’re not seeing declines in rail volumes that are synonymous with a recession,” Hatfield said. “We remain in a slow growth environment.”

The correlation between the 12-month average of total rail-car loadings excluding grain and coal and the three-month average of the [Federal Reserve’s](#) manufacturing industrial-production index is 0.82, according to Bloomberg News calculations. A correlation of 1 would show they move in lockstep, while a value of zero signals no relationship.

Manufacturing output -- which makes up 75 percent of all U.S. factory production -- climbed 0.5 percent in August, the fourth consecutive increase, according to Fed data released this month.

“Industrial-production growth is slow but positive,” according to Kurt Rankin, an economist at PNC Financial Services Group Inc. in Pittsburgh, who forecasts a 0.3 percent increase in September from August. This indicates the “gradual” U.S. expansion is still in place, he said.

### Rising Output

Gross domestic product climbed at a 1.0 percent annual rate in the second quarter, after almost stalling with a 0.4 percent gain from January-March, Commerce Department data show. GDP will rise 1.6 percent this year, according to the median estimate of 63 economists surveyed by Bloomberg.

The order rate for [Kennametal Inc. \(KMT\)](#), the No. 1 supplier of cutting tools used by manufacturers including [Caterpillar Inc. \(CAT\)](#) and [Boeing Co. \(BA\)](#), increased at a 20 percent annual pace in August,

excluding acquisitions, divestitures and workdays, the company said in a Sept. 15 statement. Kennametal's end markets "continued to reflect strong demand," and its industrial business showed "ongoing strength," the company said.

The Latrobe, Pennsylvania-based company is a "good barometer" for industrial production, according to Sheila Kahyaoglu, a New York-based analyst at Credit Suisse Group AG. Kahyaoglu maintains an "outperform" rating on the stock because its order rate, while poised to slow, will continue to grow at a rate faster than consensus forecasts.

## **Bullish About Manufacturing**

Hatfield is bullish about U.S. manufacturing output even amid concerns that the world economy is slowing. The International Monetary Fund cut its forecast for global growth this week, projecting expansion of 4 percent this year, compared with a June forecast of 4.3 percent.

Hatfield maintains "outperform" ratings on Union Pacific Corp. (UNP), Norfolk Southern Corp. (NSC) and CSX Corp. (CSX), the three largest U.S. railroads, because "valuations are attractive given our earnings estimates, which include the impact of slow growth."

Between March 13, 2009, and July 1, 2011, the Standard & Poor's Supercomposite Railroads Index -- which includes the three companies -- rose 200 percent, while the S&P 500 Index grew 77 percent, Bloomberg data show. Since July, the railroads index has fallen 23 percent, compared with the S&P 500's 14 percent decline.

## **'Some Pickup'**

The recent underperformance is driven by investor concern about a recession, Hatfield said. The Fed noted in its Sept. 7 Beige Book report that "most" manufacturers were less optimistic than in its July survey. On Sept. 21, Fed policy makers said they expect "some pickup in the pace of recovery over coming quarters," adding there are "significant downside risks" to their outlook.

Hatfield still projects rail-car shipments will grow in the "low single digits" for the second half of this year, even though third-quarter volumes may be lighter than forecast because of weather-related disruptions, he said.

FedEx Corp., operator of the world's biggest cargo airline, cut its full-year profit and industrial production forecasts yesterday, as volumes declined amid a slowing economic recovery. The Memphis-based company now projects U.S. output will rise 3.9 percent in 2012, Executive Vice President Michael Glenn said on a conference call. This is down from its previous forecast of 4.3 percent, said Jesse Bunn, a company spokesman.

Consumer sentiment remains the biggest drag on economic improvement, Glenn said. Still, FedEx expects “modest growth to continue.”

## **No Indication of Declines**

Similarly, since reporting quarterly earnings in July, the three largest U.S. railroads haven't given any indication of a sharp decline in demand similar to 2008 and 2009, when volumes fell as much as 24 percent on an annual basis.

Omaha, Nebraska-based Union Pacific had its strongest weekly volume so far this year -- almost 187,000 carloads -- prior to Labor Day, Chief Financial Officer Robert Knight said at a Sept. 21 conference hosted by Citigroup Inc. It continues to see “solid demand” across most business segments, including shipments of industrial products, up 8 percent annually as of Sept. 15 for the quarter ending Sept. 30, he said.

Norfolk Southern, based in Norfolk, Virginia, maintains an outlook “which is still upbeat despite some of the macro indicators,” Chief Financial Officer James Squires said at the Citigroup conference on the same date. Total railcar shipments are up about 3 percent on an annual basis so far for the three-month period ending Sept. 30, he said.

## **‘Doing Okay’**

Industrial volumes for Jacksonville, Florida-based CSX have increased about 5 percent since last year through August for the quarter ending Sept. 30, Vice President Fredrik Eliasson said yesterday at the Citigroup conference. Even amid recent “moderating,” the economy continues to grow and the company is “doing okay from a volume perspective,” he said.

Earlier this month, CSX's Chief Financial Officer Oscar Munoz said he isn't concerned about “any kind of overarching sort of dire circumstances around the corner,” as there is still a “general level of optimism” among customers and suppliers.

“Sure, things have moderated, but there is no one in that near state of panic that we saw certainly in late '08 and '09,” Munoz said at a Sept. 8 conference hosted by UBS AG.

To contact the reporter on this story: Anna-Louise Jackson in New York at [ajackson36@bloomberg.net](mailto:ajackson36@bloomberg.net)

To contact the editor responsible for this story: Anthony Feld in New York at [afeld2@bloomberg.net](mailto:afeld2@bloomberg.net)

**Public Utilities Commission of the  
State of California**

**REGULATIONS GOVERNING THE OCCUPANCY OF PUBLIC  
GRADE CROSSINGS BY RAILROADS**

Adopted September 11, 1974. Effective November 1, 1974.  
Decision No. 83446 in Case No. 8949.

IT IS ORDERED by the Public Utilities Commission of the State of California that each railroad corporation operating in the state of California shall observe the following regulations in conducting operations on and across public grade crossings:

1. TRAIN MOVEMENTS—Except as provided in Paragraph 5, a public grade crossing which is blocked by a stopped train, other than a passenger train, must be opened within 10 minutes, unless no vehicle or pedestrian is waiting at the crossing. Such a cleared crossing must be left open until it is known that the train is ready to depart. When recoupling such a train at the crossing, movement must be made promptly, consistent with safety.
2. SWITCHING MOVEMENTS—Switching over public grade crossings should be avoided whenever reasonably possible. If not reasonably possible, such crossings must be cleared frequently to allow a vehicle or pedestrian to pass and must not be occupied continuously for longer than 10 minutes unless no vehicle or pedestrian is waiting at the crossing.
3. GRADE CROSSING PROTECTION CIRCUITS—Cars or locomotives must not be left standing nor switches left open within the controlling circuits of automatic gate protection devices unless time-out features are provided to allow the gate arms to rise.
4. There are no time restrictions for crossing occupancy for a moving train continuing in the same direction.
5. These time limit provisions shall not apply to any blocking resulting from compliance with State and Federal laws and regulations, terrain and physical conditions, adverse weather conditions, conditions rendering the roadbed or track structure unsafe, mechanical failures, train accidents, or other occurrences over which the railroad has no control, except that such crossing shall be cleared with reasonable dispatch.

6. In the event of any uncontrolled blockage involving more than one grade crossing and a peace officer is on the scene, primary consideration shall be given to the clearing of that crossing which, in the peace officer's judgment, will result in the minimum delay to vehicular traffic.
7. A crew member of a train blocking a public crossing shall immediately take all reasonable steps, consistent with the safe operation of such train, to clear the crossing upon receiving information from a peace officer, member of any fire department, as defined in Section 2801 of the Vehicle Code, or operator of an emergency vehicle, as defined in Section 165 of the Vehicle Code, that emergency circumstances require the clearing of the crossing.
8. Any agreement between a railroad and a public agency in effect on the effective date hereof or, in accordance with Attachment A, subsequently approved by this Commission permitting certain crossings to be blocked for a time period other than specified herein shall prevail.
9. Any railroad or public agency<sup>1</sup> may, by formal application to this Commission, request a variance from the regulations prescribed herein or have different regulations provided in connection with operations over a specific crossing where local conditions so require. The contents of the application shall be in accord with Rule 15 of the Commission's Rules of Practice and Procedure. The application shall detail any previous steps that may have been taken in an attempt to reach an agreement on the proposed variance and shall list any public agencies within the geographic area or any railroads that might be affected by the variance. A copy of the application shall be mailed to all such public agencies and railroads and a certificate of service regarding such mailings shall accompany the application filed with the Commission.
10. The district attorney of the proper county or the city attorney designated to prosecute misdemeanors in his stead shall prosecute noncompliance with this General Order by means of a misdemeanor complaint issued against the railroad corporation in accordance with Chapter 11, Part I, Division I of the Public Utilities Code.

This order shall become effective November 1, 1974.

Approved and dated at San Francisco, California, this 11<sup>th</sup> day of

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<sup>1</sup> Public Agency-The term "public agency" as used herein shall include the State, a county, an incorporated city or town, or any authorized agencies thereof.  
G.O. 135

September, 1974.

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**PUBLIC UTILITIES COMMISSION  
OF THE STATE OF CALIFORNIA**

By **William R. Johnson**  
*Secretary*



Attachment A

(Agreement re Variance)

The following procedures shall be followed when Commission approval is sought for an agreement between a railroad and a public agency regarding any proposed variance from this General Order that is reached subsequent to the effective date of the general order.

A letter jointly signed by the parties to the agreement shall be filed with the Commission. Said letter shall state all information pertinent to the proposed variance agreed upon by the parties, including a traffic count for the crossing for which the variance is sought. In addition to the signing parties, the letter shall specify any other railroads or any other public agencies within the geographic area that might be affected by the variance, including the California Highway Patrol, the sheriff, and police and fire departments. A copy of the letter shall be mailed to all such public agencies and railroads and a certificate of service regarding such mailings shall accompany the letter filed with the Commission. Any affected public agency or railroad may file with the Commission an objection to the proposed variance no later than 20 days after the date on which the variance-request letter was mailed to the Commission.

Any variance granted shall be by a resolution adopted by the Commission after the Commission has determined that such variance would be in the public interest. The Commission will notify all parties and specified public agencies and railroads of whatever action it may take regarding the proposed variance, and will forward a copy of the resolution, if granted, to the parties. If not granted the parties may file a formal application seeking to obtain such variance.



# Federal Register

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Thursday,  
August 17, 2006

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## Part IV

### Department of Transportation

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Federal Railroad Administration

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49 CFR Parts 222 and 229

Use of Locomotive Horns at Highway-Rail  
Grade Crossings; Final Rule

## DEPARTMENT OF TRANSPORTATION

## Federal Railroad Administration

## 49 CFR Parts 222 and 229

[Docket No. FRA-1999-6439, Notice No. 17]

RIN 2130-AB73

## Use of Locomotive Horns at Highway-Rail Grade Crossings

**AGENCY:** Federal Railroad Administration (FRA), Department of Transportation (DOT).

**ACTION:** Final rule; response to petitions for reconsideration.

**SUMMARY:** This document responds to petitions for reconsideration of FRA's April 27, 2005 final rule that required that the locomotive horn be sounded while trains approach and enter public highway-rail grade crossings. This document amends and clarifies the final rule, in response to petitions for reconsideration and associated letters in support that have been submitted by interested parties, including the railroad industry, rail unions, and a manufacturer of traffic channelization devices.

**DATES:** The effective date is September 18, 2006.

**FOR FURTHER INFORMATION CONTACT:** Ron Ries, Office of Safety, FRA, 1120 Vermont Avenue, NW, Washington, DC 20590 (telephone: 202-493-6299); or Kathryn Shelton, Office of Chief Counsel, FRA, 1120 Vermont Avenue, NW, Washington, DC 20590 (telephone: 202-493-6038).

**SUPPLEMENTARY INFORMATION:****1. Background**

On January 13, 2000, FRA published a Notice of Proposed Rulemaking (NPRM) in the *Federal Register* (65 FR 2230) addressing the use of locomotive horns at public highway-rail grade crossings. This rulemaking was mandated by Public Law 103-440, which added section 20153 to title 49 of the United States Code. The statute requires the Secretary of Transportation (whose authority in this area has been delegated to the Federal Railroad Administrator under 49 CFR 1.49) to issue regulations that require the use of locomotive horns at public grade crossings, but gives the Secretary the authority to make reasonable exceptions.

In accordance with the Administrative Procedure Act (5 U.S.C. 553), FRA solicited written comments from the public. By the close of the comment period on May 26, 2000, approximately 3,000 comments had

been filed with this agency regarding the NPRM and the associated Draft Environmental Impact Statement. As is FRA's practice, FRA held the public docket open for late filed comments and considered them to the extent possible.

Due to the substantial and wide-ranging public interest in the NPRM, FRA conducted a series of public hearings throughout the United States in which local citizens, local and State officials, Congressmen, and Senators provided testimony. Twelve hearings were held (Washington, DC; Fort Lauderdale, Florida; Pendleton, Oregon; San Bernadino, California; Chicago, Illinois (four hearings were held in the greater Chicago area); Berea, Ohio; South Bend, Indiana; Salem, Massachusetts; and Madison, Wisconsin) at which more than 350 people testified.

On December 18, 2003, FRA published an Interim Final Rule in the *Federal Register* (68 FR 70586). Even though FRA could have proceeded directly to the final rule stage, FRA chose to issue an interim final rule in order to give the public an opportunity to comment on changes that had been made to the rule. FRA also held a public hearing in Washington, DC on February 4, 2004. By the close of the extended comment period, over 1,400 comments had been filed with the agency regarding the Interim Final Rule. As is FRA's practice, FRA held the public docket open for late-filed comments and considered them to the extent possible. In order to avoid imposing inconsistent regulatory standards for quiet zone creation and establishment, FRA extended the effective date of the Interim Final Rule on November 22, 2004 (69 FR 67858) and on March 18, 2005 (70 FR 13117) so that the Interim Final Rule would not take effect before the final rule was issued.

On April 27, 2005, FRA published a Final Rule in the *Federal Register* (70 FR 21844). After the final rule was published, FRA received petitions for reconsideration and associated letters in support from the Association of American Railroads, Mr. James Adams of Placentia, California, GE Transportation-Rail, United Transportation Union, Brotherhood of Locomotive Engineers and Trainmen, BNSF Railway Company and Qwick Kurb, Inc. In addition, the Association of American Railroads submitted a petition for Emergency Order, which was subsequently denied.

**2. Statutory Mandate**

On November 2, 1994, Congress passed Public Law 103-440 ("Act") which added section 20153 to title 49 of

the United States Code ("title 49"). Subsections (i) and (j) were added on October 9, 1996 when section 20153 was amended by Public Law 104-264. The Act requires the use of locomotive horns at public highway-rail grade crossings, but gives FRA the authority to make reasonable exceptions.

FRA's Final Rule on the Use of Locomotive Horns at Highway-Rail Grade Crossings (Final Rule) complied with the statutory mandate contained within section 20153 of title 49. As required by section 20153(b) of title 49, the final rule requires locomotive horn sounding by trains that approach and enter public highway-rail grade crossings. (See rule § 222.21.) However, as allowed by 49 U.S.C. 20153(c), the final rule contains exceptions for certain categories of rail operations and highway-rail grade crossings.

Section 222.33 of the rule provides that a railroad operating over a public highway-rail grade crossing may, at its discretion, choose not to sound the locomotive horn if the locomotive speed is 15 miles per hour or less and the train crew or appropriately equipped flaggers provide warning to motorists. FRA has determined that these limited types of rail operations do not present a significant risk of loss of life or serious personal injury.

Locomotive horn sounding is also not required within highway-rail grade crossing corridors that are equipped with supplementary safety measures (SSMs) at each public highway-rail grade crossing. In addition, locomotive horn sounding is not required within highway-rail grade crossing corridors that have a Quiet Zone Risk Index at or below the Nationwide Significant Risk Threshold or the Risk Index With Horns. These highway-rail grade crossing corridors have been deemed, by the Administrator, to constitute categories of highway-rail grade crossings that do not present a significant risk with respect to loss of life or serious personal injury or that fully compensate for the absence of the warning provided by the locomotive horn. Therefore, communities with highway-rail grade crossing corridors that meet either of these standards may silence the locomotive horn within the crossing corridor, if all other applicable quiet zone requirements have been met. (See § 222.39.)

Section 20153(i) of title 49 requires FRA to "take into account the interest of communities that have in effect restrictions on the sounding of a locomotive horn at highway-rail grade crossings." FRA has complied with this requirement in several ways. Until December 24, 2005, the final rule

allowed communities to establish Pre-Rule Quiet Zones, if the Quiet Zone Risk Index was at, or below, two times the Nationwide Significant Risk Threshold and there were no relevant collisions within the quiet zone since April 27, 2000. (See § 222.41.) It should also be noted that the final rule allows communities to establish Pre-Rule Quiet Zones, if SSMS have been implemented at every public grade crossing within the quiet zone or if the Quiet Zone Risk Index is at, or below, the Nationwide Significant Risk Threshold.)

Additionally, the rule allows Pre-Rule Quiet Zone communities to take additional time (up to eight years from the effective date of the final rule) within which to implement safety improvements that will bring them into compliance with the requirements of the rule. This "grace period" has been included in the rule in order to comply with 49 U.S.C. 20153(i)(2), which requires FRA to provide "a reasonable amount of time for [pre-existing whistle ban] communities to install SSMS".

Section 20153 of title 49 prohibits FRA from entertaining single-party petitions for waiver from the regulatory requirements issued under the authority of 49 U.S.C. 20153, unless FRA determines that this prohibition against single-party waiver petitions " \* \* \* is not likely to contribute significantly to public safety." Therefore, § 222.15 of the final rule, which governs the process for obtaining a waiver from the requirements of 49 CFR Part 222, requires joint filing of waiver petitions by the railroad and public authority, unless the Associate Administrator makes the determination that joint submission of an individual waiver petition would not be likely to significantly contribute to public safety.

Section 222.55 of the final rule addresses the manner in which new SSMS and ASMs are demonstrated and approved for use. Paragraph (c) of this section, which reflects the requirements contained within 49 U.S.C. 20153(e), specifically provides that the Associate Administrator may order railroad carriers operating over a crossing or crossings to temporarily cease sounding the locomotive horn at the crossing(s) to demonstrate proposed new SSMS and ASMs that have been subject to prior testing and evaluation.

Section 20153(f) of title 49 explicitly gives discretion to the Secretary as to whether private highway-rail grade crossings, pedestrian crossings, and crossings utilized primarily by nonmotorized and other special vehicles should be subject this regulation. FRA has decided to refrain from exercising jurisdiction over crossings utilized

primarily by nonmotorized and other special vehicles in this final rule. FRA has, however, exercised its jurisdiction, in a limited manner, over private and pedestrian grade crossings. Under the final rule amendments issued today, the sounding of locomotive audible warning devices at private and pedestrian crossings will be governed by this rule, if State law requires the sounding of locomotive audible warning devices at these crossings. (§§ 222.25 and 222.27) However, routine locomotive horn sounding is prohibited at private and pedestrian grade crossings located within quiet zones, even if other locomotive audible warning devices must be sounded at these crossings per State and local law.

Section 222.7 of the rule contains a concise statement of the rule's impact with respect to 49 U.S.C. 20106 (national uniformity of regulation). This statement of the rule's effect on State and local law, which was required by 49 U.S.C. 20153(h), provides that the rule, when effective, will preempt State and local laws that govern locomotive horn use at public highway-rail grade crossings. Under the final rule amendments issued today, State and local laws that require the sounding of locomotive audible warning devices at public, private and pedestrian grade crossings will be preempted to the limited extent described in §§ 222.21(e), 222.25 and 222.27 of the rule. However, as stated in § 222.7(b), this rule does not preempt State and local laws governing the sounding of locomotive audible warning devices at Chicago Region highway-rail grade crossings where railroads were excused from sounding the locomotive horn by the Illinois Commerce Commission, and where railroads did not sound the horn, as of December 18, 2003.

Lastly, the final rule also complied with the statutory one-year delay requirement. Section 20153(j) of title 49 prohibits any regulations issued under its authority from becoming effective before the 365th day following the date of publication of the final rule. On December 18, 2003, FRA published an Interim Final Rule on the Use of Locomotive Horns at Highway-rail Grade Crossings, which had the same force and effect as a final rule. After reviewing approximately 1,400 comments on the interim final rule, FRA issued a final rule that granted additional relief to States and local communities and became effective on June 24, 2005. The final rule has therefore complied with 49 U.S.C. 20153(j) because more than the required 365 days elapsed between issuance of the interim final rule on December 18,

2003 and the effective date of the rule on June 24, 2005.

### 3. Emergency Order 15

Emergency Order 15, issued in 1991, requires the Florida East Coast Railway Company to sound locomotive horns at all public grade crossings. The Emergency Order preempted State and local laws that permitted nighttime bans on the use of locomotive horns. Amendments to the Emergency Order did, however, permit the establishment of quiet zones if supplementary safety measures were implemented at every crossing within a proposed quiet zone. The supplementary safety measures specified in the Emergency Order are similar, but are not identical, to the supplementary safety measures contained in FRA's Final Rule on the Use of Locomotive Horns at Highway-Rail Grade Crossings (70 FR 21844).

FRA has not yet rescinded Emergency Order 15. Therefore, FRA's Final Rule on the Use of Locomotive Horns at Highway-Rail Grade Crossings does not apply to public highway-rail grade crossings within the State of Florida that are currently subject to Emergency Order 15. On April 15, 2005, a public conference was held in Florida, at which FRA solicited comments on the appropriate excess risk estimate that should be applied to public highway-rail grade crossings that are currently subject to Emergency Order 15. While FRA intends to specifically address this issue in the near future, comments that have been received on this issue are still under consideration at this time.

### 4. Rule Changes

This brief overview of the major amendments that have been made to the Final Rule is provided for the reader's convenience. Because this section merely provides an overview, it should not be relied upon for a comprehensive discussion of all final rule amendments. Indeed, this full document should be read together with the previous documents issued in the proceeding. Inasmuch as the Final Rule, Interim Final Rule and Notice of Proposed Rulemaking contained extensive discussion of both the background of the issues involved in this rulemaking and the rationale behind decisions relating to those issues, FRA emphasizes that these amendments should be read in conjunction with the Final Rule, Interim Final Rule and Notice of Proposed Rulemaking. Unless the positions and rationale expressed in those documents have explicitly changed in the subsequent rulemaking documents, the reader should understand that those

positions and rationale remain those of FRA.

#### Summary of Changes to the Final Rule

- These amendments extend the compliance date of the time-based locomotive horn sounding requirements until December 15, 2006. (See § 222.21(b) for more information.)
- A "good faith" exception has been incorporated into the time-based locomotive horn sounding requirements for locomotive engineers who are unable to precisely estimate their time of arrival at upcoming grade crossings. (See § 222.21(h)(2) for more information.)
- An exception has been added to the 15-second minimum locomotive horn sounding requirement for locomotives and trains that re-initiate movement after having stopped in close proximity to a public highway-rail grade crossing. (See § 222.21(d) for more information.)
- These amendments expand the scope of the time-based locomotive horn sounding requirements to cover the sounding of any locomotive audible warning device (*i.e.*, locomotive bells) at public highway-rail grade crossings. (See § 222.21(e) for more information.)
- If State law requires the sounding of locomotive audible warning devices at private and/or pedestrian crossings, these amendments will require railroads to sound the locomotive audible warning device in a time-based manner. (See §§ 222.25 and 222.27 for more information.)
- An exception has been added to the locomotive horn sounding requirements for locomotives equipped with defective horns that are being moved for repair. (See § 222.21(b)(2) for more information.)
- The notification requirements for Pre-Rule Quiet Zones and Pre-Rule Partial Quiet Zones have been streamlined by expanding the scope of the Notice of Intent requirement and removing the Notice of Detailed Plan requirement. (See § 222.43 for more information.)
- These amendments extend the compliance date for the sound level testing of new locomotives until September 18, 2006. (See § 229.129(b) for more information.)
- These amendments provide clarification that locomotives used in rapid transit operations on the general railroad system are exempt from the locomotive horn sound level and testing requirements contained in 49 CFR 229.129. (See § 229.129 for more information.)

#### Section-by-Section Analysis

*Section 222.1 What is the purpose of this regulation?*

This section has not been revised.

*Section 222.3 What areas does this regulation cover?*

This section has not been revised.

*Section 222.5 What railroads does this regulation apply to?*

This section has not been revised.

*Section 222.7 What is this regulation's effect on State and local laws and ordinances?*

In its petition for reconsideration, the Association of American Railroads (AAR) noted that the Final Rule does not specifically address the preemptive effect of the Final Rule on State and local laws that effectively prohibit and/or restrict the sounding of locomotive horns for testing purposes. Asserting that the Final Rule should preempt such State and local laws, the AAR requested confirmation of FRA's position on this issue.

FRA does not intend to preempt State and local noise ordinances that may have the effect of restricting the time period during which the locomotive horn may be sounded at locations other than grade crossings. FRA was directed to issue regulations that govern the sounding of locomotive horns at public highway-rail grade crossings, provided the interests of communities with pre-existing restrictions on locomotive horn sounding were taken into consideration. Given the nature of this statutory directive, FRA is reluctant to disturb longstanding State and local noise ordinances that may restrict locomotive horn sounding at locations other than grade crossing locations without additional information on the adverse impact of these ordinances on the ability of locomotive manufacturers and railroads to conduct locomotive horn testing in accordance with § 229.129 of this part.

Paragraph (b) of this section has been revised to reflect FRA's intent to refrain from preempting any State law, rule, regulation, or order governing the sounding of locomotive audible warning devices, including the locomotive horn, at any highway-rail grade crossing described in § 222.3(c) of this part. Without this revision, FRA might have inadvertently preempted State law by requiring the sounding of the locomotive bell, at the highway-rail grade crossings described in § 222.3(c) of this part, in accordance with this part.

Paragraphs (c), (d), and (e) of this section have not been revised.

#### Section 222.9 Definitions

FRA is making a minor revision to the definition of "channelization device" in the Final Rule. FRA revised this definition in the Final Rule to prohibit the use of surface-mounted tubular markers and vertical panels within quiet zones as SSMS, where the surface-mounted tubular markers or vertical panels are not used in conjunction with a raised longitudinal channelizer. FRA did not, however, intend to prohibit the use of surface-mounted tubular markers or vertical panels, in conjunction with a raised longitudinal channelizer. FRA recognizes that the use of surface-mounted tubular markers and vertical panels, in conjunction with a raised longitudinal channelizer, can effectively reduce quiet zone risk.

FRA is also correcting an inadvertent error in the preamble discussion of the definition of "channelization device" in the Final Rule. In that discussion, FRA stated that "it would be highly advisable to use raised longitudinal channelizers that are at least four inches high." (See 70 FR 21854.) However, in its petition for reconsideration, Qwick Kurb, Inc. ("Qwick Kurb") noted that FRA partially relied upon the results of state-sponsored tests on the efficacy of Qwick Kurb installations, which consist of three and one-half inch high longitudinal channelizers with vertical elliptical markers attached, when determining that Qwick Kurb installations had an effectiveness rating of at least .75. Qwick Kurb also noted that Qwick Kurb installations were successfully tested by the Federal Highway Administration (FHWA) under FHWA's NCHRP 350 criteria as a crashworthy traffic control device.

FRA notes that the regulatory text itself does not require use of raised longitudinal channelizers that are at least four inches high. Indeed, FRA never intended to discourage the use of raised longitudinal channelizers that are at least three and one-half inches high. Even though Qwick Kurb subsequently withdrew its objection to the preamble discussion of the definition of "channelization device" in the Final Rule, FRA recognizes that there may be some communities that have already purchased and installed raised longitudinal channelizers that are three and one-half inches in height. Therefore, FRA is clarifying that raised longitudinal channelizers of at least three and one-half inches in height, when affixed with vertical panels or tubular delineators, constitute acceptable channelization devices for

purposes of this part. Lastly, FRA is removing all references to specific MUTCD sections from the definition of "channelization device", in recognition of the somewhat transitory nature of MUTCD section citations.

A definition of "locomotive audible warning device" has been added to the Final Rule, in recognition of the expanded scope of the Final Rule with respect to the sounding of locomotive audible warning devices, as opposed to just locomotive horns, at public, private and pedestrian grade crossings.

The definition of "locomotive horn" has been revised by adding a specific reference to locomotive horns used in rapid transit operations.

The definition of "MUTCD" has been revised to correct an inadvertent typographical error.

The definition of "New Partial Quiet Zone" has been revised to correct an inadvertent typographical error.

The definition of "pedestrian grade crossing" has been revised in order to clarify that the requirements for pedestrian crossings contained within this part only apply to pedestrian grade crossings. Nonetheless, despite the limited scope of these requirements, the terms "pedestrian crossing" and "pedestrian grade crossing" have been used interchangeably for purposes of this part.

The definition of "private highway-rail grade crossing" has been revised to correct an inadvertent typographical error.

Even though the definition of "Pre-Rule Quiet Zone" has not been revised, FRA is providing further clarification on the definition of this term. While reviewing Notices of Quiet Zone Continuation that have been submitted by public authorities seeking to continue locomotive horn restrictions in Pre-Rule Quiet Zones, it has come to FRA's attention that disagreements have arisen between public authorities and railroads on whether local ordinances that seem to prohibit locomotive horn sounding at certain highway-rail grade crossings have, in fact, been "enforced or observed". In these situations, the public authority and railroad must determine whether locomotive horns were routinely sounded at the grade crossings in question on October 9, 1996 and December 18, 2003, despite locomotive horn sounding restrictions that were ostensibly imposed by State or local law. Railroad timetables that reflect locomotive horn sounding practices on October 9, 1996 and December 18, 2003 will provide dispositive proof on this issue.

Even though the definition of "quiet zone" has not been revised, FRA is

providing further clarification on the definition of this term. A quiet zone may only contain consecutive public highway-rail grade crossings located on a segment of a rail line. Therefore, a public authority may find it necessary to establish more than one quiet zone within the boundaries of a local community. For example, if there are two railroad tracks running through a local community that are not adjacent to each other and which do not share grade crossing warning system devices, a community that wishes to silence the locomotive horn at grade crossings along both tracks must create separate quiet zones for each railroad track or right-of-way. Also, if there is both a main line track and an industrial spur track within town limits, a community that wishes to silence the locomotive horn at grade crossings located on both tracks must create separate quiet zones for the main line track and the industrial spur track, unless the main line track and the industrial spur track share grade crossing warning system devices.

*Section 222.11 What are the penalties for failure to comply with this regulation?*

This section has not been revised.

*Section 222.13 Who is responsible for compliance?*

This section has not been revised.

*Section 222.15 How does one obtain a waiver of a provision of this regulation?*

This section has not been revised.

*Section 222.17 How can a State agency become a recognized State agency?*

This section has not been revised.

*Section 222.21 When must a locomotive horn be used?*

This section has been revised in order to address the movement of locomotives with inoperative horns, extend the compliance date of paragraph (b) of this section by 120 days, provide a good-faith exception for locomotive engineers who sound the locomotive horn for more than 20 seconds when approaching public crossings, address the sounding of locomotive audible warning devices at public highway-rail grade crossings when required by State and local law and provide a limited exception to the minimum audible warning requirement for trains and locomotives that have stopped in close proximity to a public highway-rail grade crossing.

Paragraph (a) of this section requires locomotive engineers to initiate

locomotive horn sounding, in accordance with paragraph (b) of this section, and to continue sounding the locomotive horn until the lead locomotive blocks access to the crossing from all roadway approaches. FRA received a petition for reconsideration on this issue from James Adams, a resident of Placentia, California, who suggested that FRA require the locomotive engineer to sound only those locomotive horns which point in the direction of locomotive travel, in order to reduce unnecessary horn noise impacts from the sounding of locomotive horns that are pointed against the direction of travel. Most locomotive horns, particularly in freight service, are designed to provide warning in both directions of travel; and the engineer has no ability to select warning only in the forward direction. FRA will, however, continue research into more selective and effective means of providing audible warnings and may make further proposals in subsequent proceedings.

Minor typographical revisions have been made in paragraph (a) of this section. Paragraph (b) of this section has been revised to provide an exception to the locomotive horn sounding requirements for locomotive engineers who discover that the locomotive horn on the lead locomotive has failed enroute. Should this situation occur, the locomotive must be moved for repair in accordance with § 229.9 of this chapter. In addition, any movement of the locomotive with the inoperative horn over highway-rail grade crossings must be made in accordance with all applicable railroad operating rules.

Paragraph (b) of this section has also been revised in response to petitions for reconsideration that were submitted by the AAR and the BNSF Railway Company (BNSF), as well as letters that were submitted by the Brotherhood of Locomotive Engineers and Trainmen (BLET) and the United Transportation Union (UTU), which were submitted in support of certain provisions contained within the AAR's petition for reconsideration.

In the AAR's petition for reconsideration, the AAR asserted that the current compliance date for the locomotive horn sounding requirements set forth in this paragraph would require a rapid transition from State law. The AAR asserted that such a transition would not be in the public interest, as locomotive engineers would be required to comply with time-based audible warning requirements without the benefit of training and/or properly placed whistle posts. Therefore, the AAR requested that FRA postpone the

compliance date of these requirements for one year.

FRA notes that railroads have been aware of the time-based audible warning requirements of this section for some time, as FRA's Interim Final Rule on the Use of Locomotive Horns at Highway-Rail Grade Crossings, which was published on December 18, 2003, contained a 15–20 second audible warning requirement. While FRA is aware of the fact that the AAR objected to the 15–20 second audible warning requirement in its comments on the Interim Final Rule, the 15–20 second audible warning requirement contained within the Final Rule should not have been a complete surprise to the railroad industry. Nonetheless, in the interest of railroad safety, FRA has added paragraph (b)(1) to this section, which delays the compliance date of the time-based audible warning requirement by 120 days from the date of publication of this Notice in order to give railroads additional time within which to adjust whistle posts and/or issue appropriate instructions to train crews. In the interim, railroads must either comply with the locomotive horn sounding requirements that were in effect immediately prior to June 24, 2005 (i.e., State law or, in the absence of State law, railroad operating rules) or this section.

The AAR, BNSF, BLET, and UTU also indicated significant concerns that situations may arise in which engineers are unable to precisely estimate the point at which sounding of the horn should be initiated in order to meet the 15–20 second criterion of the final rule. The AAR, BLET and UTU suggest that a good faith exception be employed where circumstances make it difficult to estimate the time of arrival, citing concerns about liability. This could include cases where whistle boards are placed irregularly (confounding an engineer's attempt to begin a "countdown" at a fixed point), where weather conditions make identification of landmarks difficult, where the train is accelerating or braking on approach to the crossing, and under other circumstances.

In sum, AAR's petition appeared to focus on short and long audible warnings, while the BLET and the UTU expressed concern with respect to exceeding the 20-second audible warning requirement. On the other hand, BNSF expressed concern with the time-based nature of the locomotive horn sounding requirement and requested that the locomotive horn continue to be sounded from a fixed point of reference, such as a whistle post.

FRA appreciates these concerns. FRA is also cognizant that previously existing State law requirements, and requirements of railroad operating rules have required distance-based use of the horn for many years, with attendant liability for non-compliance where collisions occur. However, FRA believes that adjustment to a time-based approach can, and should be readily accomplished, since locomotive engineers are required to be familiar with their territory and are accustomed to meeting these kinds of challenges. The time-based approach will allow the railroads to provide effective warning without incurring the animus of local communities associated with sounding the horn for a full quarter-mile when trains are operated a low speed. The time-based approach incorporates the strategy used by the locomotive engineer who "took mercy" on the community by exercising discretion, when operating a slow-moving train, to delay the onset of horn sounding at grade crossings.

FRA believes that it is important that sufficient warning be provided to the motorist who needs time to recognize the audible signal, understand its message, initiate a reaction, and take appropriate action when approaching the crossing. Other standards for other active warning at highway-rail crossings call for at least 20 seconds of advance warning (*see* 49 CFR 234.225), and it is typical for basic signal arrangements to provide 30 seconds' warning or more. At crossings equipped with active warning devices, the locomotive horn generally provides a last-minute, additional warning to the motorist of the impending arrival of a train. Thus, it appears quite necessary and appropriate to retain the minimum 15-second warning requirement, given the need for uniformity and the wide range of conditions on the roadway approach to highway-rail crossings (including road speeds as high as 55 miles per hour).

Nevertheless, FRA agrees that employees should err on the side of safety when there is any uncertainty. In a case where situational awareness is partially compromised, an employee should not hesitate to begin a horn sounding sequence because of fear that excessive warning might be provided. Accordingly, former paragraph (b)(1), which has been renumbered as paragraph (b)(2) of this section, has been amended to state explicitly that exceeding the maximum warning time up to a limit of 25 seconds will not constitute a violation of this section if the action is taken in good faith. This is intended to affirm the action of an employee who errs on the side of safety

in a particular instance, and not to condone the actions of an engineer who willfully disregards the 20-second limitation for normal operations. FRA will also utilize enforcement discretion for cases in excess of 25 seconds where unusual circumstances provide a justification.

Former paragraph (b)(2), which has been renumbered as paragraph (b)(3) of this section, has also been revised in order to correct a typographical error. Trains, locomotive consists (two or more locomotives traveling together without any train cars attached), and individual locomotives traveling at speeds in excess of 60 mph are prohibited from providing an advance warning more than one-quarter mile in advance of public grade crossings, even if this means that high-speed trains, locomotive consists, and individual locomotives cannot provide an advance warning of at least 15 seconds in duration.

Paragraph (c) of this section has not been revised.

Paragraph (d) has been added to this section to address locomotive horn sounding when a train, locomotive consist, or individual locomotive has stopped in close proximity to a public highway-rail grade crossing. Trains and locomotives may stop in close proximity to public grade crossings during switching and/or commuter rail operations, especially when passenger stations are located in close proximity to public highway-rail grade crossings. In light of the low train speed associated with initiating train or locomotive movement from a complete stop, as well as FRA's intent to minimize local noise impacts where feasible, paragraph (d) will allow the locomotive engineer to sound the locomotive horn for less than 15 seconds before entering a public highway-rail grade crossing, when initiating movement from a complete stop in the close proximity of a public highway-rail grade crossing. Even though passenger stations located adjacent to public highway-rail grade crossings were the impetus for this revision, FRA notes that this limited exception may apply in other situations where trains have stopped in close proximity to public highway-rail grade crossings.

FRA is refraining from providing an exact distance that would constitute "close proximity" as the length of time that it will take for a train to reach the crossing will vary greatly depending on the type and weight of the train. If a train is stopped at a location such that it will take less than fifteen seconds for it to occupy the crossing, it is deemed to be in close proximity.

Paragraph (e) has also been added to this section, in response to a petition for reconsideration submitted by the AAR, in which the AAR requested that 49 CFR Part 222 be revised to preempt State laws that govern the sounding of all locomotive audible warning devices at public highway-rail grade crossings. Without such preemption, the AAR asserted that railroads would be required to initiate locomotive bell sounding at a location specified by State law, which may be inconsistent with the time-based locomotive horn sounding requirement set forth in this section.

FRA is not exercising complete preemption of State laws on the sounding of locomotive audible warning devices at public highway-rail grade crossings. Complete preemption of State laws on this issue could inadvertently remove the valuable warning currently provided by locomotive audible warning devices other than the locomotive horn because the Final Rule does not require the sounding of locomotive audible warning devices, other than the locomotive horn, at public highway-rail grade crossings.

FRA has, however, added this section to ensure that a consistent locomotive audible warning will be provided at public highway-rail grade crossings. Therefore, if State law requires the sounding of a locomotive audible warning device other than the locomotive horn at public highway-rail grade crossings, that locomotive audible warning device must be sounded in accordance with paragraphs (b) and (d) of this section. By exercising preemption in this limited manner, FRA hopes to alleviate any potential confusion on the part of the locomotive engineer who might otherwise have been forced to comply with distance-based locomotive bell sounding requirements, as well as time-based locomotive horn sounding requirements, at the same public highway-rail grade crossing.

*Section 222.23 How does this regulation affect sounding of a horn during an emergency or other situations?*

Paragraph (a) of this section has not been revised.

Paragraph (b) of this section has been revised to correct an inadvertent omission from the list of situations in which locomotive horn use at quiet zone crossings would be permissible. In the Final Rule, FRA stated that locomotive horn use would be permitted at a quiet zone crossing equipped with a wayside horn, in the event of a wayside horn malfunction. Similarly, the Final Rule states that

locomotive horn use would be permitted at a quiet zone crossing when active grade crossing warning devices installed at the grade crossing are malfunctioning or out of service. As indicated by this list of potential scenarios, FRA has always intended to permit railroads to sound the locomotive horn at a quiet zone crossing whenever engineering improvements installed at the grade crossing become non-compliant. Therefore, FRA has added paragraph (b)(4) to this section to clarify that railroads are not required to comply with the general prohibition against routine locomotive horn sounding at a quiet zone crossing, when an SSM, modified SSM or engineering SSM installed at the quiet zone crossing fails to comply with the requirements set forth in appendix A of this part or the conditions contained within the Associate Administrator's decision to approve the quiet zone in accordance with section 222.39(b) of this part. The railroad should, however, attempt to contact the person responsible for monitoring quiet zone compliance with this part (as designated in the Notice of Quiet Zone Establishment), in order to inform the public authority of the non-compliant condition of the quiet zone crossing.

Paragraph (c) of this section has not been revised.

*Section 222.25 How does this rule affect private highway-rail grade crossings?*

This section has been revised in response to the AAR petition for reconsideration. In its petition for reconsideration, the AAR expressed support for FRA's decision to refrain from requiring locomotive horn sounding at every private highway-rail grade crossing. However, noting that some States require the sounding of a locomotive horn or the ringing of the locomotive bell at private highway-rail grade crossings, the AAR requested that FRA amend 49 CFR Part 222 by adding an explicit statement of FRA's intent to preempt State law, to the extent that State law requires the sounding of a locomotive audible warning device for a period of time or in a pattern different from the locomotive horn sounding requirements set forth in § 222.21 of this part. After considering this request, as well as the potential for confusion that may result from requiring the locomotive engineer to provide a different audible warning at public highway-rail grade crossings than at private highway-rail grade crossings, FRA revised this section. Thus, if State law requires the sounding of locomotive audible warning devices at private

highway-rail grade crossings, the locomotive audible warning device must be sounded in accordance with the locomotive horn sounding requirements set forth in § 222.21 of this part as of December 15, 2006. However, in recognition of the fact that some locomotive audible warning devices (such as the locomotive bell) cannot be sounded in accordance with the locomotive horn sounding pattern required by § 222.21(a) of this part (i.e., two long blasts, one short blast, and one long blast), locomotive audible warning devices other than the locomotive horn need only be sounded in accordance with the time-based locomotive horn sounding requirements set forth in §§ 222.21(b) and (d) of this part.

Paragraph (a) of this section has also been revised, in response to the AAR's petition for reconsideration. In its petition for reconsideration, the AAR asserted that the permissive language in this provision could mislead public authorities into thinking that they are not required to address private highway-rail grade crossings when establishing their quiet zones. After considering this assertion, FRA noted that public authorities located in States that do not require locomotive horn sounding at private highway-rail grade crossings might erroneously assume that it will not be necessary to include and/or improve private highway-rail grade crossings located within the boundaries of their quiet zone. Therefore, FRA revised this paragraph in order to clarify that all private highway-rail grade crossings located within the boundaries of a quiet zone must be treated in accordance with this part.

Paragraph (b)(1) of this section has been revised to clarify that all private highway-rail grade crossings that are located in New Quiet Zones or New Partial Quiet Zones must be evaluated by a diagnostic team and then equipped or treated in accordance with the diagnostic team recommendations, if the private highway-rail grade crossings allow access to the public or provide access to active industrial or commercial sites. Paragraph (b)(2) of this section has not been revised.

Paragraph (c) of this section has also been revised to clarify that crossbucks and "STOP" signs must be installed at each approach to private highway-rail grade crossings that are located within quiet zones.

*Section 222.27 How does this rule affect pedestrian grade crossings?*

This section has been revised in response to the AAR petition for reconsideration. In its petition for reconsideration, the AAR expressed



support for FRA's decision to refrain from requiring locomotive horn sounding at pedestrian grade crossings. However, after asserting that some States may require the sounding of a locomotive audible warning device at pedestrian grade crossings, the AAR requested that FRA amend 49 CFR Part 222 by adding an explicit statement of FRA's intent to preempt State law, to the extent that State law requires the sounding of a locomotive audible warning device for a period of time or in a pattern different from the locomotive horn sounding requirements set forth in § 222.21 of this part. After considering this request, as well as the potential for confusion that may result from requiring the locomotive engineer to provide a different audible warning at public highway-rail grade crossings than at pedestrian grade crossings, FRA revised this section. Therefore, if State law requires the sounding of a locomotive audible warning device at pedestrian grade crossings, the locomotive audible warning device must be sounded in accordance with the locomotive horn sounding requirements set forth in § 222.21 of this part as of December 15, 2006. However, in recognition of the fact that some locomotive audible warning devices (such as the locomotive bell) cannot be sounded in accordance with the locomotive horn sounding pattern required by § 222.21(a) of this part (*i.e.*, two long blasts, one short blast, and one long blast), locomotive audible warning devices other than the locomotive horn need only be sounded in accordance with the time-based locomotive horn sounding requirements set forth in §§ 222.21(b) and (d) of this part.

Paragraph (a) of this section has also been revised, in response to the AAR's petition for reconsideration. In its petition for reconsideration, the AAR expressed concern that the permissive language contained in paragraph (a) of this section could mislead public authorities into thinking that they are not required to address pedestrian crossings when establishing their quiet zones. After considering this assertion, FRA noted that public authorities located in States that do not require locomotive horn sounding at pedestrian grade crossings might erroneously assume that it will not be necessary to include and/or improve pedestrian grade crossings located within the boundaries of their quiet zone. Therefore, FRA revised this paragraph in order to clarify that all pedestrian grade crossings located within the boundaries of a quiet zone must be treated in accordance with this part.

Paragraph (b) of this section has been revised to clarify that all pedestrian grade crossings that are located in New Quiet Zones or New Partial Quiet Zones must be evaluated by a diagnostic team and then equipped or treated in accordance with the diagnostic team recommendations, if the pedestrian grade crossings allow access to the public or provide access to active industrial or commercial sites.

A minor typographical edit has been made to paragraph (c) of this section.

Paragraph (d) of this section has also been revised in response to the AAR petition for reconsideration. In its petition for reconsideration, the AAR asserted that paragraph (d) of this section requires the installation of signs at pedestrian crossings that could potentially be misleading. In light of the fact that partial quiet zones may be established in States that do not require locomotive horn sounding at pedestrian grade crossings, the AAR expressed concern that pedestrians encountering time-specific warning signs when the partial quiet zone is not in effect might assume that the locomotive horn will be sounded by approaching trains. After considering this issue, FRA agreed that the Final Rule's warning sign requirement could be misleading to pedestrians. Therefore, in order to minimize confusion, paragraphs (d)(2) and (d)(4) of this section have been revised to give public authorities the flexibility to install warning signs which advise pedestrians that train horns will not be sounded, but do not list the hours within which the partial quiet zone will be in effect. Thus, if State law does not require locomotive horn sounding at pedestrian grade crossings, signs that indicate that horns are not sounded would be appropriate. However, if State law requires locomotive horn sounding during non-quiet zone hours, then signs indicating that horns are not sounded between stated hours of the partial quiet zone would be appropriate. Paragraph (d) of this section has also been revised to clarify that advance warning signs must be installed on each approach to pedestrian grade crossings located within quiet zones.

*Section 222.33 Can locomotive horns be silenced at an individual public highway-rail grade crossing which is not within a quiet zone?*

This section has not been revised.

*Section 222.35 What are the minimum requirements for quiet zones?*

Minor typographical revisions have been made throughout this section.

Paragraph (a)(1)(iii) has been added to this section to address the configuration

of multiple New Quiet Zones and New Partial Quiet Zones along the same rail line within a single political jurisdiction. Even though FRA has refrained from establishing a minimum distance between neighboring quiet zones, there must be at least one public highway-rail grade crossing between New Quiet Zones and New Partial Quiet Zones located on the same rail line within a single political jurisdiction unless a New Quiet Zone or New Partial Quiet Zone is being added onto an existing quiet zone. While it is perfectly acceptable for a community to create two quiet zones (each at least one-half mile long) with a segment between them at which horns will sound, multiple New Quiet Zones and New Partial Quiet Zones cannot be established on the same rail line within the boundaries of a single political jurisdiction unless they are separated by at least one public highway-rail grade crossing.

By establishing a single New Quiet Zone or New Partial Quiet Zone to incorporate all public highway-rail grade crossings at which routine locomotive horn sounding will be restricted or prohibited, the administrative burden associated with quiet zone establishment will be lessened. In addition, FRA perceives no safety-related rationale for dividing a multiple-crossing New Quiet Zone or New Partial Quiet Zone along a single rail line into fragmented quiet zones. Therefore, unless a New Quiet Zone or New Partial Quiet Zone is being added onto an existing quiet zone, New Quiet Zones and New Partial Quiet Zones created along the same rail line within a single political jurisdiction must be separated by at least one public highway-rail grade crossing.

Paragraph (a)(2)(ii) of this section has been revised to correct an inadvertent restriction on the number of Pre-Rule Quiet Zones that can be combined. Under the revised language in paragraph (a)(2)(ii) of this section, public authorities can combine more than two adjacent Pre-Rule Quiet Zones or Pre-Rule Partial Quiet Zones.

Paragraph (a)(3) of this section, which states that grade crossings on a segment of rail line that travels through more than one political jurisdiction may be included within a single quiet zone, has been revised. This paragraph has been revised in order to clarify that pedestrian crossings, located on the same segment of rail line as public highway-rail grade crossings, may also be included in multi-jurisdictional quiet zones.

Paragraph (b) of this section has not been revised.

Paragraph (c) of this section has been revised in response to the AAR's petition for reconsideration. In its petition for reconsideration, the AAR asserted that paragraph (c) of this section requires the installation of signs at private highway-rail grade crossings that could potentially be misleading. In light of the fact that partial quiet zones may be established in States that do not require locomotive horn sounding at private highway-rail grade crossings, the AAR expressed concern that motorists encountering time-specific warning signs when the partial quiet zone is not in effect might assume that the locomotive horn will be sounded by approaching trains. After considering this issue, FRA agreed that the Final Rule's warning sign requirement could be misleading to motorists. Therefore, in order to minimize confusion, paragraphs (c)(2) and (c)(4) of this section have been revised to give public authorities the flexibility to install warning signs which advise motorists that train horns will not be sounded, but do not list the hours within which the partial quiet zone will be in effect. Thus, if State law does not require locomotive horn sounding at private highway-rail grade crossings, signs that indicate that horns are not sounded would be appropriate. However, if State law requires locomotive horn sounding during non-quiet zone hours, then signs indicating that horns are not sounded between stated hours of the partial quiet zone would be appropriate. These warning signs must be installed on each approach to public and private highway-rail grade crossings.

Paragraph (c)(5) has been added to this section to clarify that FRA does not intend to require public authorities to install advance warning signs at highway-rail grade crossings that are equipped with wayside horns that conform to the requirements set forth in § 222.59 and Appendix E of this part, but are located within a quiet zone.

Paragraph (d) of this section has not been revised. Minor typographical edits have, however, been made in paragraphs (e), (f), and (g) of this section.

*Section 222.37 Who may establish a quiet zone?*

Paragraph (a) of this section addresses the situation that may occur if a proposed quiet zone includes public highway-rail grade crossings that are under the authority and control of more than one public authority. This scenario could occur if the proposed quiet zone contains county roads and State highways that intersect the railroad tracks at adjacent crossings. This

scenario could also occur if the railroad tracks or the roadway run along the border between two neighboring communities.

When faced with this scenario, paragraph (a) of this section states that both public authorities must agree to establishment of the quiet zone and must jointly, or by delegation, take such actions as are required to comply with this part. Therefore, if two neighboring communities are interested in quiet zone creation, the communities might want to consider working together to create a multi-jurisdictional quiet zone. If the neighboring communities are not, however, interested in creating a single, multi-jurisdictional quiet zone, any shared highway-rail grade crossing (*i.e.*, a highway-rail grade crossing that contains a roadway that runs along the border of the neighboring communities) can only be attributed to one quiet zone. Otherwise, the risk reduction credit associated with any safety improvements at the shared highway-rail grade crossing would be "double-counted", if claimed by adjacent quiet zones.

A minor typographical revision has been made to paragraph (a) of this section. However, paragraphs (b) and (c) of this section have not been revised.

*Section 222.38 Can a quiet zone be created in the Chicago Region?*

This section has not been revised.

*Section 222.39 How is a quiet zone established?*

Paragraph (a) of this section has not been revised.

Minor typographical revisions have been made to paragraph (b) of this section. In addition, paragraph (b) of this section has been revised in response to the AAR's petition for reconsideration. In its petition, the AAR asserted that it may be unclear, in certain circumstances, as to what constitutes a pedestrian crossing. Therefore, the AAR recommended that the Final Rule be revised to require public authorities to indicate, in their quiet zone applications and notification packages, where pedestrian crossings are located. The AAR reasoned that this revision would eliminate any confusion as to where crossing signs must be located, in accordance with § 222.27.

Even though public authorities are required to identify pedestrian crossings in their quiet zone notification packages, in accordance with the requirements set forth in § 222.43, FRA notes that it had inadvertently failed to require public authorities to identify or provide information on pedestrian grade crossings in their quiet zone

applications. Therefore, paragraph (b) of this section has been revised to require public authorities to submit Grade Crossing Inventory Forms for each pedestrian grade crossing located within a proposed quiet zone, as well as information concerning present safety measures and proposed improvements at these crossings. FRA also inadvertently failed to require public authorities to provide information on current and proposed safety improvements at private highway-rail grade crossings. Therefore, paragraph (b) of this section has been revised to require public authorities to submit information on present safety measures and proposed improvements at private highway-rail grade crossings located within the proposed quiet zone. With respect to public highway-rail grade crossings, paragraph (b) of this section has been revised to require public authorities to provide detailed information about all safety improvements, as opposed to just SSMs and ASMs, that have been proposed for implementation. In making these revisions, FRA hopes to obtain better information as to the overall level of safety within the proposed quiet zone.

Paragraph (b)(iv) of this section has been revised by inserting an explicit reference to the Notice of Intent requirement contained within § 222.43 of this part. (An inadvertent omission of the State agency responsible for highway and road safety has also been corrected.) The public authority is required to provide a Notice of Intent, in accordance with § 222.43 of this part, at least 60 days prior to the submission of its quiet zone application. All objections received from any railroad operating within the proposed quiet zone, the State agency responsible for grade crossing safety, and the State agency responsible for highway and road safety in response to the Notice of Intent must then be addressed by the public authority in the quiet zone application, in accordance with paragraph (b)(iv) of this section.

Paragraph (h)(2) of this section addresses the inclusion of newly established public and private highway-rail grade crossings in quiet zones. Any proposed quiet zone that contains a newly established public highway-rail grade crossing must be established through public authority application, unless one or more SSMs will be implemented at every public highway-rail grade crossing within the proposed quiet zone in accordance with paragraph (a)(1) of this section. Quiet zones with newly established public highway-rail grade crossings cannot be established through comparison to

either the Nationwide Significant Risk Threshold or the Risk Index With Horns because the Quiet Zone Risk Index cannot be computed without historical vehicle and rail traffic counts for each public highway-rail grade crossing within the quiet zone.

A minor typographical revision has been made in paragraph (b)(3) of this section. However, paragraph (b)(4) of this section has not been revised. Paragraph (c) of this section has also not been revised.

*Section 222.41 How Does This Rule Affect Pre-Rule Quiet Zones and Pre-Rule Partial Quiet Zones?*

Minor typographical revisions have been made in paragraphs (a) and (b) of this section.

Paragraph (c) of this section has been revised in order to clarify the process that must be followed in order to continue existing locomotive horn sounding restrictions within a Pre-Rule Quiet Zone or Pre-Rule Partial Quiet Zone that will not be established by automatic approval. Paragraph (c)(1) has been added to this section to clarify that the public authority must provide a Notice of Quiet Zone Continuation, in accordance with § 222.43 of this part, in order to retain existing locomotive horn sounding restrictions until June 24, 2008. Paragraph (c)(2) of this section explains the process that must be followed, in order to continue existing locomotive horn sounding restrictions until June 24, 2010. Paragraph (c)(3) of this section explains the process that can be followed, in order to continue existing locomotive horn sounding restrictions until June 24, 2013, by providing a comprehensive State-wide implementation plan and funding commitment for the establishment of Pre-Rule Quiet Zones and Pre-Rule Partial Quiet Zones.

Paragraph (c)(2) of this section has been revised to clarify the process for continuing existing locomotive horn sounding restrictions beyond June 24, 2008 without interruption. As stated in paragraph (c)(2)(i)(A) of this section, the public authority must mail a Notice of Intent, in accordance with § 222.43 of this part, by February 24, 2008. The mailing of the Notice of Intent, which will provide a brief explanation of the public authority's plans for implementing improvements within the quiet zone, will trigger a 60-day comment period, within which affected railroads, the State agency responsible for grade crossing safety, and the State agency responsible for highway and road safety can provide comments on the proposed improvements. This Notice of Intent replaces the Notice of

Detailed Plan, which was previously required by the Final Rule.

After the Notice of Intent has been mailed and the subsequent 60-day comment period has run, paragraph (c)(2)(i)(B) requires the public authority to file a detailed plan with the FRA Associate Administrator by June 24, 2008. The detailed plan must include a detailed explanation of each safety improvement that will be implemented at public, private, and pedestrian crossings within the Pre-Rule Quiet Zone or Pre-Rule Partial Quiet Zone, in order to comply with §§ 222.25, 222.27, 222.35 and 222.39 of this part. (The public authority may also choose to explain additional safety improvements that will be implemented within the quiet zone, but are not being relied upon to achieve compliance with this part.) The detailed plan must also include a timetable for the implementation of these safety improvements.

If the public authority plans to implement ASMs within the quiet zone, paragraph (c)(2)(ii) of this section (formerly paragraph (c)(4) of the Final Rule) advises the public authority to apply for FRA approval of the quiet zone by December 24, 2007, in order to ensure that FRA will have ample time within which to review the quiet zone application.

Providing a Notice of Intent and filing a detailed plan in accordance with paragraph (c)(2) of this section will, however, only postpone routine locomotive horn sounding at public highway-rail grade crossings until June 24, 2010, unless the public authority establishes a Pre-Rule Quiet Zone or Pre-Rule Partial Quiet Zone in accordance with paragraph (c)(4) of this section. Paragraph (c)(2)(ii) in the Final Rule, which specifically addressed the establishment of Pre-Rule Quiet Zones and Pre-Rule Partial Quiet Zones during the three-year period following June 24, 2005, has been removed. However, Pre-Rule Quiet Zones and Pre-Rule Partial Quiet Zones that have Quiet Zone Risk Indices that fall to a level at or below the Nationwide Significant Risk Threshold during this three-year period are now governed by paragraph (c)(4) of this section, which sets forth the procedure for establishing Pre-Rule Quiet Zones and Pre-Rule Partial Quiet Zones that will not be established by automatic approval.

Paragraph (c)(3) of this section explains the process that must be followed by an appropriate State agency, in order to continue existing locomotive horn sounding restrictions within Pre-Rule Quiet Zones and Pre-Rule Partial Quiet Zones for an additional three years (until June 24,

2013) through the filing of a comprehensive State-wide implementation plan and funding commitment. As stated in this paragraph, existing locomotive horn sounding restrictions may remain in place until June 24, 2013, if: a) a comprehensive State-wide implementation plan and funding commitment is filed by the appropriate State agency with the Associate Administrator by June 24, 2008; and b) safety improvements are initiated within at least one Pre-Rule Quiet Zone or Pre-Rule Partial Quiet Zone in the State by June 24, 2009. The comprehensive State-wide implementation plan must include an explanation of the process that will be used to assist Pre-Rule Quiet Zones and Pre-Rule Partial Quiet Zones to come into compliance with §§ 222.25, 222.27, 222.35 and 222.39 of this part, as well as a timetable for the implementation of necessary safety improvements. As of June 24, 2013, locomotive horn sounding will resume unless each public authority establishes a Pre-Rule Quiet Zone or Pre-Rule Partial Quiet Zones, in accordance with paragraph (c)(4) of this section.

Paragraph (c)(4) of this section explains the process that must be followed in order to establish a Pre-Rule Quiet Zone or Pre-Rule Partial Quiet Zone. As stated in paragraph (c)(4) of this section, a public authority can establish a Pre-Rule Quiet Zone or Pre-Rule Partial Quiet Zone if: (a) The Pre-Rule Quiet Zone or Pre-Rule Partial Quiet Zone complies with the Pre-Rule Quiet Zone requirements set forth in §§ 222.25, 222.27, and 222.35 of this part; (b) the Pre-Rule Quiet Zone or Pre-Rule Partial Quiet Zone complies with the quiet zone standards set forth in § 222.39 of this part; and (c) the public authority complies with all applicable notification and filing requirements contained within this paragraph (c) and § 222.43 of this part.

The notification and filing requirements contained within this paragraph (c) and § 222.43 of this part may include: a) mailing the Notice of Intent, in accordance with § 222.43 of this part, if new SSMs or ASMs will be implemented within the Pre-Rule Quiet Zone or Pre-Rule Partial Quiet Zone; b) filing a detailed plan with the Associate Administrator by June 24, 2008, in accordance with paragraph (c)(2) of this section, if the Pre-Rule Quiet Zone or Pre-Rule Partial Quiet Zone will be established after that date; and c) providing a Notice of Quiet Zone Establishment, in accordance with § 222.43 of this part.

Paragraph (d) of this section has been revised in order to clarify the process that must be followed in order to convert a Pre-Rule Partial Quiet Zone into a 24-hour New Quiet Zone. While the final rule simply stated that the public authority must provide "notification of the establishment of a New 24-hour Quiet Zone", paragraph (d) of this section has been revised to clarify that the public authority is actually required to comply with all applicable notification and filing requirements contained within paragraph (c) of this section and § 222.43 of this part. These notification and filing requirements may include: (a) Mailing the Notice of Intent, in accordance with § 222.43 of this part; b) filing a detailed plan with the Associate Administrator by June 24, 2008, in accordance with paragraph (c)(2) of this section, if the Pre-Rule Partial Quiet Zone will be converted after that date; and c) providing a Notice of Quiet Zone Establishment, in accordance with § 222.43 of this part.

*Section 222.42 How does this rule affect Intermediate Quiet Zones and Intermediate Partial Quiet Zones?*

This section has been revised in order to clarify the process that must be followed in order to continue existing locomotive horn sounding restrictions in Intermediate Quiet Zones and Intermediate Partial Quiet Zones until June 24, 2006. This section has also been revised in order to clarify the process that must be followed in order to convert an Intermediate Quiet Zone or Intermediate Partial Quiet Zone into a New Quiet Zone or New Partial Quiet Zone on or before June 24, 2006, in order to prevent the resumption of locomotive horn sounding on that date.

As stated in paragraph (a)(1) of this section, a public authority may continue existing locomotive horn restrictions until June 24, 2006 by providing a Notice of Quiet Zone Continuation in accordance with § 222.43 of this part. An Intermediate Quiet Zone or Intermediate Partial Quiet Zone must, however, be converted into a New Quiet Zone or a New Partial Quiet Zone by June 24, 2006, in order to prevent the resumption of locomotive horn sounding on that date.

Paragraph (a)(2) of this section explains the process for converting an Intermediate Quiet Zone into a New Quiet Zone, or an Intermediate Partial Quiet Zone into a New Partial Quiet Zone, by June 24, 2006. Paragraph (b) of this section explains the process for converting an Intermediate Partial Quiet Zone into a 24-hour New Quiet Zone by June 24, 2006.

While most of the requirements for converting an Intermediate Quiet Zone or Intermediate Partial Quiet Zone remain unchanged, paragraph (a)(2) of this section explains that the public authority is required to: (a) Provide a Notice of Intent, in accordance with § 222.43 of this part; (b) bring the Intermediate Quiet Zone or Intermediate Partial Quiet Zone into compliance with the standards set forth in § 222.39 of this part; (c) bring the Intermediate Quiet Zone or Intermediate Partial Quiet Zone into compliance with the New Quiet Zone requirements set forth in §§ 222.25, 222.27, and 222.35 of this part; and d) provide a Notice of Quiet Zone Establishment, in accordance with § 222.43 of this part, by June 3, 2006. It should be noted that the Notice of Intent should be mailed prior to April 3, 2006, in order to allow at least 60 days for the submission of comments and/or "no-comment" statements from each railroad operating over public highway-rail grade crossings within the quiet zone, the State agency responsible for grade crossing safety, and the State agency responsible for highway and road safety before the mailing of the Notice of Quiet Zone Establishment. (Please refer to § 222.43(b) for more information.) Even though these notification requirements were contained within § 222.43 of this part and were included in the Paperwork Reduction Act analysis that FRA performed on the Final Rule, FRA inadvertently omitted explicit reference to these requirements in this section of the Final Rule.

Paragraph (b) of this section has been revised in order to clarify the process that must be followed in order to convert an Intermediate Partial Quiet Zone into a 24-hour New Quiet Zone. (Please note that the requirements for converting an Intermediate Partial Quiet Zone into either a 24-hour New Quiet Zone or a New Partial Quiet Zone are identical.) While the Final Rule simply stated that the public authority is required to provide "notification of New Quiet Zone establishment", paragraph (b) of this section has been revised to clarify that the public authority is actually required to provide two different types of quiet zone notification—the Notice of Intent and the Notice of Quiet Zone Establishment. In order to facilitate conversion of the Intermediate Partial Quiet Zone before the end of the one-year grace period for existing locomotive horn sounding restrictions, paragraph (b) of this section has also been revised to include a deadline for the submission of the Notice of Quiet Zone Establishment,

which mirrors the submission deadline contained within paragraph (a)(2) of this section.

*Section 222.43 What notices and other information are required to create or continue a quiet zone?*

Minor typographical revisions have been made throughout this section.

This section has also been revised by expanding the scope of the Notice of Intent requirement to include Pre-Rule Quiet Zones and Pre-Rule Partial Quiet Zones that will need to implement SSMs or ASMs in order to qualify for quiet zone establishment under § 222.41 (c) or (d) of this part. The requirement to provide Notice of Detailed Plan, which was virtually identical to the Notice of Intent, has therefore been removed. Thus, Pre-Rule Quiet Zones and Pre-Rule Partial Quiet Zones that were previously required to provide a Notice of Detailed Plan are now required to provide a Notice of Intent on or before February 24, 2008.

As stated in paragraph (a)(1) of this section, a Notice of Intent must be provided by public authorities who wish to create a New Quiet Zone or New Partial Quiet Zone by public authority designation or application, in accordance with § 222.39(a) or (b) of this part. This includes public authorities who wish to convert Intermediate Quiet Zones and Intermediate Partial Quiet Zones into a New Quiet Zone or New Partial Quiet Zone. In addition, public authorities seeking to implement new SSMs or ASMs within Pre-Rule Quiet Zones and Pre-Rule Partial Quiet Zones are required to provide a Notice of Intent.

The Notice of Intent should be mailed early in the quiet zone development process, as the submission of the Notice of Intent triggers a 60-day comment period and provides State agencies and railroads with an opportunity to provide input on the quiet zone to the public authority. Therefore, paragraph (b)(1) was added to this section to reiterate that a sixty-day period must elapse between the mailing of the Notice of Intent and the mailing of the Notice of Quiet Zone Establishment, unless the public authority has obtained written comments and/or "no-comment" statements from each railroad operating over public highway-rail grade crossings within the quiet zone, the State agency responsible for grade crossing safety, and the State agency responsible for highway and road safety, in accordance with paragraph (b)(3)(ii) of this section. This provision is very similar to language contained within paragraph (d)(1)(ii) of this section, which

addresses the timing of Notices of Quiet Zone Establishment.

With respect to Pre-Rule Quiet Zones and Pre-Rule Partial Quiet Zones that will not be established by June 24, 2008, paragraph (b)(1)(ii) of this section reminds public authorities that the Notice of Intent, which provides a brief explanation of proposed quiet zone improvements, must be provided by February 24, 2008, in order to continue existing locomotive horn sounding restrictions beyond June 24, 2008 without interruption.

As for the Notice of Quiet Zone Continuation, it should be noted that submission of the Notice of Quiet Zone Continuation was only necessary if the public authority wanted to continue pre-existing locomotive horn sounding restrictions after June 24, 2005. If a Pre-Rule Quiet Zone or Pre-Rule Partial Quiet Zone was established under the authority of this part before the Final Rule took effect on June 24, 2005, the public authority was not required to provide prior Notice of Quiet Zone Continuation.

All Notices of Intent, Notices of Quiet Zone Continuation, and Notices of Quiet Zone Establishment that complied with § 222.43 of the Final Rule and were mailed on or before August 17, 2006, shall be deemed compliant with any revised notification requirements now contained in this section.

*Section 222.45 When Is a Railroad Required to Cease Routine Sounding of Locomotive Horns at Crossings?*

This section has been revised to clarify the required railroad response to a valid Notice of Quiet Zone Continuation or Establishment. Even though railroads have been required to refrain from, or cease, routine sounding of the locomotive horn at all public, private, and pedestrian crossings identified in a valid Notice of Quiet Zone Continuation or Establishment on the date specified in the Notice, reference to the Notice of Quiet Zone Continuation was inadvertently omitted from this section in the Final Rule. Pedestrian grade crossings were also inadvertently omitted from the description of grade crossings at which railroads are required to cease routine use of the locomotive horn.

*Section 222.47 What periodic updates are required?*

Minor typographical revisions have been made in this section.

*Section 222.49 Who may file Grade Crossing Inventory Forms?*

This section has not been revised.

*Section 222.51 Under what conditions will quiet zone status be terminated?*

This section has not been revised.

*Section 222.53 What are the requirements for supplementary and alternative safety measures?*

This section has not been revised.

*Section 222.55 How are new supplementary or alternative safety measures approved?*

This section has not been revised.

*Section 222.57 Can parties seek review of the Associate Administrator's actions?*

This section has not been revised.

*Section 222.59 When May a Wayside Horn Be Used?*

It has come to FRA's attention that there may be some confusion in the railroad industry as to whether the notification requirements contained within this section apply to existing wayside horn installations. As a result, we wish to clarify that railroads and/or public authorities who are responsible for wayside horns that became operational before June 24, 2005 and that meet the requirements set forth in this part are not required to submit notification of operational status, in accordance with paragraphs (b) and (c) of this section. Thus, all railroads operating over highway-rail grade crossings equipped with wayside horns that became operational before June 24, 2005 were required to cease routine sounding of the locomotive horn at those crossings on that date, even if notification of operational status was not provided in accordance with this section.

*Appendix A to Part 222—Approved Supplementary Safety Measures*

Sections (A)(1), (A)(3), (A)(4), and (A)(5) of this Appendix have not been revised. However, FRA has added a brief discussion of the effectiveness rate assigned to four-quadrant gate systems equipped with vehicle presence detection to Section (A)(2) of this Appendix.

As stated in the Note to section (A)(2) of the Appendix, the lower effectiveness rate assigned to four-quadrant gate systems equipped with presence detection does not mean that four-quadrant systems with presence detection are inherently less safe. The lower effectiveness rate merely reflects the fact that motorists who are intent on circumventing the grade crossing warning system can take advantage of presence detection by driving under the delayed exit gates to enter the grade

crossing. However, the public authority must weigh this risk against site-specific risks, such as nearby highway intersections that may cause traffic to back up on the grade crossing, when determining which type of four-quadrant gate system should be installed at a specific highway-rail grade crossing. FRA therefore recommends the use of site-specific studies to determine the best application for each installation.

Sections (B) and (C) of this Appendix have not been revised.

*Appendix B to Part 222—Alternative Safety Measures*

Minor revisions have been made to section I.A. of this appendix, which contains a brief discussion of the requirements and effectiveness rates for modified SSMs. Specifically, section I.A.2 of this appendix has been revised in order to clarify that the public authority is required to provide estimates of the effectiveness of its modified SSMs, which can be based upon adjustments to the effectiveness levels provided in appendix A or actual field data derived from the crossing sites. These effectiveness rate estimates must be included in the quiet zone application, as set forth in § 222.39(b) of this part.

Sections (I)(B) and (I)(C) of this Appendix have not been revised. Sections II and III of this Appendix have also not been revised.

*Appendix C to Part 222—Guide to Establishing Quiet Zones*

This appendix has been revised to incorporate changes that have made been to the rule text.

*Appendix D to Part 222—Determining Risk Levels*

This appendix has not been revised.

*Appendix E to Part 222—Requirements for Wayside Horns*

This appendix has not been revised.

*Appendix F to Part 222—Diagnostic Team Considerations*

This appendix has not been revised.

*Appendix G to Part 222—Schedule of Civil Penalties*

This appendix has been revised to reflect the exception for fast-moving trains (trains operating at speeds in excess of 60 mph) from the 15-second minimum horn sounding requirement contained in § 222.21(b) of this part. As stated in § 222.21(b)(3) of this part, FRA will not issue civil penalties against railroads whose fast-moving trains fail to sound the locomotive horn at least 15

seconds prior to their arrival at public highway-rail grade crossings, if locomotive horn sounding was initiated one-quarter mile from the public highway-rail grade crossing.

This appendix has also been revised to reflect revisions that have been made to the audible warning requirement set forth in § 222.21(b) of this part. When dealing with situations in which the locomotive engineer provided an audible warning in excess of 20 seconds before public grade crossings, FRA will try to determine whether the locomotive engineer made a good faith attempt to comply with the 15–20 second audible warning requirement. However, if an audible warning in excess of 25 seconds was provided before a public highway-rail grade crossing and FRA determines that the locomotive engineer failed to make a good faith attempt to comply with the 15–20 second audible warning requirement set forth in § 222.21(b) of this part, FRA may issue an appropriate civil penalty.

Section 222.21(b)(3) of this part prohibits the initiation of locomotive horn sounding from a location more than one-quarter mile before a public highway-rail grade crossing. However, under the civil penalty schedule contained within Appendix G to the Final Rule, a \$5,000 civil penalty could only have been assessed if locomotive horn sounding was routinely initiated from a location more than one-quarter mile before a public highway-rail grade crossing. FRA did not intend to restrict its enforcement activity to habitual violations of the locomotive horn sounding requirements contained within this part. Therefore, FRA is amending this appendix in order to clarify that civil penalties may be assessed against railroads for individual instances in which locomotive horn sounding was initiated from a location more than one-quarter mile before a public highway-rail grade crossing. However, the recommended standard civil penalty has been reduced from \$5,000 to \$1,000 and the recommended willful civil penalty has also been reduced from \$7,500 to \$2,000.

This appendix has also been revised to clarify that routine sounding of the locomotive horn at any grade crossing (i.e., public, private or pedestrian grade crossing) located within a quiet zone is prohibited.

#### Section 229.5 Definitions

The three definitions that are being added this section were included in the Final Rule on the Use of Locomotive Horns at Highway-Rail Grade Crossings. These definitions were, however, inadvertently removed upon issuance of

the Final Rule on Locomotive Event Recorders (70 FR 37920).

Also, the definition of the term “defective” has been revised to reflect FRA’s intent to limit application of this specific definition to § 229.129 of this part.

#### Section 229.129 Locomotive Horn

The title of this section has been changed to reflect the fact that the requirements contained within this section only pertain to one type of locomotive audible warning device—the locomotive horn. Therefore, all references to “audible warning devices” within this section have been replaced with the term “locomotive horn”.

This section has also been revised in response to petitions for reconsideration that were submitted by GE Transportation Rail and the AAR. In its petition for reconsideration, GE Transportation Rail requested a 120-day extension of the compliance deadline set forth in paragraph (b)(1) of this section for the sound level testing of new locomotives. GE Transportation Rail asserted that, given the relatively short period of time since the issuance of FRA’s Final Rule on the Use of Locomotive Horns at Highway-Rail Grade Crossings, it would be unable to complete sound level testing on its first batch of new locomotives prior to June 24, 2005 (the compliance deadline for sound level testing of new locomotives). As a result, GE Transportation Rail asserted that it would be forced to test every new locomotive, which would negatively impact its ability to meet delivery commitments made to its customers.

After considering the assertions made by GE Transportation Rail with respect to the practical limitations associated with testing new locomotive sound levels, in accordance with the test parameters set forth in § 229.129, FRA revised paragraph (b) to extend the compliance date of the new locomotive sound level testing requirements to September 18, 2006. In light of the delay incidental to the publication of these amendments, this revision will actually extend the compliance date of the testing requirements contained in this section by more than 120 days. Therefore, any locomotives built on or after September 18, 2006 must comply with the minimum and maximum locomotive horn sound level requirements set forth in paragraph (a) of this section. However, locomotives built before September 18, 2006 must be tested and brought into compliance with the minimum and maximum locomotive horn sound level requirements set forth

in paragraph (a) of this section by June 24, 2010.

Paragraph (b)(3) of this section has been revised to clarify FRA’s original intent to require the sound level testing of remanufactured locomotives, in accordance with this section. Even though the Final Rule required sound level testing of “each locomotive when rebuilt, as determined pursuant to 49 CFR 232.5”, FRA has received comments noting that this provision is somewhat ambiguous and difficult to interpret. Since FRA had actually intended to apply the sound level testing requirements contained within this section to those locomotives that have been rebuilt or refurbished from a previously used or refurbished underframe (“deck”) and contain fewer than 25 percent of previously used components (weighted by the dollar value of the components), paragraph (b)(3) of this section has been revised to refer only to those locomotives that meet the definition of “remanufactured locomotive”, as set forth in § 229.5 of this part. (Please refer to FRA’s Final Rule on Locomotive Crashworthiness, which was published in the **Federal Register** on June 28, 2006 (71 FR 36888), for further discussion of the term “remanufactured locomotive”.)

The AAR also submitted a petition for reconsideration that addressed a number of provisions contained within § 229.129 of this part. First, the AAR asserted that § 229.129 of this part was ambiguous as to what additional testing, if any, must be conducted when locomotive horns are replaced. If additional testing would be necessary, the AAR proposed that railroads be allowed to use the sampling scheme set forth in paragraph (b)(1) of this section to qualify replacement horns, with no additional testing necessary. However, if a replacement horn was not model qualified through acceptance sampling, the AAR proposed that railroads be required to test the replacement horn at the time of the next periodic inspection or by June 24, 2010, whichever is later.

FRA has not, however, revised this section to allow acceptance sampling of replacement horns. Given the level of variation that exists in the different types of locomotive/locomotive horn configurations, FRA is concerned that acceptance sampling would not ensure that the replacement horn, when installed on the locomotive, would generate an audible warning commensurate with the sound level parameters established by paragraph (a) of this section. FRA believes that locomotive horns should not be tested in isolation—the sound level must be tested after the horn has been installed

on the locomotive. FRA notes that there are a variety of factors that can influence locomotive horn sound levels, such as the placement, mounting, air pressure and actual condition of the locomotive horn. However, should railroads develop data from field testing to demonstrate that some form of acceptance sampling would be appropriate, FRA would be willing to reconsider its position on this issue.

Paragraph (b)(4) has been added to this section to require sound level testing of locomotives equipped with replacement horns, in accordance with paragraph (c) of this section. As stated in paragraph (b)(4) of this section, locomotives equipped with replacement horns must be tested unless: (a) The locomotive has already been individually tested or tested through acceptance sampling, in accordance with paragraphs (b)(1), (b)(2), or (b)(3) of this section; (b) the replacement horn is the same locomotive horn model as the locomotive horn that was replaced; and (c) the replacement horn was mounted in the same manner and location as the locomotive horn that was replaced. This sound level testing must be performed before the next two annual tests required by § 229.27 of this part are completed.

In its petition for reconsideration, the AAR also requested that railroads be allowed to use acceptance sampling to qualify the sound level output of existing locomotives. In support of this request, the AAR asserted that there is a great deal of standardization with respect to locomotive horn and locomotive models. However, FRA has not revised this section to allow acceptance sampling of the sound level output of existing locomotives, as the considerations that militate against acceptance sampling of replacement locomotive horns apply equally, if not more so, to the acceptance sampling of existing locomotives. FRA notes that there are many factors that can influence the sound level output of existing locomotives, including the actual condition of the locomotive horn, as well as the placement, mounting and air pressure of the locomotive horn. FRA may, however, reconsider this issue, should railroads develop data from field testing that demonstrates that some form of acceptance sampling would be appropriate.

Paragraph (c)(1) of this section has not been revised.

By e-mail dated September 20, 2005, the AAR submitted a request for modification of the locomotive horn testing requirements in paragraph (c)(2) of this section. In its e-mail, the AAR requested permission to use electronic

calibrators, in addition to approved acoustic calibrators, to conduct compliance testing in accordance with this section. If such a change were made, the AAR asserted that railroads could use an acoustic calibrator during the initial setup of an "environmental noise monitoring system" and then store the results in an electronic calibrator which could, conceivably, have an accuracy of  $\pm 0.1$  dB.

FRA has not, however, revised paragraph (c)(2) of this section. Acoustical calibration has been incorporated into the recommended practice for monitoring aircraft noise in the vicinity of airports, unlike electronic calibration, which is mainly used to identify sound level measurement system failure. See SAE Aerospace Recommended Practice (ARP) 4721—Monitoring Aircraft Noise and Operations in the Vicinity of Airports and ISO/DIS 20906—Unattended Monitoring of Aircraft Sound in the Vicinity of Airports. Thus, while FRA will permit the use of environmental noise monitoring systems to conduct compliance testing under this section, FRA cannot permit electronic calibration of sound level measurement systems.

Apart from the correction of a typographical error in paragraph (c)(5), paragraphs (c)(3) through (c)(8) of this section have not been revised.

In its e-mail dated September 20, 2005, the AAR also requested that FRA relax the requirement in paragraph (c)(9) of this section that calibration be done before and after each compliance test. However, FRA would like to clarify that calibration is not required before and after each compliance test. Acoustical calibration must be performed, at a minimum, before and after each session of compliance tests within an 8-hour period, unless a physical change in the environment (such as a drop or rise in temperature, atmospheric pressure or wind) or damage to the instrument may cause changes in microphone response. Therefore, paragraph (c)(9) of this section has not been revised.

In its petition for reconsideration, the AAR asserted that the requirement to record air flow measurements when testing locomotive sound levels would not only be extremely burdensome, but would fail to provide any useful information. Noting that § 229.129 does not contain any regulatory requirement pertinent to air flow, the AAR stated that no regulatory purpose would be served by recording air flow measurements. In addition, the AAR asserted that railroads would need to employ extra personnel and/or utilize specialized equipment during

locomotive sound level testing, for the sole purpose of reading the air flow meter.

After considering these assertions, FRA revised paragraph (c)(10) of this section by removing the requirement to retain written records of air flow measurements taken during locomotive sound level testing. FRA was persuaded that this requirement would impose an unnecessary burden on railroads and locomotive manufacturers.

Lastly, the AAR objected to the written signature requirement contained within paragraph (c)(10) of this section. Noting that the Interim Final Rule did not provide any rationale for requiring the signature of the person who performs the locomotive horn sound level test, the AAR expressed concern that railroads would be unable to use a fully automated test procedure under consideration which would record and send sound level test results to a database without any human intervention. Nonetheless, if signatures will be required, the AAR asserted that FRA will have to allow railroads to use electronic signatures, in accordance with the Government Paperwork Elimination Act.

While FRA recognizes the paperwork burdens associated with an additional recordkeeping requirement, FRA notes that the written signature of the person who performs the locomotive sound level test will provide accountability, should questions arise as to the quality of the test that was performed. However, FRA acknowledges that an electronic recordkeeping system could be designed to provide an equivalent level of accountability, while reducing associated paperwork burdens. Therefore, even though FRA has not revised paragraph (c)(10) of this section to remove the written signature requirements, FRA looks forward to the implementation of electronic recordkeeping in the near future, at which time FRA intends to review all of the recordkeeping requirements contained within 49 CFR Part 229.

Paragraph (d) of this section has not been revised. However, in light of the confusion generated by the preamble discussion of this section in the Final Rule, FRA would like to clarify the intent of this section.

Contrary to the discussion of this section in the preamble to the Final Rule, rapid transit operations that share track with general system railroads are not subject to this section. (This category of rapid transit operations includes "light rail" vehicles that are operated on general system track pursuant to an FRA-approved Temporal Separation Plan.) Thus, rapid transit

operations that share track with general system railroads need not file waiver petitions to obtain relief from the locomotive horn volume and testing requirements contained in this section.

It should, however, be noted that rapid transit operations that share track with general system railroads remain subject to the locomotive horn sounding requirements contained in 49 CFR Part 222, absent relief granted in the form of an FRA waiver. Thus, rapid transit operations that share track with general system railroads are required to sound the locomotive horn when approaching and entering public highway-rail grade crossings located outside quiet zones. However, these rapid transit operations need not comply with the minimum and maximum locomotive horn sound level requirements contained in this section, nor do they need to conduct locomotive horn testing in accordance with this section.

Rapid transit operations that operate within a common corridor with general system railroads and traverse shared public highway-rail grade crossings are also exempt from the requirements contained in this section. However, these rapid transit operations remain subject to the locomotive horn sounding requirements contained in 49 CFR Part 222, absent relief granted in the form of an FRA waiver.

Therefore, rapid transit operations that operate within a common corridor with general system railroads are required to sound the locomotive horn when approaching and entering public highway-rail grade crossings that are shared with general system railroads and located outside quiet zones.

However, these rapid transit operations need not comply with the minimum and maximum locomotive horn sound level requirements contained in this section, nor do they need to conduct locomotive horn testing in accordance with this section.

*Appendix B to Part 229—Schedule of Civil Penalties*

This appendix has been revised to reflect changes that have been made to section 229.129 of this part, which clarify that the sound level and testing requirements contained within section 229.129 of this part only pertain to one type of locomotive audible warning device—the locomotive horn. In addition to other minor clarifying revisions, this appendix has also been revised by assigning a civil penalty recommendation to the failure of a railroad or locomotive manufacturer to complete and/or retain a proper locomotive horn sound level test record in accordance with section 229.129(c)(10) of this part.

**5. Regulatory Impact**

*A. Executive Order 12866 and DOT Regulatory Policies and Procedures*

This revised Final Rule has been evaluated in accordance with existing policies and procedures and is considered to be significant under both Executive Order 12866 and DOT policies and procedures. FRA has prepared and placed in the docket a regulatory evaluation of the rule. Following is a summary of the findings.

FRA identified 1,598 existing whistle ban or no-horn crossings that would qualify for inclusion in Pre-Rule Quiet

Zones. FRA also identified 372 potential New Quiet Zone crossings and 71 potential Intermediate Quiet Zone crossings. Using information available about the crossing characteristics and the number of persons that would be or currently are severely affected by the sounding of train horns, FRA estimated the costs and benefits of the actions that communities would take in response to this revised Final Rule. FRA believes that many communities will take advantage of the many options available to establish quiet zones. FRA also estimated the costs associated with the revised horn sound level testing requirements.

After the release of the Final Rule, FRA received petitions for reconsideration on various issues of concern to the railroads, railroad suppliers, and other affected entities. After careful consideration, FRA is revising the Final Rule to address some of the issues raised in the petitions for reconsideration. FRA is also taking the opportunity to clean up the rule by correcting a few inadvertent errors and omissions which are necessary for the rule to function as intended. These revisions to the Final Rule will result in approximately \$184,873 in additional costs. These additional costs are reflected in the cost table below. For a complete discussion of the costs of the revisions, please see the *Economic and Regulatory Flexibility Analyses of the Revisions to the Final Rule*.

The table below presents estimated twenty-year monetary costs associated with complying with the requirements contained in the Final Rule revisions using a 7 percent discount rate.

**TOTAL TWENTY-YEAR COSTS (PV, 7%)<sup>1</sup>**

Extension of Compliance Date for Sound Level Testing of New Locomotives	\$34,203
Notice and Comment Requirements	\$150,670
<b>Total Twenty-Year Costs associated with implementation of the Final Rule revisions are estimated to total</b>	<b>*\$184,873</b>

<sup>1</sup> Present Value (PV) provides a way of converting future benefits and costs into equivalent dollars today so that benefit and cost streams that involve different time paths may be compared. The formula used to calculate these flows is:  $1/(1+i)^t$  where "i" is the discount rate, and "t" is the year. Per guidance from the Office of Management and Budget, a discount rate of .07 is used in this analysis.  
\*(PV, 20 Years, 7%).

FRA extended the compliance deadline for the sound level testing of new locomotives at the request of a major locomotive manufacturer, who was not prepared to meet the original compliance deadline without major disruption. This extension of the compliance deadline has, however, resulted in \$34,203 in additional costs. FRA believes that this small additional cost is justified by the benefit (not quantified) of avoiding either substantial non-compliance or

disruptions to the manufacturing process.

The remaining additional costs are associated with the notice and comment provisions of the Final Rule. These provisions have been revised, in order to streamline the quiet zone notification process and facilitate communication between interested parties prior to the expenditure of significant funds for projects such as crossing safety improvements. Even though we do not have the information necessary to

estimate the amount of "waste" which may be avoided through early disclosure of planned crossing safety improvements, FRA believes that this small increase in total cost will prevent additional cost outlays associated with potential problems arising from projects requiring a substantial investment for needed safety improvements.

The direct safety benefit of this revised Final Rule is the reduction in casualties that result from collisions between trains and highway users at



public at-grade highway-rail crossings. Implementation of this rule will ensure that (1) locomotive horns are sounded to warn highway users of approaching trains; or (2) rail corridors where train horns do not sound will have a level of risk that is no higher than the average risk level at gated crossings nationwide where locomotive horns are sounded regularly; or (3) the effectiveness of horns is compensated for in rail corridors where train horns do not sound.

Some of the unquantified benefits of this revised Final Rule include reductions in freight and passenger train delays, both of which can be very significant when grade crossing collisions occur, and collision investigation efforts. Although these benefits are not quantified in this analysis, their monetary value is significant.

Maximum horn sound level requirements will limit community disruption by not allowing horns to be sounded any louder than necessary to provide motorists with adequate warning of a train's approach. The benefit in noise reduction due to this change in maximum horn loudness is not readily quantifiable.

Another unquantified benefit of this rule is elimination of some locomotive horn noise disruption to some railroad employees and those who may reside near industrial areas served by railroads. Locomotive horns do not have to be sounded at individual highway-rail grade crossings at which the maximum authorized operating speed for that segment of track is 15 miles per hour or less and properly equipped flaggers (as defined in by 49 CFR 234.5, but who for purposes of this rule can also be crew members) provide warning to motorists. This rule will allow engineers, who were probably already exercising some level of discretion as to the duration and sound level of locomotive horn sounding, to stop sounding the horn under these circumstances at no additional cost. In addition, under the Final Rule revisions, locomotive horns need not be sounded for a minimum of 15 seconds by trains that re-initiate movement from locations, such as passenger stations, that are in close proximity to public highway-rail grade crossings, provided certain specified conditions are met.

The Final Rule revisions will also facilitate railroad compliance with required time-based locomotive horn sounding. By extending the compliance deadline for time-based locomotive horn sounding, FRA will ensure that locomotive engineers have sufficient time to adapt to time-based locomotive

horn sounding. In addition, by expanding the scope of these time-based audible warning requirements to cover audible warnings provided at public, private and pedestrian crossings, locomotive engineers will no longer be required to comply with potentially inconsistent State and Federal requirements governing locomotive-based audible warnings at grade crossings. Improved railroad compliance is not, however, readily quantifiable.

This analysis does not quantify the benefit of eliminating community disruption caused by the sounding of train horns, nor does it quantify costs from increased noise at crossings where horns will sound where they were previously silent. FRA is, however, confident that the benefits in terms of lives saved and injuries prevented will exceed the costs imposed on society by this rule.

#### *B. Regulatory Flexibility Act*

The Regulatory Flexibility Act of 1980 (5 U.S.C. 601 *et seq.*) requires a review of final rules to assess their impact on small entities unless the Secretary certifies that a final rule will not have a significant economic impact on a substantial number of small entities. Data available to FRA indicates that this rule may have minimal economic impact on a substantial number of small entities (railroads) and possibly a significant economic impact on a few small entities (government jurisdictions and small businesses). However, there is no indication that this rule will have a significant economic impact on a substantial number of small entities. The Small Business Administration (SBA) did not submit comments to the docket for this rulemaking in response to the Initial Regulatory Flexibility Assessment that accompanied the NPRM or the Regulatory Flexibility Assessment that accompanied the Interim Final Rule. FRA certifies that this rule will not have a significant economic impact on a substantial number of small entities.

FRA has performed a Final Regulatory Flexibility Assessment (FRFA) on small entities that potentially can be affected by this revised Final Rule. The FRFA is summarized in this preamble as required by the Regulatory Flexibility Act. The full FRFA is included in the Regulatory Evaluation, which is available in the public docket of this proceeding.

This is essentially a safety rule that implements as well as minimizes the potential negative impacts of a Congressional mandate to blow train whistles and horns at all public

crossings. Some communities believe that the sounding of train whistles at every crossing is excessive and an infringement on community quality of life, and therefore have enacted "whistle bans" that prevent the trains from sounding their whistles entirely, or during particular times (usually at night). Some communities would like to establish "quiet zones" where train horns would not be routinely sounded and have been awaiting issuance of this rule to do so. FRA is concerned that with the increased risk at grade crossings where train whistles are not sounded, or another means of warning utilized, collisions and casualties may increase significantly. The rule contains low risk based provisions for communities to establish quiet zones. Some crossing corridors may already be at risk levels that are permissible under this rule and would not need to reduce risk levels any further to establish quiet zones. Otherwise, communities establishing Pre-Rule Quiet Zones may implement sufficient safety measures along whistle-ban corridors to reduce risk to permissible levels. In addition to having permissible risk levels, all crossings in New Quiet Zones will have to be equipped with gates and flashing lights. If a community elects to simply follow the mandate, horn sounding will resume and there will be a noise impact on small businesses that exist along crossings where horns are not currently routinely sounded. If a community elects to implement sufficient safety measures to comply with the requirements for establishing a quiet zone, then the governmental jurisdiction will be impacted by the cost of such program or system. To the extent that potential quiet zone crossing corridors already have average risk levels permissible under this rule, and, in the case of New Quiet Zones, every crossing is equipped with gates and flashing lights, communities will only incur administrative costs associated with establishing and maintaining quiet zones.

The costs of implementing this revised Final Rule will predominantly be on the governmental jurisdictions of communities some of which are "small governmental jurisdictions." As defined by the SBA this term means governments of cities, counties, towns, townships, villages, school districts, or special districts with a population of less than fifty thousand. The most significant impacts from this rule will be on about 260 governmental jurisdictions whose communities currently have either formal or informal whistle bans in place. FRA estimates

that approximately 70 percent (i.e. 193 communities) of these governmental jurisdictions are considered to be small entities.

FRA has recently published a final policy which establishes "small entity" as being railroads which meet the line haulage revenue requirements of a Class III railroad. As defined by 49 CFR 1201.1-1, Class III railroads are those railroads who have annual operating revenues of \$20 million per year or less. Hazardous material shippers or contractors that meet this income level will also be considered as small entities. FRA is using this definition of small entity for this rulemaking. FRA believes that approximately 640 small railroads would be minimally impacted by train horn sound level testing requirements contained in this rule. In addition, some small businesses that operate along or nearby rail lines that currently have whistle bans in place that potentially may not after the implementation of this rule, could be moderately impacted. Alternative options for complying with this rule include allowing the train whistle to be blown. This alternative has no direct costs associated with it for the governmental jurisdiction. Other alternatives include "gates with median

barriers" which are estimated to cost between \$13,000 and \$15,000 for simple installations; upgrade two-quadrant gate systems to four-quadrant gate systems at an estimated cost of \$100,000-\$300,000 plus annual maintenance costs of \$2,500-\$3,000; and "Photo enforcement" which is estimated to cost \$28,000-\$65,500 per crossing, and have annual maintenance costs of \$6,600-\$24,000 per crossing. Finally, FRA has not limited compliance to the lists provided in appendix A or appendix B of the rule. The rule provides for supplementary safety measures that might be unique or different. For such an alternative, an analysis would have to accompany the option that would demonstrate that the number of motorists that violate the crossing is equivalent or less than that of blowing the whistle. FRA intends to rely on the creativity of communities to formulate solutions which will work for that community.

FRA does not know how many small businesses are located within a distance of the affected highway-rail crossings where the noise from the whistle blowing could be considered to be a nuisance and bad for business. Concerns have been advanced by owners and

operators of hotels, motels and some other establishments as a result of numerous town meetings and other outreach sessions in which FRA has participated during development of this rule. If supplementary safety measures are implemented to create a quiet zone then such small entities should not be impacted. FRA held 12 public hearings nationwide following issuance of the NPRM and requested comments to the docket from small businesses that feel they will be adversely impacted by the requirements contained in the NPRM. FRA received no comments in response.

#### *C. Paperwork Reduction Act*

The information collection requirements in these amendments to the final rule, which respond to petitions for reconsideration, have been submitted for approval to the Office of Management and Budget (OMB) under the Paperwork Reduction Act of 1995, 44 U.S.C. 3501 et seq., and have been assigned OMB control no. 2130-0560. The sections that contain the new information collection requirements and the estimated time to fulfill each requirement are as follows:

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CFR Section	Respondent Universe	Total Annual Responses	Average Time per Response	Total Annual Burden Hours	Tot. Annual Burden Cost
222.11 - Penalties	340 Public Authorities	5 false reports/rcd	2 hours	10 hours	\$400
222.15 - Petitions for Waivers	340 Public Authorities	5 petitions	4 hours	20 hours	\$800
222.17 - Applications To Be Recognized as a State Agency	68 State Agencies	7 applications	8 hours	56 hours	\$3,416
222.39 - Establishment of Quiet Zones					
- Public Authority Application to FRA	340 Public Authorities	105 Applications	80 hours	8,400 hours	\$512,400
- Diagnostic Team Reviews	340 Public Authorities	53 reviews	32 hours	1,696 hours	\$0 (Cost incl. RIA)
- Updated Crossing Inventory Form	340 Public Authorities	302 forms	1 hour	302 hours	\$0 (Cost incl. RIA)
- 60-Day Comment Period: Copies of Quiet Zone Application	340 Public Authorities	630 copies	10 minutes	105 hours	\$6,405
- Comments on Applications	715 Railroads/State Agencies	50 comments	2.5 hours	125 hours	\$5,000
222.41 - Pre-Rule Quiet Zones Which Qualify For Automatic Approval - Notices/Notice Copies	262 communities/Pub. Auth.	247 notices + 1482 notifications	40 hours + 10 min.	10,127 hours	\$0 (Cost incl. RIA)
- Certifications	262 communities/Pub. Auth.	262 certifications	5 minutes	22 hours	\$0 (Cost incl. RIA)
- Updated Grade Crossing Inventory Forms	200 communities/Pub. Auth.	2,364 Forms	1 hour	2,364 hours	\$0 (Cost incl. RIA)
- Pre-Rule Quiet Zones/Partial Quiet Zones That Will Not Be Established By Automatic Approval	200 Communities	200 notices + 1200 notifications	40 hours + 10 min.	8,200 hours	\$0 (Cost incl. RIA)
- Certifications	200 Communities	200 certifications	5 minutes	17 hours	\$0 (Cost incl. RIA)
- Updated Crossing Inventory Forms	200 Communities	416 Forms	1 hour	416 hours	\$0 (RIA)
- Detailed Grade Crossing Safety Plans	200 Communities/Pub. Auth.	100 plans	40 hours	4,000 hours	\$244,000
- State-wide Implementation Plans	25 State Agencies	3 plans	120 hours	360 hours	\$21,960
- Notification of Intent to Create a New Quiet Zone or Partial Quiet Zone (New Requirement)	200 Public Authorities	100 notices + 600 notifications	20 hours + 10 min.	2,100 hours	\$128,100
- 60-Day Comment Period (New Requirement)	200 Railroads/State Agencies	70 comments	4 hours	280 hours	\$17,080

222.42 - Intermediate Quiet Zones and Intermediate Partial Quiet Zones - Notices/Notifications	10 Communities/Pub. Auth.	10 notices + 60 notifications	40 hours + 10 min.	410 hours	\$25,010
- Updated Grade Crossing Inventory Forms	10 Communities/Pub. Auth.	100 Forms	1 hour	100 hours	\$6,100
- Certifications	10 Communities/Pub. Auth.	10 certifications	5 minutes	1 hour	\$61
- Notice of Intent Regarding Establishment of New/Partial Quiet Zone (New Requirement)	10 Communities/Pub. Auth.	5 notices + 30 notifications	40 hours + 10 min.	205 hours	\$12,505
- 60-Day Comment Period (New Requirement)	20 Railroads/State Agencies	5 comments	4 hours	20 hours	\$1,220
- Notice of Intent: Conversion of Intermediate Partial Quiet Zone into 24-hour New Quiet Zone (New Requirement)	10 Public Authorities	5 notices+30 notif	40 hours + 10 min	205 hours	\$12,505
- 60-Day Comment Period (New Requirement)	20 Railroads/State Agencies	5 comments	4 hours	20 hours	\$1,220
222.43 - Notice and Other Information Required to Establish a Quiet Zone	216 Communities	216 notices + 648 notifications	40 hours + 10 min.	8,748 hours	\$533,628
- Updated Grade Crossing Inventory Forms	216 Communities	376 Forms	1 hour	376 hours	\$0 (Cost incl. RIA)
- 60-Day Comment Period on Notices of Intent	715 Railroads/State Agencies	108 comments	4 hours	432 hours	\$17,280
- Notice of Intent to Continue Pre-Rule Quiet Zone or Partial Quiet Zone	Incl. in 222.41(c) and 222.42(a)(1)	Incl in 222.41c and 222.42(a)(1)	Incl. in 222.41(c) and 222.42(a)(1)	Incl. in 222.41(c) and 222.42(a)(1)	Incl. 222.41(c) /222.42(a)(1)
- Updated Grade Crossing Inventory Forms and Certifications Continuing Quiet Zones	Incl in 222.41(c) and 222.42 (a)(2)	Incl. in 222.41(c) and 222.42(a)(1)	Incl. in 222.41(c) and 222.42(a)(1)	Incl in 222.41(c) and 222.42(a)(1)	Incl. 222.41(c) /222.42(a)(1)
- Notice of Establishment of Quiet Zone	316 Communities/Pub. Auth.	72 notices + 432 notifications	40 hours + 10 min.	2,952 hours	\$180,072 \$0 (RIA)
- Updated Grade Crossing Inventory Forms	316 Communities	950 forms	1 hour	950 hours	\$57,950
- Certifications Establishing Quiet Zones	216 Communities/Pub. Auth.	216 certifications	5 minutes	18 hours	\$1,098
222.47 - Periodic Updates					
- Quiet Zones Which Do Not Have Supplementary Safety Measures at Each Public Crossing	200 Public Authorities	100 Affirmations + 600 Copies	30 minutes + 2 min	70 hours	\$0 (Cost incl. RIA)
- Updated Crossing Inventory Forms	200 Public Authorities	500 Forms	1 hour	500 hours	\$0 (Cost incl. RIA)
222.51 - Review of Quiet Zone Status - Public Authority Written Statements/Commitments	9 Public Authorities	2 statements	5 hours	10 hours	\$610
- Review at FRA's Initiative - Comments	3 Public Authorities	20 comments	30 minutes	10 hours	\$610
222.55 - Approval of New SSMs or ASMs - Letters	265 Interested Parties	1 letter	30 minutes	1 hour	\$61
- Comments	265 Interested Parties	5 comments	30 minutes	3 hours	\$183
- Demo of New SSM/ASM & Approval Application	265 Interested Parties	1 letter	30 minutes	1 hour	\$61

222.47 - Periodic Updates					
- Quiet Zones Which Do Not Have Supplementary Safety Measures at Each Public Crossing	200 Public Authorities	100 Affirmations + 600 Copies	30 minutes + 2 min	70 hours	\$0 (Cost incl. RIA)
- Updated Crossing Inventory Forms	200 Public Authorities	500 Forms	1 hour	500 hours	\$0 (Cost incl. RIA)
222.57 - Review of Assoc. Administrator's Actions	265 Public Authorities/Int. Parties	1 petition + 5 petition copies	1 hour + 2 min.	1 hour	\$61
- Petition For Reconsideration by Pub. Authority	200 Public Authorities	1 petition + 6 petition copies	5 hours + 2 min.	5 hours	\$305
- Additional Documents/Materials	200 Public Authorities	1 document	2 hours	2 hours	\$122
- Request For Informal Hearing	200 Public Authorities	1 letter	30 minutes	1 hour	\$61
222.59 - Use of Wayside Horns - Notice/Copies:	200 Public Authorities	10 notices + 60 notice copies	2.5 hours + 10 min.	35 hours	\$2,135
- Grade Crossings Located Inside Quiet Zone					
- Grade Crossings Located Outside Quiet Zone	200 Public Authorities	10 notices + 60 notice copies	2.5 hours + 10 min.	35 hours	\$2,135
Appendix B: Non-Engineering ASMs					
- Records For Programmed Enforcement/Public Educ.	200 Public Authorities	10 records	500 hours	5,000 hours	\$305,000
- Records For Photo Enforcement	200 Public Authorities	10 records	9 hours	90 hours	\$5,490
229.129 - Audible Warning Devices - Testing Reports or Records	687 Railroads	7,743 records	1 hour	7,743 hours	\$309,720
- Retests of Locomotive Horns - Records	687 Railroads	650 records	1 hour	650 hours	\$26,000

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All estimates include the time for reviewing instructions; searching existing data sources; gathering or maintaining the needed data; and reviewing the information. For information or a copy of the paperwork package submitted to OMB, contact Robert Brogan at 202-493-6292.

OMB is required to make a decision concerning the collection of information requirements contained in these amendments to the final rule between 30 and 60 days after publication of this document in the **Federal Register**.

FRA cannot impose a penalty on persons for violating information collection requirements which do not display a current OMB control number, if required. FRA has obtained OMB control number 2130-0560 for the new information collection requirements resulting from the amendments to this rulemaking.

*D. Environmental Impact*

A Record of Decision has been prepared and is available in the public docket.

*E. Federalism Implications*

Executive Order 13132, entitled, "Federalism," issued on August 4, 1999, requires that each agency "in a separately identified portion of the preamble to the regulation as it is to be issued in the **Federal Register**, provides to the Director of the Office of Management and Budget a Federalism summary impact statement, which consists of a description of the extent of the agency's prior consultation with State and local officials, a summary of the nature of their concerns and the agency's position supporting the need to issue the regulation, and a statement of the extent to which the concerns of State and local officials have been met.

\* \* \*

FRA has complied with E.O. 13132 in issuing this rule. FRA consulted extensively with State and local officials

prior to issuance of the NPRM, and we have taken very seriously the concerns and views expressed by State and local officials as expressed in written comments and testimony at the various public hearings throughout the country. FRA staff provided briefings to many State and local officials and organizations during the comment period to encourage full public participation in this rulemaking. As discussed earlier in this preamble, because of the great interest in this subject throughout various areas of the country, FRA was involved in an extensive outreach program to inform communities which presently have whistle bans of the effect of the Act and the regulatory process. Since the passage of the Act, FRA headquarters and regional staff have met with a large number of local officials. FRA also held a number of public meetings to discuss the issues and to receive information from the public. In addition to local citizens, both local and State officials attended and participated in the public

meetings. Additionally, FRA took the unusual step of establishing a public docket before formal initiation of rulemaking proceedings in order to enable citizens and local officials to comment on how FRA might implement the Act and to provide insight to FRA. FRA received comments from representatives of Portland, Maine; Maine Department of Transportation; Acton, Massachusetts; Wisconsin's Office of the Commissioner of Railroads; a Wisconsin State representative; a Massachusetts State senator; the Town of Ashland, Massachusetts; Bellevue, Iowa; and the mayor of Batavia, Illinois.

Since passage of the Act in 1994, FRA has consulted and briefed representatives of the American Association of State Highway and Transportation Officials (AASHTO), the National League of Cities, National Association of Regulatory Utility Commissioners, National Conference of State Legislatures, and others. Additionally we have provided extensive written information to all United States Senators and a large number of Representatives with the expectation that the information would be shared with interested local officials and constituents.

Prior to issuance of the NPRM, FRA had been in close contact with, and has received many comments from Chicago area municipal groups representing suburban areas in which, for the most part, locomotive horns are not routinely sounded. The Chicago area Council of Mayors, which represents over 200 cities and villages with over four million residents outside of Chicago, provided valuable information to FRA as did the West Central Municipal Conference and the West Suburban Mass Transit District, both of suburban Chicago.

Another association of suburban Chicago local governments, the DuPage [County] Mayors and Managers Conference, provided comments and information. Additionally, FRA officials met with many Members of Congress, who have invited FRA to their districts and have provided citizens and local officials with the opportunity to express their views on this rulemaking process. These exchanges, and others conducted directly through FRA's regional crossing managers, have been very valuable in identifying the need for flexibility in preparing the revised Final Rule.

Under 49 U.S.C. 20106, issuance of this regulation preempts any State law, rule, regulation, order, or standard covering the same subject matter, except a provision necessary to eliminate or reduce an essentially local safety hazard, that is not incompatible with

Federal law or regulation and does not unreasonably burden interstate commerce. For further discussion of the effect of this rule on State and local laws and ordinances, see § 222.7 and its accompanying discussion.

As noted, this rulemaking is required by 49 U.S.C. 20153. The statute both requires that the Department issue this rule and sets out clear guidance as to the structure of such rule. The statute clearly and unambiguously requires the Department to issue rules requiring locomotive horns to be sounded at every public grade crossing. The Department has no discretion as to this aspect of the rule. The statute also makes clear that the Federal government must have a leading role in establishing the framework for providing exceptions to the requirement that horns sound at every public crossing. While some States and communities expressed opposition to Federal involvement in this area which historically has been subject to State regulation, the majority of State and local community commenters recognized and accepted the statutorily required Federal involvement. Of concern to many of these commenters, however, was the issue as to whether States or local communities should have primary responsibility for creation of quiet zones. As further discussed in the section-by-section analysis regarding "Who may establish a quiet zone?", States generally felt that they should have a primary role in establishing quiet zones and in administering a quiet zone. Comments from local governments tended to support the contrary view that local political subdivisions should establish quiet zones. A review of 49 U.S.C. 20153 indicates a clear Congressional preference that decision-makers be local authorities. This revised Final Rule provides non-Federal parties extensive involvement in decision-making pertaining to the creation of quiet zones. Through issuance of the Final Rule, FRA increased the role of States in creation of quiet zones and provided more opportunities for non-Federal parties, including States to have input in decisions made regarding creation and termination of quiet zones. However, given the nature of the competing interests of State and local governments in this area, FRA could not fully meet the concerns of both groups. For the reasons detailed in the section-by-section analyses of the Interim Final Rule, the Final Rule, and these Final Rule amendments, FRA asserts that the concerns of local communities have been substantially met.

#### *F. Compliance With the Unfunded Mandates Reform Act of 1995*

Pursuant to the Unfunded Mandates Reform Act of 1995 (Pub. L. 104-4) each Federal agency "shall, unless otherwise prohibited by law, assess the effects of Federal regulatory actions on State, local, and tribal governments, and the private sector (other than to the extent that such regulations incorporate requirements specifically set forth in law)." Unfunded Mandates Reform Act section 201, 2 U.S.C. 1531 (1995). Section 202 of the Unfunded Mandates Reform Act further requires that "before promulgating any general notice of proposed rulemaking that is likely to result in promulgation of any rule that includes any Federal mandate that may result in the expenditure by State, local, and tribal governments, in the aggregate, or by the private sector, of \$100,000,000 or more (adjusted annually for inflation)[currently \$120,700,000] in any one year, and before promulgating any final rule for which a general notice of proposed rulemaking was published, the agency shall prepare a written statement \* \* \*" detailing the effect on State, local and tribal governments and the private sector. The rule issued today will not result in the expenditure, in the aggregate, of \$120,700,000 or more in any one year, and thus preparation of a statement is not required.

#### *G. Energy Impact*

Executive Order 13211 requires Federal agencies to prepare a Statement of Energy Effects for any "significant energy action." 66 FR 28355 (May 22, 2001). Under the Executive Order, a "significant energy action" is defined as any action by an agency (normally published in the **Federal Register**) that promulgates or is expected to lead to the promulgation of a final rule or regulation, including notices of inquiry, advance notices of proposed rulemaking, and notices of proposed rulemaking: (1)(i) That is a significant regulatory action under Executive Order 12866 or any successor order, and (ii) is likely to have a significant adverse effect on the supply, distribution, or use of energy; or (2) that is designated by the Administrator of the Office of Information and Regulatory Affairs as a significant energy action. FRA has evaluated this revised Final Rule in accordance with Executive Order 13211 and has determined that this revised Final Rule is not likely to have a significant adverse effect on the supply, distribution, or use of energy. Consequently, FRA has determined that this regulatory action is not a

“significant energy action” within the meaning of Executive Order 13211.

## 6. Privacy Act Statement

Anyone is able to search the electronic form of all comments received into any of our dockets by the name of the individual submitting the comment (or signing the comment), if submitted on behalf of an association, business, labor union, etc.). You may review DOT's complete Privacy Act Statement in the **Federal Register** published on April 11, 2000 (volume 65, Number 70; Pages 19477–78) or you may visit <http://dms.dot.gov>.

## List of Subjects

### 49 CFR Part 222

Administrative practice and procedure, Penalties, Railroad safety, Reporting and recordkeeping requirements.

### 49 CFR Part 229

Locomotives, Penalties, Railroad safety.

■ In consideration of the foregoing, FRA is amending chapter II, subtitle B of title 49, Code of Federal Regulations as follows:

■ 1. Part 222 is revised to read as follows:

## PART 222—USE OF LOCOMOTIVE HORNS AT PUBLIC HIGHWAY-RAIL GRADE CROSSINGS

### Subpart A—General

#### Sec.

- 222.1 What is the purpose of this regulation?  
 222.3 What areas does this regulation cover?  
 222.5 What railroads does this regulation apply to?  
 222.7 What is this regulation's effect on State and local laws and ordinances?  
 222.9 Definitions.  
 222.11 What are the penalties for failure to comply with this regulation?  
 222.13 Who is responsible for compliance?  
 222.15 How does one obtain a waiver of a provision of this regulation?  
 222.17 How can a State agency become a recognized State agency?

### Subpart B—Use of Locomotive Horns

- 222.21 When must a locomotive horn be used?  
 222.23 How does this regulation affect sounding of a horn during an emergency or other situations?  
 222.25 How does this rule affect private highway-rail grade crossings?  
 222.27 How does this rule affect pedestrian grade crossings?

### Subpart C—Exceptions to the Use of the Locomotive Horn

- 222.31 [Reserved]

### Silenced Horns at Individual Crossings

- 222.33 Can locomotive horns be silenced at an individual public highway-rail grade crossing which is not within a quiet zone?

### Silenced Horns at Groups of Crossings—Quiet Zones

- 222.35 What are minimum requirements for quiet zones?  
 § 222.37 Who may establish a quiet zone?  
 § 222.38 Can a quiet zone be created in the Chicago Region?  
 § 222.39 How is a quiet zone established?  
 § 222.41 How does this rule affect Pre-Rule Quiet Zones and Pre-Rule Partial Quiet Zones?  
 § 222.42 How does this rule affect Intermediate Quiet Zones and Intermediate Partial Quiet Zones?  
 § 222.43 What notices and other information are required to create or continue a quiet zone?  
 § 222.45 When is a railroad required to cease routine sounding of locomotive horns at crossings?  
 § 222.47 What periodic updates are required?  
 § 222.49 Who may file Grade Crossing Inventory Forms?  
 § 222.51 Under what conditions will quiet zone status be terminated?  
 § 222.53 What are the requirements for supplementary and alternative safety measures?  
 § 222.55 How are new supplementary or alternative safety measures approved?  
 § 222.57 Can parties seek review of the Associate Administrator's actions?  
 § 222.59 When may a wayside horn be used?

Appendix A to Part 222—Approved Supplementary Safety Measures

Appendix B to Part 222—Alternative Safety Measures

Appendix C to Part 222—Guide to Establishing Quiet Zones

Appendix D to Part 222—Determining Risk Levels

Appendix E to Part 222—Requirements for Wayside Horns

Appendix F to Part 222—Diagnostic Team Considerations

Appendix G to Part 222—Schedule of Civil Penalties

**Authority:** 28 U.S.C. 2461, note; 49 U.S.C. 20103, 20107, 20153, 21301, 21304; 49 CFR 1.49.

### Subpart A—General

#### § 222.1 What is the purpose of this regulation?

The purpose of this part is to provide for safety at public highway-rail grade crossings by requiring locomotive horn use at public highway-rail grade crossings except in quiet zones established and maintained in accordance with this part.

#### § 222.3 What areas does this regulation cover?

(a) This part prescribes standards for sounding locomotive horns when

locomotives approach and pass through public highway-rail grade crossings. This part also provides standards for the creation and maintenance of quiet zones within which locomotive horns need not be sounded.

(b) The provisions of this part are separate and severable from one another. If any provision is stayed or determined to be invalid, it is the intent of FRA that the remaining provisions shall continue in effect.

(c) This part does not apply to any Chicago Region highway-rail grade crossing where the railroad was excused from sounding the locomotive horn by the Illinois Commerce Commission, and where the railroad did not sound the horn, as of December 18, 2003.

#### § 222.5 What railroads does this regulation apply to?

This part applies to all railroads except:

(a) A railroad that exclusively operates freight trains only on track which is not part of the general railroad system of transportation;

(b) Passenger railroads that operate only on track which is not part of the general railroad system of transportation and that operate at a maximum speed of 15 miles per hour over public highway-rail grade crossings; and

(c) Rapid transit operations within an urban area that are not connected to the general railroad system of transportation. See 49 CFR part 209, appendix A for the definitive statement of the meaning of the preceding sentence.

#### § 222.7 What is this regulation's effect on State and local laws and ordinances?

(a) Except as provided in paragraph (b) of this section, issuance of this part preempts any State law, rule, regulation, or order governing the sounding of the locomotive horn at public highway-rail grade crossings, in accordance with 49 U.S.C. 20106.

(b) This part does not preempt any State law, rule, regulation, or order governing the sounding of locomotive audible warning devices at any highway-rail grade crossing described in § 222.3(c) of this part.

(c) Except as provided in §§ 222.25 and 222.27, this part does not preempt any State law, rule, regulation, or order governing the sounding of locomotive horns at private highway-rail grade crossings or pedestrian crossings.

(d) Inclusion of SSMs and ASMs in this part or approved subsequent to issuance of this part does not constitute federal preemption of State law regarding whether those measures may be used for traffic control. Individual

states may continue to determine whether specific SSMs or ASMs are appropriate traffic control measures for that State, consistent with Federal Highway Administration regulations and the MUTCD. However, except for the SSMs and ASMs implemented at highway-rail grade crossings described in § 222.3(c) of this part, inclusion of SSMs and ASMs in this part does not constitute federal preemption of State law concerning the sounding of the locomotive horn in relation to the use of those measures.

(e) Issuance of this part does not constitute federal preemption of administrative procedures required under State law regarding the modification or installation of engineering improvements at highway-rail grade crossings.

#### § 222.9 Definitions.

As used in this part—

*Administrator* means the Administrator of the Federal Railroad Administration or the Administrator's delegate.

*Alternative safety measures (ASM)* means a safety system or procedure, other than an SSM, established in accordance with this part which is provided by the appropriate traffic control authority or law enforcement authority and which, after individual review and analysis by the Associate Administrator, is determined to be an effective substitute for the locomotive horn in the prevention of highway-rail casualties at specific highway-rail grade crossings. Appendix B to this part lists such measures.

*Associate Administrator* means the Associate Administrator for Safety of the Federal Railroad Administration or the Associate Administrator's delegate.

*Channelization device* means a traffic separation system made up of a raised longitudinal channelizer, with vertical panels or tubular delineators, that is placed between opposing highway lanes designed to alert or guide traffic around an obstacle or to direct traffic in a particular direction. "Tubular markers" and "vertical panels", as described in the MUTCD, are acceptable channelization devices for purposes of this part. Additional design specifications are determined by the standard traffic design specifications used by the governmental entity constructing the channelization device.

*Chicago Region* means the following six counties in the State of Illinois: Cook, DuPage, Lake, Kane, McHenry and Will.

*Crossing Corridor Risk Index* means a number reflecting a measure of risk to the motoring public at public grade

crossings along a rail corridor, calculated in accordance with the procedures in appendix D of this part, representing the average risk at each public crossing within the corridor. This risk level is determined by averaging among all public crossings within the corridor, the product of the number of predicted collisions per year and the predicted likelihood and severity of casualties resulting from those collisions at each public crossing within the corridor.

*Diagnostic team* as used in this part, means a group of knowledgeable representatives of parties of interest in a highway-rail grade crossing, organized by the public authority responsible for that crossing, who, using crossing safety management principles, evaluate conditions at a grade crossing to make determinations or recommendations for the public authority concerning safety needs at that crossing.

*Effectiveness rate* means a number between zero and one which represents the reduction of the likelihood of a collision at a public highway-rail grade crossing as a result of the installation of an SSM or ASM when compared to the same crossing equipped with conventional active warning systems of flashing lights and gates. Zero effectiveness means that the SSM or ASM provides no reduction in the probability of a collision, while an effectiveness rating of one means that the SSM or ASM is totally effective in eliminating collision risk. Measurements between zero and one reflect the percentage by which the SSM or ASM reduces the probability of a collision.

*FRA* means the Federal Railroad Administration.

*Grade Crossing Inventory Form* means the U.S. DOT National Highway-Rail Grade Crossing Inventory Form, FRA Form F6180.71. This form is available through the FRA's Office of Safety, or on FRA's Web site at <http://www.fra.dot.gov>.

*Intermediate Partial Quiet Zone* means a segment of a rail line within which is situated one or a number of consecutive public highway-rail grade crossings at which State statutes or local ordinances restricted the routine sounding of locomotive horns for a specified period of time during the evening or nighttime hours, or at which locomotive horns did not sound due to formal or informal agreements between the community and the railroad or railroads for a specified period of time during the evening and/or nighttime hours, and at which such statutes, ordinances or agreements were in place and enforced or observed as of

December 18, 2003, but not as of October 9, 1996.

*Intermediate Quiet Zone* means a segment of a rail line within which is situated one or a number of consecutive public highway-rail grade crossings at which State statutes or local ordinances restricted the routine sounding of locomotive horns, or at which locomotive horns did not sound due to formal or informal agreements between the community and the railroad or railroads, and at which such statutes, ordinances or agreements were in place and enforced or observed as of December 18, 2003, but not as of October 9, 1996.

*Locomotive* means a piece of on-track equipment other than hi-rail, specialized maintenance, or other similar equipment—

(1) With one or more propelling motors designed for moving other equipment;

(2) With one or more propelling motors designed to carry freight or passenger traffic or both; or

(3) Without propelling motors but with one or more control stands.

*Locomotive audible warning device* means a horn, whistle, siren, or bell affixed to a locomotive that is capable of producing an audible signal.

*Locomotive horn* means a locomotive air horn, steam whistle, or similar audible warning device (see 49 CFR 229.129) mounted on a locomotive or control cab car. The terms "locomotive horn", "train whistle", "locomotive whistle", and "train horn" are used interchangeably in the railroad industry. For purposes of this part, locomotive horns used in rapid transit operations must be suitable for street usage and/or designed in accordance with State law requirements.

*Median* means the portion of a divided highway separating the travel ways for traffic in opposite directions.

*MUTCD* means the Manual on Uniform Traffic Control Devices published by the Federal Highway Administration.

*Nationwide Significant Risk Threshold* means a number reflecting a measure of risk, calculated on a nationwide basis, which reflects the average level of risk to the motoring public at public highway-rail grade crossings equipped with flashing lights and gates and at which locomotive horns are sounded. For purposes of this rule, a risk level above the Nationwide Significant Risk Threshold represents a significant risk with respect to loss of life or serious personal injury. The Nationwide Significant Risk Threshold is calculated in accordance with the procedures in appendix D of this part.



Unless otherwise indicated, references in this part to the Nationwide Significant Risk Threshold reflect its level as last published by FRA in the **Federal Register**.

*New Partial Quiet Zone* means a segment of a rail line within which is situated one or a number of consecutive public highway-rail crossings at which locomotive horns are not routinely sounded between the hours of 10 p.m. and 7 a.m., but are routinely sounded during the remaining portion of the day, and which does not qualify as a Pre-Rule Partial Quiet Zone or an Intermediate Partial Quiet Zone.

*New Quiet Zone* means a segment of a rail line within which is situated one or a number of consecutive public highway-rail grade crossings at which routine sounding of locomotive horns is restricted pursuant to this part and which does not qualify as either a Pre-Rule Quiet Zone or Intermediate Quiet Zone.

*Non-traversable curb* means a highway curb designed to discourage a motor vehicle from leaving the roadway. Non-traversable curbs are used at locations where highway speeds do not exceed 40 miles per hour and are at least six inches high. Additional design specifications are determined by the standard traffic design specifications used by the governmental entity constructing the curb.

*Partial Quiet Zone* means a segment of a rail line within which is situated one or a number of consecutive public highway-rail grade crossings at which locomotive horns are not routinely sounded for a specified period of time during the evening and/or nighttime hours.

*Pedestrian grade crossing* means, for purposes of this part, a separate designed sidewalk or pathway where pedestrians, but not vehicles, cross railroad tracks. Sidewalk crossings contiguous with, or separate but adjacent to, public highway-rail grade crossings are presumed to be part of the public highway-rail grade crossing and are not considered pedestrian grade crossings.

*Power-out indicator* means a device which is capable of indicating to trains approaching a grade crossing equipped with an active warning system whether commercial electric power is activating the warning system at that crossing. This term includes remote health monitoring of grade crossing warning systems if such monitoring system is equipped to indicate power status.

*Pre-existing Modified Supplementary Safety Measure* (Pre-existing Modified SSM) means a safety system or procedure that is listed in appendix A

to this Part, but is not fully compliant with the standards set forth therein, which was installed before December 18, 2003 by the appropriate traffic control or law enforcement authority responsible for safety at the highway-rail grade crossing. The calculation of risk reduction credit for pre-existing modified SSMs is addressed in appendix B of this part.

*Pre-existing Supplementary Safety Measure* (Pre-existing SSM) means a safety system or procedure established in accordance with this part before December 18, 2003 which was provided by the appropriate traffic control or law enforcement authority responsible for safety at the highway-rail grade crossing. These safety measures must fully comply with the SSM requirements set forth in appendix A of this part. The calculation of risk reduction credit for qualifying pre-existing SSMs is addressed in appendix A.

*Pre-Rule Partial Quiet Zone* means a segment of a rail line within which is situated one or a number of consecutive public highway-rail crossings at which State statutes or local ordinances restricted the routine sounding of locomotive horns for a specified period of time during the evening and/or nighttime hours, or at which locomotive horns did not sound due to formal or informal agreements between the community and the railroad or railroads for a specified period of time during the evening and/or nighttime hours, and at which such statutes, ordinances or agreements were in place and enforced or observed as of October 9, 1996 and on December 18, 2003.

*Pre-Rule Quiet Zone* means a segment of a rail line within which is situated one or a number of consecutive public highway-rail crossings at which State statutes or local ordinances restricted the routine sounding of locomotive horns, or at which locomotive horns did not sound due to formal or informal agreements between the community and the railroad or railroads, and at which such statutes, ordinances or agreements were in place and enforced or observed as of October 9, 1996 and on December 18, 2003.

*Private highway-rail grade crossing* means, for purposes of this part, a highway-rail grade crossing which is not a public highway-rail grade crossing.

*Public authority* means the public entity responsible for traffic control or law enforcement at the public highway-rail grade or pedestrian crossing.

*Public highway-rail grade crossing* means, for purposes of this part, a location where a public highway, road, or street, including associated sidewalks

or pathways, crosses one or more railroad tracks at grade. If a public authority maintains the roadway on both sides of the crossing, the crossing is considered a public crossing for purposes of this part.

*Quiet zone* means a segment of a rail line, within which is situated one or a number of consecutive public highway-rail crossings at which locomotive horns are not routinely sounded.

*Quiet Zone Risk Index* means a measure of risk to the motoring public which reflects the Crossing Corridor Risk Index for a quiet zone, after adjustment to account for increased risk due to lack of locomotive horn use at the crossings within the quiet zone (if horns are presently sounded at the crossings) and reduced risk due to implementation, if any, of SSMs and ASMs with the quiet zone. The calculation of the Quiet Zone Risk Index, which is explained in appendix D of this part, does not differ for partial quiet zones.

*Railroad* means any form of non-highway ground transportation that runs on rails or electromagnetic guideways and any entity providing such transportation, including:

- (1) Commuter or other short-haul railroad passenger service in a metropolitan or suburban area and commuter railroad service that was operated by the Consolidated Rail Corporation on January 1, 1979; and
- (2) High speed ground transportation systems that connect metropolitan areas, without regard to whether those systems use new technologies not associated with traditional railroads; but does not include rapid transit operations in an urban area that are not connected to the general railroad system of transportation.

*Recognized State agency* means, for purposes of this part, a State agency, responsible for highway-rail grade crossing safety or highway and road safety, that has applied for and been approved by FRA as a participant in the quiet zone development process.

*Relevant collision* means a collision at a highway-rail grade crossing between a train and a motor vehicle, excluding the following: a collision resulting from an activation failure of an active grade crossing warning system; a collision in which there is no driver in the motor vehicle; or a collision in which the highway vehicle struck the side of the train beyond the fourth locomotive unit or rail car. With respect to Pre-Rule Partial Quiet Zones, a relevant collision shall not include collisions that occur during the time period within which the locomotive horn is routinely sounded.

*Risk Index With Horns* means a measure of risk to the motoring public when locomotive horns are routinely sounded at every public highway-rail grade crossing within a quiet zone. In Pre-Rule Quiet Zones and Pre-Rule Partial Quiet Zones, the Risk Index With Horns is determined by adjusting the Crossing Corridor Risk Index to account for the decreased risk that would result if locomotive horns were routinely sounded at each public highway-rail grade crossing.

*Supplementary safety measure (SSM)* means a safety system or procedure established in accordance with this part which is provided by the appropriate traffic control authority or law enforcement authority responsible for safety at the highway-rail grade crossing, that is determined by the Associate Administrator to be an effective substitute for the locomotive horn in the prevention of highway-rail casualties. Appendix A of this part lists such SSMs.

*Waiver* means a temporary or permanent modification of some or all of the requirements of this part as they apply to a specific party under a specific set of facts. Waiver does not refer to the process of establishing quiet zones or approval of quiet zones in accordance with the provisions of this part.

*Wayside horn* means a stationary horn located at a highway rail grade crossing, designed to provide, upon the approach of a locomotive or train, audible warning to oncoming motorists of the approach of a train.

**§ 222.11 What are the penalties for failure to comply with this regulation?**

Any person who violates any requirement of this part or causes the violation of any such requirement is subject to a civil penalty of least \$550 and not more than \$11,000 per violation, except that: Penalties may be assessed against individuals only for willful violations, and, where a grossly negligent violation or a pattern of repeated violations has created an imminent hazard of death or injury to persons, or has caused death or injury, a penalty not to exceed \$27,000 per violation may be assessed. Each day a violation continues shall constitute a separate offense. Any person who knowingly and willfully falsifies a record or report required by this part may be subject to criminal penalties under 49 U.S.C. 21311. Appendix G of this part contains a schedule of civil penalty amounts used in connection with this part.

**§ 222.13 Who is responsible for compliance?**

Any person, including but not limited to a railroad, contractor for a railroad, or a local or State governmental entity that performs any function covered by this part, must perform that function in accordance with this part.

**§ 222.15 How does one obtain a waiver of a provision of this regulation?**

(a) Except as provided in paragraph (b) of this section, two parties must jointly file a petition (request) for a waiver. They are the railroad owning or controlling operations over the railroad tracks crossing the public highway-rail grade crossing and the public authority which has jurisdiction over the roadway crossing the railroad tracks.

(b) If the railroad and the public authority cannot reach agreement to file a joint petition, either party may file a request for a waiver; however, the filing party must specify in its petition the steps it has taken in an attempt to reach agreement with the other party, and explain why applying the requirement that a joint submission be made in that instance would not be likely to contribute significantly to public safety. If the Associate Administrator determines that applying the requirement for a jointly filed submission to that particular petition would not be likely to significantly contribute to public safety, the Associate Administrator shall waive the requirement for joint submission and accept the petition for consideration. The filing party must also provide the other party with a copy of the petition filed with FRA.

(c) Each petition for waiver must be filed in accordance with 49 CFR part 211.

(d) If the Administrator finds that a waiver of compliance with a provision of this part is in the public interest and consistent with the safety of highway and railroad users, the Administrator may grant the waiver subject to any conditions the Administrator deems necessary.

**§ 222.17 How can a State agency become a recognized State agency?**

(a) Any State agency responsible for highway-rail grade crossing safety and/or highway and road safety may become a recognized State agency by submitting an application to the Associate Administrator that contains:

- (1) A detailed description of the proposed scope of involvement in the quiet zone development process;
- (2) The name, address, and telephone number of the person(s) who may be contacted to discuss the State agency application; and

(3) A statement from State agency counsel which affirms that the State agency is authorized to undertake the responsibilities proposed in its application.

(b) The Associate Administrator will approve the application if, in the Associate Administrator's judgment, the proposed scope of State agency involvement will facilitate safe and effective quiet zone development. The Associate Administrator may include in any decision of approval such conditions as he/she deems necessary and appropriate.

**Subpart B—Use of Locomotive Horns**

**§ 222.21 When must a locomotive horn be used?**

(a) Except as provided in this part, the locomotive horn on the lead locomotive of a train, lite locomotive consist, individual locomotive or lead cab car shall be sounded when such locomotive or lead cab car is approaching a public highway-rail grade crossing. Sounding of the locomotive horn with two long blasts, one short blast and one long blast shall be initiated at a location so as to be in accordance with paragraph (b) of this section and shall be repeated or prolonged until the locomotive occupies the crossing. This pattern may be varied as necessary where crossings are spaced closely together.

(b)(1) Railroads to which this part applies shall comply with all the requirements contained in this paragraph (b) beginning on December 15, 2006. On and after June 24, 2005, but prior to December 15, 2006, a railroad shall, at its option, comply with this section or shall sound the locomotive horn in the manner required by State law, or in the absence of State law, in the manner required by railroad operating rules in effect immediately prior to June 24, 2005.

(2) Except as provided in paragraphs (b)(3) and (d) of this section, or when the locomotive horn is defective and the locomotive is being moved for repair consistent with section 229.9 of this chapter, the locomotive horn shall begin to be sounded at least 15 seconds, but no more than 20 seconds, before the locomotive enters the crossing. It shall not constitute a violation of this section if, acting in good faith, a locomotive engineer begins sounding the locomotive horn not more than 25 seconds before the locomotive enters the crossing, if the locomotive engineer is unable to precisely estimate the time of arrival of the train at the crossing for whatever reason.

(3) Trains, locomotive consists and individual locomotives traveling at

speeds in excess of 60 mph shall not begin sounding the horn more than one-quarter mile (1,320 feet) in advance of the nearest public highway-rail grade crossing, even if the advance warning provided by the locomotive horn will be less than 15 seconds in duration.

(c) As stated in § 222.3(c) of this part, this section does not apply to any Chicago Region highway-rail grade crossing at which railroads were excused from sounding the locomotive horn by the Illinois Commerce Commission, and where railroads did not sound the horn, as of December 18, 2003.

(d) Trains, locomotive consists and individual locomotives that have stopped in close proximity to a public highway-rail grade crossing may approach the crossing and sound the locomotive horn for less than 15 seconds before the locomotive enters the highway-rail grade crossing, if the locomotive engineer is able to determine that the public highway-rail grade crossing is not obstructed and either:

(1) The public highway-rail grade crossing is equipped with automatic flashing lights and gates and the gates are fully lowered; or

(2) There are no conflicting highway movements approaching the public highway-rail grade crossing.

(e) Where State law requires the sounding of a locomotive audible warning device other than the locomotive horn at public highway-rail grade crossings, that locomotive audible warning device shall be sounded in accordance with paragraphs (b) and (d) of this section.

**§ 222.23 How does this regulation affect sounding of a horn during an emergency or other situations?**

(a)(1) Notwithstanding any other provision of this part, a locomotive engineer may sound the locomotive horn to provide a warning to animals, vehicle operators, pedestrians, trespassers or crews on other trains in an emergency situation if, in the locomotive engineer's sole judgment, such action is appropriate in order to prevent imminent injury, death, or property damage.

(2) Notwithstanding any other provision of this part, including provisions addressing the establishment of a quiet zone, limits on the length of time in which a horn may be sounded, or installation of wayside horns within quiet zones, this part does not preclude the sounding of locomotive horns in emergency situations, nor does it impose a legal duty to sound the locomotive horn in such situations.

(b) Nothing in this part restricts the use of the locomotive horn in the following situations:

(1) When a wayside horn is malfunctioning;

(2) When active grade crossing warning devices have malfunctioned and use of the horn is required by one of the following sections of this chapter: §§ 234.105, 234.106, or 234.107;

(3) When grade crossing warning systems are temporarily out of service during inspection, maintenance, or testing of the system; or

(4) When SSMs, modified SSMs or engineering SSMs no longer comply with the requirements set forth in appendix A of this part or the conditions contained within the Associate Administrator's decision to approve the quiet zone in accordance with section 222.39(b) of this part.

(c) Nothing in this part restricts the use of the locomotive horn for purposes other than highway-rail crossing safety (e.g., to announce the approach of a train to roadway workers in accordance with a program adopted under part 214 of this chapter, or where required for other purposes under railroad operating rules).

**§ 222.25 How does this rule affect private highway-rail grade crossings?**

This rule does not require the routine sounding of locomotive horns at private highway-rail grade crossings. However, where State law requires the sounding of a locomotive horn at private highway-rail grade crossings, the locomotive horn shall be sounded in accordance with § 222.21 of this part. Where State law requires the sounding of a locomotive audible warning device other than the locomotive horn at private highway-rail grade crossings, that locomotive audible warning device shall be sounded in accordance with §§ 222.21(b) and (d) of this part.

(a) Private highway-rail grade crossings located within the boundaries of a quiet zone must be included in the quiet zone.

(b)(1) Private highway-rail grade crossings that are located in New Quiet Zones or New Partial Quiet Zones and allow access to the public, or which provide access to active industrial or commercial sites, must be evaluated by a diagnostic team and equipped or treated in accordance with the recommendations of such diagnostic team.

(2) The public authority shall provide the State agency responsible for grade crossing safety and all affected railroads an opportunity to participate in the diagnostic team review of private highway-rail grade crossings.

(c)(1) At a minimum, each approach to every private highway-rail grade crossing within a New Quiet Zone or New Partial Quiet Zone shall be marked by a crosshuck and a "STOP" sign, which are compliant with MUTCD standards unless otherwise prescribed by State law, and shall be equipped with advance warning signs in compliance with § 222.35(c) of this part.

(2) At a minimum, each approach to every private highway-rail grade crossing within a Pre-Rule Quiet Zone or Pre-Rule Partial Quiet Zone shall, by June 24, 2008, be marked by a crossbuck and a "STOP" sign, which are compliant with MUTCD standards unless otherwise prescribed by State law, and shall be equipped with advance warning signs in compliance with § 222.35(c) of this part.

**§ 222.27 How does this rule affect pedestrian grade crossings?**

This rule does not require the routine sounding of locomotive horns at pedestrian grade crossings. However, where State law requires the sounding of a locomotive horn at pedestrian grade crossings, the locomotive horn shall be sounded in accordance with § 222.21 of this part. Where State law requires the sounding of a locomotive audible warning device other than the locomotive horn at pedestrian grade crossings, that locomotive audible warning device shall be sounded in accordance with §§ 222.21(b) and (d) of this part.

(a) Pedestrian grade crossings located within the boundaries of a quiet zone must be included in the quiet zone.

(h) Pedestrian grade crossings that are located in New Quiet Zones or New Partial Quiet Zones must be evaluated by a diagnostic team and equipped or treated in accordance with the recommendations of such diagnostic team.

(c) The public authority shall provide the State agency responsible for grade crossing safety and all affected railroads an opportunity to participate in diagnostic team reviews of pedestrian grade crossings.

(d) *Advance warning signs.* (1) Each approach to every pedestrian grade crossing within a New Quiet Zone shall be equipped with a sign that advises the pedestrian that train horns are not sounded at the crossing. Such sign shall conform to the standards contained in the MUTCD.

(2) Each approach to every pedestrian grade crossing within a New Partial Quiet Zone shall be equipped with a sign that advises the pedestrian that train horns are not sounded at the crossing or that train horns are not

sounded at the crossing between the hours of 10 p.m. and 7 a.m., whichever is applicable. Such sign shall conform to the standards contained in the MUTCD.

(3) Each approach to every pedestrian grade crossing within a Pre-Rule Quiet Zone shall be equipped by June 24, 2008 with a sign that advises the pedestrian that train horns are not sounded at the crossing. Such sign shall conform to the standards contained in the MUTCD.

(4) Each approach to every pedestrian grade crossing within a Pre-Rule Partial Quiet Zone shall be equipped by June 24, 2008 with a sign that advises the pedestrian that train horns are not sounded at the crossing or that train horns are not sounded at the crossing for a specified period of time, whichever is applicable. Such sign shall conform to the standards contained in the MUTCD.

### Subpart C—Exceptions to the Use of the Locomotive Horn

#### § 222.31 [Reserved]

#### Silenced Horns at Individual Crossings

##### § 222.33 Can locomotive horns be silenced at an individual public highway-rail grade crossing which is not within a quiet zone?

(a) A railroad operating over an individual public highway-rail crossing may, at its discretion, cease the sounding of the locomotive horn if the locomotive speed is 15 miles per hour or less and train crew members, or appropriately equipped flaggers, as defined in 49 CFR 234.5, flag the crossing to provide warning of approaching trains to motorists.

(b) This section does not apply where active grade crossing warning devices have malfunctioned and use of the horn is required by 49 CFR 234.105, 234.106, or 234.107.

#### Silenced Horns at Groups of Crossings—Quiet Zones

##### § 222.35 What are the minimum requirements for quiet zones?

The following requirements apply to quiet zones established in conformity with this part.

(a) *Minimum length.* (1)(i) Except as provided in paragraph (a)(1)(ii) of this section, the minimum length of a New Quiet Zone or New Partial Quiet Zone established under this part shall be one-half mile along the length of railroad right-of-way.

(ii) The one-half mile minimum length requirement shall be waived for any New Quiet Zone or New Partial Quiet Zone that is added onto an existing quiet zone, provided there is no public highway-rail grade crossing at which locomotive horns are routinely sounded within one-half mile of the

New Quiet Zone or New Partial Quiet Zone.

(iii) New Quiet Zones and New Partial Quiet Zones established along the same rail line within a single political jurisdiction shall be separated by at least one public highway-rail grade crossing, unless a New Quiet Zone or New Partial Quiet Zone is being added onto an existing quiet zone.

(2)(i) The length of a Pre-Rule Quiet Zone or Pre-Rule Partial Quiet Zone may continue unchanged from that which existed as of October 9, 1996.

(ii) With the exception of combining adjacent Pre-Rule Quiet Zones or Pre-Rule Partial Quiet Zones, the addition of any public highway-rail grade crossing to a Pre-Rule Quiet Zone or Pre-Rule Partial Quiet Zone shall end the grandfathered status of that quiet zone and transform it into a New Quiet Zone or New Partial Quiet Zone that must comply with all requirements applicable to New Quiet Zones and New Partial Quiet Zones.

(iii) The deletion of any public highway-rail grade crossing from a Pre-Rule Quiet Zone or Pre-Rule Partial Quiet Zone, with the exception of a grade separation or crossing closure, must result in a quiet zone of at least one-half mile in length in order to retain Pre-Rule Quiet Zone or Pre-Rule Partial Quiet Zone status.

(3) A quiet zone may include grade crossings on a segment of rail line crossing more than one political jurisdiction.

(b) *Active grade crossing warning devices.* (1) Each public highway-rail grade crossing in a New Quiet Zone established under this part must be equipped, no later than the quiet zone implementation date, with active grade crossing warning devices comprising both flashing lights and gates which control traffic over the crossing and that conform to the standards contained in the MUTCD. Such warning devices shall be equipped with constant warning time devices, if reasonably practical, and power-out indicators.

(2) With the exception of public highway-rail grade crossings that will be temporarily closed in accordance with appendix A of this part, each public highway-rail grade crossing in a New Partial Quiet Zone established under this part must be equipped, no later than the quiet zone implementation date, with active grade crossing warning devices comprising both flashing lights and gates which control traffic over the crossing and that conform to the standards contained in the MUTCD. Such warning devices shall be equipped with constant warning time devices, if

reasonably practical, and power-out indicators.

(3) Pre-Rule Quiet Zones and Pre-Rule Partial Quiet Zones must retain, and may upgrade, the grade crossing safety warning system which existed as of December 18, 2003. Any upgrade involving the installation or renewal of an automatic warning device system shall include constant warning time devices, where reasonably practical, and power-out indicators. In no event may the grade crossing safety warning system, which existed as of December 18, 2003, be downgraded. Risk reduction resulting from upgrading to flashing lights or gates may be credited in calculating the Quiet Zone Risk Index.

(c) *Advance warning signs.* (1) Each highway approach to every public and private highway-rail grade crossing within a New Quiet Zone shall be equipped with an advance warning sign that advises the motorist that train horns are not sounded at the crossing. Such sign shall conform to the standards contained in the MUTCD.

(2) Each highway approach to every public and private highway-rail grade crossing within a New Partial Quiet Zone shall be equipped with an advance warning sign that advises the motorist that train horns are not sounded at the crossing or that train horns are not sounded at the crossing between the hours of 10 p.m. and 7 a.m., whichever is applicable. Such sign shall conform to the standards contained in the MUTCD.

(3) Each highway approach to every public and private highway-rail grade crossing within a Pre-Rule Quiet Zone shall be equipped by June 24, 2008 with an advance warning sign that advises the motorist that train horns are not sounded at the crossing. Such sign shall conform to the standards contained in the MUTCD.

(4) Each highway approach to every public and private highway-rail grade crossing within a Pre-Rule Partial Quiet Zone shall be equipped by June 24, 2008 with an advance warning sign that advises the motorist that train horns are not sounded at the crossing or that train horns are not sounded at the crossing for a specified period of time, whichever is applicable. Such sign shall conform to the standards contained in the MUTCD.

(5) This paragraph (c) does not apply to public and private highway-rail grade crossings equipped with wayside horns that conform to the requirements set forth in § 222.59 and Appendix E of this part.

(d) *Bells.* (1) Each public highway-rail grade crossing in a New Quiet Zone or New Partial Quiet Zone that is subjected to pedestrian traffic and equipped with

one or more automatic bells shall retain those bells in working condition.

(2) Each public highway-rail grade crossing in a Pre-Rule Quiet Zone or Pre-Rule Partial Quiet Zone that is subjected to pedestrian traffic and equipped with one or more automatic bells shall retain those bells in working condition.

(e) All private highway-rail grade crossings within the quiet zone must be treated in accordance with this section and § 222.25 of this part.

(f) All pedestrian grade crossings within a quiet zone must be treated in accordance with § 222.27 of this part.

(g) All public highway-rail grade crossings within the quiet zone must be in compliance with the requirements of the MUTCD.

#### § 222.37 Who may establish a quiet zone?

(a) A public authority may establish quiet zones that are consistent with the provisions of this part. If a proposed quiet zone includes public highway-rail grade crossings under the authority and control of more than one public authority (such as a county road and a State highway crossing the railroad tracks at different crossings), both public authorities must agree to establishment of the quiet zone, and must jointly, or by delegation provided to one of the authorities, take such actions as are required by this part.

(b) A public authority may establish quiet zones irrespective of State laws covering the subject matter of sounding or silencing locomotive horns at public highway-rail grade crossings. Nothing in this part, however, is meant to affect any other applicable role of State agencies or the Federal Highway Administration in decisions regarding funding or construction priorities for grade crossing safety projects, selection of traffic control devices, or engineering standards for roadways or traffic control devices.

(c) A State agency may provide administrative and technical services to public authorities by advising them, acting on their behalf, or acting as a central contact point in dealing with FRA; however, any public authority eligible to establish a quiet zone under this part may do so.

#### § 222.38 Can a quiet zone be created in the Chicago Region?

Public authorities that are eligible to establish quiet zones under this part may create New Quiet Zones or New Partial Quiet Zones in the Chicago Region, provided the New Quiet Zone or New Partial Quiet Zone does not include any highway-rail grade crossing described in § 222.3(c) of this part.

#### § 222.39 How is a quiet zone established?

(a) *Public authority designation.* This paragraph (a) describes how a quiet zone may be designated by a public authority without the need for formal application to, and approval by, FRA. If a public authority complies with either paragraph (a)(1), (a)(2), or (a)(3) of this section, and complies with the information and notification provisions of § 222.43 of this part, a public authority may designate a quiet zone without the necessity for FRA review and approval.

(1) A quiet zone may be established by implementing, at every public highway-rail grade crossing within the quiet zone, one or more SSMs identified in appendix A of this part.

(2) A quiet zone may be established if the Quiet Zone Risk Index is at, or below, the Nationwide Significant Risk Threshold, as follows:

(i) If the Quiet Zone Risk Index is already at, or below, the Nationwide Significant Risk Threshold without being reduced by implementation of SSMs; or

(ii) If SSMs are implemented which are sufficient to reduce the Quiet Zone Risk Index to a level at, or below, the Nationwide Significant Risk Threshold.

(3) A quiet zone may be established if SSMs are implemented which are sufficient to reduce the Quiet Zone Risk Index to a level at or below the Risk Index With Horns.

(b) *Public authority application to FRA.* (1) A public authority may apply to the Associate Administrator for approval of a quiet zone that does not meet the standards for public authority designation under paragraph (a) of this section, but in which it is proposed that one or more safety measures be implemented. Such proposed quiet zone may include only ASMs, or a combination of ASMs and SSMs at various crossings within the quiet zone. Note that an engineering improvement which does not fully comply with the requirements for an SSM under appendix A of this part, is considered to be an ASM. The public authority's application must:

(i) Contain an accurate, complete and current Grade Crossing Inventory Form for each public, private and pedestrian grade crossing within the proposed quiet zone;

(ii) Contain sufficient detail concerning the present safety measures at each public, private and pedestrian grade crossing proposed to be included in the quiet zone to enable the Associate Administrator to evaluate their effectiveness;

(iii) Contain detailed information about diagnostic team reviews of any

crossing within the proposed quiet zone, including a membership list and a list of recommendations made by the diagnostic team;

(iv) Contain a statement describing efforts taken by the public authority to address comments submitted by each railroad operating the public highway-rail grade crossings within the quiet zone, the State agency responsible for highway and road safety, and the State agency responsible for grade crossing safety in response to the Notice of Intent. This statement shall also list any objections to the proposed quiet zone that were raised by the railroad(s) and State agencies;

(v) Contain detailed information as to which safety improvements are proposed to be implemented at each public, private, or pedestrian grade crossing within the proposed quiet zone;

(vi) Contain a commitment to implement the proposed safety improvements within the proposed quiet zone; and

(vii) Demonstrate through data and analysis that the proposed implementation of these measures will reduce the Quiet Zone Risk Index to a level at, or below, either the Risk Index With Horns or the Nationwide Significant Risk Threshold.

(2) If the proposed quiet zone contains newly established public or private highway-rail grade crossings, the public authority's application for approval must also include five-year projected vehicle and rail traffic counts for each newly established grade crossing;

(3) *60-day comment period.* (i) The public authority application for FRA approval of the proposed quiet zone shall be provided, by certified mail, return receipt requested, to: all railroads operating over the public highway-rail grade crossings within the quiet zone; the highway or traffic control or law enforcement authority having jurisdiction over vehicular traffic at grade crossings within the quiet zone; the landowner having control over any private highway-rail grade crossings within the quiet zone; the State agency responsible for highway and road safety; the State agency responsible for grade crossing safety; and the Associate Administrator.

(ii) Except as provided in paragraph (b)(3)(iii) of this section, any party that receives a copy of the public authority application may submit comments on the public authority application to the Associate Administrator during the 60-day period after the date on which the public authority application was mailed.

(iii) If the public authority application for FRA approval contains written statements from each railroad operating over the public highway-rail grade crossings within the quiet zone, the highway or traffic control authority or law enforcement authority having jurisdiction over vehicular traffic at grade crossings within the quiet zone, the State agency responsible for grade crossing safety, and the State agency responsible for highway and road safety stating that the railroad, vehicular traffic authority and State agencies have waived their rights to provide comments on the public authority application, the 60-day comment period under paragraph (b)(3)(ii) of this section shall be waived.

(4)(i) After reviewing any comments submitted under paragraph (b)(3)(ii) of this section, the Associate Administrator will approve the quiet zone if, in the Associate Administrator's judgment, the public authority is in compliance with paragraphs (b)(1) and (b)(2) of this section and has satisfactorily demonstrated that the SSMs and ASMs proposed by the public authority result in a Quiet Zone Risk Index that is either:

(A) At or below the Risk Index With Horns or

(B) At or below the Nationwide Significant Risk Threshold.

(ii) The Associate Administrator may include in any decision of approval such conditions as may be necessary to ensure that the proposed safety improvements are effective. If the Associate Administrator does not approve the quiet zone, the Associate Administrator will describe, in the decision, the basis upon which the decision was made. Decisions issued by the Associate Administrator on quiet zone applications shall be provided to all parties listed in paragraph (b)(3)(i) of this section and may be reviewed as provided in §§ 222.57(b) and (d) of this part.

(c) Appendix C of this part contains guidance on how to create a quiet zone.

**§ 222.41 How does this rule affect Pre-Rule Quiet Zones and Pre-Rule Partial Quiet Zones?**

(a) *Pre-Rule Quiet Zones that will be established by automatic approval.* (1) A Pre-Rule Quiet Zone may be established by automatic approval and remain in effect, subject to § 222.51, if the Pre-Rule Quiet Zone is in compliance with §§ 222.35 (minimum requirements for quiet zones) and 222.43 of this part (notice and information requirements) and:

(i) The Pre-Rule Quiet Zone has at every public highway-rail grade crossing

within the quiet zone one or more SSMs identified in appendix A of this part; or

(ii) The Quiet Zone Risk Index is at, or below, the Nationwide Significant Risk Threshold, as last published by FRA in the **Federal Register**; or

(iii) The Quiet Zone Risk Index is above the Nationwide Significant Risk Threshold, as last published by FRA in the **Federal Register**, but less than twice the Nationwide Significant Risk Threshold and there have been no relevant collisions at any public highway-rail grade crossing within the quiet zone since April 27, 2000 or

(iv) The Quiet Zone Risk Index is at, or below, the Risk Index with Horns.

(2) The public authority shall provide Notice of Quiet Zone Establishment, in accordance with § 222.43 of this part, no later than December 24, 2005.

(b) *Pre-Rule Partial Quiet Zones that will be established by automatic approval.* (1) A Pre-Rule Partial Quiet Zone may be established by automatic approval and remain in effect, subject to § 222.51, if the Pre-Rule Partial Quiet Zone is in compliance with §§ 222.35 (minimum requirements for quiet zones) and 222.43 of this part (notice and information requirements) and:

(i) The Pre-Rule Partial Quiet Zone has at every public highway-rail grade crossing within the quiet zone one or more SSMs identified in appendix A of this part; or

(ii) The Quiet Zone Risk Index is at, or below, the Nationwide Significant Risk Threshold, as last published by FRA in the **Federal Register**; or

(iii) The Quiet Zone Risk Index is above the Nationwide Significant Risk Threshold, as last published by FRA in the **Federal Register**, but less than twice the Nationwide Significant Risk Threshold and there have been no relevant collisions at any public highway-rail grade crossing within the quiet zone since April 27, 2000. With respect to Pre-Rule Partial Quiet Zones, collisions that occurred during the time period within which the locomotive horn was routinely sounded shall not be considered "relevant collisions"; or

(iv) The Quiet Zone Risk Index is at, or below, the Risk Index with Horns.

(2) The public authority shall provide Notice of Quiet Zone Establishment, in accordance with § 222.43 of this part, no later than December 24, 2005.

(c) *Pre-Rule Quiet Zones and Pre-Rule Partial Quiet Zones that will not be established by automatic approval.* (1) If a Pre-Rule Quiet Zone or Pre-Rule Partial Quiet Zone will not be established by automatic approval under paragraph (a) or (b) of this section, existing restrictions may, at the public authority's discretion, remain in

place until June 24, 2008, if a Notice of Quiet Zone Continuation is provided in accordance with § 222.43 of this part.

(2)(i) Existing restrictions on the routine sounding of the locomotive horn may remain in place until June 24, 2010, if:

(A) Notice of Intent is mailed, in accordance with § 222.43 of this part, by February 24, 2008; and

(B) A detailed plan for quiet zone improvements is filed with the Associate Administrator by June 24, 2008. The detailed plan shall include a detailed explanation of, and timetable for, the safety improvements that will be implemented at each public, private and pedestrian grade crossing located within the Pre-Rule Quiet Zone or Pre-Rule Partial Quiet Zone which are necessary to comply with §§ 222.25, 222.27, 222.35 and 222.39 of this part.

(ii) In the event that the safety improvements planned for the quiet zone require approval of FRA under § 222.39(b) of this part, the public authority should apply for such approval prior to December 24, 2007, to ensure that FRA has ample time in which to review such application prior to the end of the extension period.

(3) Locomotive horn restrictions may continue for an additional three years beyond June 24, 2010, if:

(i) Prior to June 24, 2008, the appropriate State agency provides to the Associate Administrator: A comprehensive State-wide implementation plan and funding commitment for implementing improvements at Pre-Rule Quiet Zones and Pre-Rule Partial Quiet Zones which, when implemented, would enable them to qualify as quiet zones under this part; and

(ii) Prior to June 24, 2009, either safety improvements are initiated at a portion of the crossings within the quiet zone, or the appropriate State agency has participated in quiet zone improvements in one or more Pre-Rule Quiet Zones or Pre-Rule Partial Quiet Zones elsewhere within the State.

(4) A public authority may establish a Pre-Rule Quiet Zone or Pre-Rule Partial Quiet Zone upon compliance with:

(A) The Pre-Rule Quiet Zone or Pre-Rule Partial Quiet Zone requirements contained within §§ 222.25, 222.27, and 222.35 of this part;

(B) The quiet zone standards set forth in § 222.39 of this part; and

(C) All applicable notification and filing requirements contained within this paragraph (c) and § 222.43 of this part.

(d) *Pre-Rule Partial Quiet Zones that will be converted to 24-hour New Quiet Zones.* A Pre-Rule Partial Quiet Zone

may be converted into a 24-hour New Quiet Zone, if:

(1) The quiet zone is brought into compliance with the New Quiet Zone requirements set forth in §§ 222.25, 222.27, and 222.35 of this part;

(2) The quiet zone is brought into compliance with the quiet zone standards set forth in § 222.39 of this part; and

(3) The public authority complies with all applicable notification and filing requirements contained within this paragraph (c) and § 222.43 of this part.

**§ 222.42 How does this rule affect Intermediate Quiet Zones and Intermediate Partial Quiet Zones?**

(a)(1) Existing restrictions may, at the public authority's discretion, remain in place within the Intermediate Quiet Zone or Intermediate Partial Quiet Zone until June 24, 2006, if the public authority provides Notice of Quiet Zone Continuation, in accordance with § 222.43 of this part.

(2) A public authority may continue locomotive horn sounding restrictions beyond June 24, 2006 by establishing a New Quiet Zone or New Partial Quiet Zone. A public authority may establish a New Quiet Zone or New Partial Quiet Zone if:

(i) Notice of Intent is mailed, in accordance with § 222.43 of this part;

(ii) The quiet zone complies with the standards set forth in § 222.39 of this part;

(iii) The quiet zone complies with the New Quiet Zone standards set forth in §§ 222.25, 222.27, and 222.35 of this part;

(iv) Notice of Quiet Zone Establishment is mailed, in accordance with § 222.43 of this part, by June 3, 2006.

(b) *Conversion of Intermediate Partial Quiet Zones into 24-hour New Quiet Zones.* An Intermediate Partial Quiet Zone may be converted into a 24-hour New Quiet Zone if:

(1) Notice of Intent is mailed, in accordance with § 222.43 of this part;

(2) The quiet zone complies with the standards set forth in § 222.39 of this part;

(3) The quiet zone is brought into compliance with the New Quiet Zone requirements set forth in §§ 222.25, 222.27, and 222.35 of this part; and

(4) Notice of Quiet Zone Establishment is mailed, in accordance with § 222.43 of this part, by June 3, 2006.

**§ 222.43 What notices and other information are required to create or continue a quiet zone?**

(a)(1) The public authority shall provide written notice, by certified mail, return receipt requested, of its intent to create a New Quiet Zone or New Partial Quiet Zone under § 222.39 of this part or to implement new SSMS or ASMs within a Pre-Rule Quiet Zone or Pre-Rule Partial Quiet Zone under § 222.41(c) or (d) of this part. Such notification shall be provided to: All railroads operating over the public highway-rail grade crossings within the quiet zone; the State agency responsible for highway and road safety; and the State agency responsible for grade crossing safety.

(2) The public authority shall provide written notification, by certified mail, return receipt requested, to continue a Pre-Rule Quiet Zone or Pre-Rule Partial Quiet Zone under § 222.41 of this part or to continue an Intermediate Quiet Zone or Intermediate Partial Quiet Zone under § 222.42 of this part. Such notification shall be provided to: All railroads operating over the public highway-rail grade crossings within the quiet zone; the highway or traffic control or law enforcement authority having jurisdiction over vehicular traffic at grade crossings within the quiet zone; the landowner having control over any private highway-rail grade crossings within the quiet zone; the State agency responsible for highway and road safety; the State agency responsible for grade crossing safety; and the Associate Administrator.

(3) The public authority shall provide written notice, by certified mail, return receipt requested, of the establishment of a quiet zone under § 222.39 or 222.41 of this part. Such notification shall be provided to: All railroads operating over the public highway-rail grade crossings within the quiet zone; the highway or traffic control or law enforcement authority having jurisdiction over vehicular traffic at grade crossings within the quiet zone; the landowner having control over any private highway-rail grade crossings within the quiet zone; the State agency responsible for highway and road safety; the State agency responsible for grade crossing safety; and the Associate Administrator.

(b) *Notice of Intent.* (1) *Timing.* (i) The Notice of Intent shall be mailed at least 60 days before the mailing of the Notice of Quiet Zone Establishment, unless the public authority obtains written comments and/or "no-comment" statements from each railroad operating over public highway-rail grade crossings within the quiet zone, the State agency

responsible for grade crossing safety, and the State agency responsible for highway and road safety, in accordance with paragraph (b)(3)(ii) of this section.

(ii) The Notice of Intent shall be mailed no later than February 24, 2008 for all Pre-Rule Quiet Zones and Pre-Rule Partial Quiet Zones governed by §§ 222.41(c) and (d) of this part, in order to continue existing locomotive horn sounding restrictions beyond June 24, 2008 without interruption.

(2) *Required Contents.* The Notice of Intent shall include the following:

(i) A list of each public, private, and pedestrian grade crossing within the quiet zone, identified by both U.S. DOT National Highway-Rail Grade Crossing Inventory Number and street or highway name, if applicable.

(ii) A statement of the time period within which restrictions would be imposed on the routine sounding of the locomotive horn (i.e., 24 hours or from 10 p.m. until 7 a.m.).

(iii) A brief explanation of the public authority's tentative plans for implementing improvements within the proposed quiet zone.

(iv) The name and title of the person who will act as point of contact during the quiet zone development process and the manner in which that person can be contacted.

(v) A list of the names and addresses of each party that will receive notification in accordance with paragraph (a)(1) of this section.

(3) *60-day comment period.* (i) A party that receives a copy of the public authority's Notice of Intent may submit information or comments about the proposed quiet zone to the public authority during the 60-day period after the date on which the Notice of Intent was mailed.

(ii) The 60-day comment period established under paragraph (b)(3)(i) of this section may terminate when the public authority obtains from each railroad operating over public highway-rail grade crossings within the proposed quiet zone, the State agency responsible for grade crossing safety, and the State agency responsible for highway and road safety:

(A) Written comments; or

(B) Written statements that the railroad and State agency do not have any comments on the Notice of Intent ("no-comment statements").

(c) *Notice of Quiet Zone Continuation.*

(1) *Timing.* (i) In order to prevent the resumption of locomotive horn sounding on June 24, 2005, the Notice of Quiet Zone Continuation under § 222.41 or 222.42 of this part shall be served no later than June 3, 2005.

(ii) If the Notice of Quiet Zone Continuation under § 222.41 or 222.42 of this part is mailed after June 3, 2005, the Notice of Quiet Zone Continuation shall state on which date locomotive horn use at grade crossings within the quiet zone shall cease, but in no event shall that date be earlier than 21 days after the date of mailing.

(2) *Required Contents.* The Notice of Quiet Zone Continuation shall include the following:

(i) A list of each public, private, and pedestrian grade crossing within the quiet zone, identified by both U.S. DOT National Highway-Rail Grade Crossing Inventory Number and street or highway name.

(ii) A specific reference to the regulatory provision that provides the basis for quiet zone continuation, citing as appropriate, § 222.41 or 222.42 of this part.

(iii) A statement of the time period within which restrictions on the routine sounding of the locomotive horn will be imposed (i.e., 24 hours or nighttime hours only.)

(iv) An accurate and complete Grade Crossing Inventory Form for each public, private, and pedestrian grade crossing within the quiet zone that reflects conditions currently existing at the crossing.

(v) The name and title of the person responsible for monitoring compliance with the requirements of this part and the manner in which that person can be contacted.

(vi) A list of the names and addresses of each party that will receive notification in accordance with paragraph (a)(2) of this section.

(vii) A statement signed by the chief executive officer of each public authority participating in the continuation of the quiet zone, in which the chief executive officer certifies that the information submitted by the public authority is accurate and complete to the best of his/her knowledge and belief.

(d) *Notice of Quiet Zone Establishment.* (1) *Timing.* (i) The Notice of Quiet Zone Establishment shall provide the date upon which the quiet zone will be established, but in no event shall the date be earlier than 21 days after the date of mailing.

(ii) If the public authority was required to provide a Notice of Intent, in accordance with paragraph (a)(1) of this section, the Notice of Quiet Zone Establishment shall not be mailed less than 60 days after the date on which the Notice of Intent was mailed, unless the Notice of Quiet Zone Establishment contains a written statement affirming that written comments and/or "no-comment" statements have been

received from each railroad operating over public highway-rail grade crossings within the proposed quiet zone, the State agency responsible for grade crossing safety, and the State agency responsible for highway and road safety, in accordance with paragraph (b)(3)(ii) of this section.

(2) *Required contents.* The Notice of Quiet Zone Establishment shall include the following:

(i) A list of each public, private, and pedestrian grade crossing within the quiet zone, identified by both U.S. DOT National Highway-Rail Grade Crossing Inventory Number and street or highway name, if applicable.

(ii) A specific reference to the regulatory provision that provides the basis for quiet zone establishment, citing as appropriate, § 222.39(a)(1), 222.39(a)(2)(i), 222.39(a)(2)(ii), 222.39(a)(3), 222.39(b), 222.41(a)(1)(i), 222.41(a)(1)(ii), 222.41(a)(1)(iii), 222.41(a)(1)(iv), 222.41(b)(1)(i), 222.41(b)(1)(ii), 222.41(b)(1)(iii), or 222.41(b)(1)(iv) of this part.

(A) If the Notice contains a specific reference to § 222.39(a)(2)(i), 222.39(a)(2)(ii), 222.39(a)(3), 222.41(a)(1)(ii), 222.41(a)(1)(iii), 222.41(a)(1)(iv), 222.41(b)(1)(ii), 222.41(b)(1)(iii), or 222.41(b)(1)(iv) of this part, it shall include a copy of the FRA Web page that contains the quiet zone data upon which the public authority is relying (<http://www.fra.dot.gov/us/content/1337>).

(B) If the Notice contains a specific reference to § 222.39(b) of this part, it shall include a copy of FRA's notification of approval.

(iii) If a diagnostic team review was required under § 222.25 or 222.27 of this part, the Notice shall include a statement affirming that the State agency responsible for grade crossing safety and all affected railroads were provided an opportunity to participate in the diagnostic team review. The Notice shall also include a list of recommendations made by the diagnostic team.

(iv) A statement of the time period within which restrictions on the routine sounding of the locomotive horn will be imposed (i.e., 24 hours or from 10 p.m. until 7 a.m.).

(v) An accurate and complete Grade Crossing Inventory Form for each public, private, and pedestrian grade crossing within the quiet zone that reflects the conditions existing at the crossing before any new SSMs or ASMs were implemented.

(vi) An accurate, complete and current Grade Crossing Inventory Form for each public, private, and pedestrian grade crossing within the quiet zone

that reflects SSMs and ASMs in place upon establishment of the quiet zone. SSMs and ASMs that cannot be fully described on the Inventory Form shall be separately described.

(vii) If the public authority was required to provide a Notice of Intent, in accordance with paragraph (a)(1) of this section, the Notice of Quiet Zone Establishment shall contain a written statement affirming that the Notice of Intent was provided in accordance with paragraph (a)(1) of this section. This statement shall also state the date on which the Notice of Intent was mailed.

(viii) If the public authority was required to provide a Notice of Intent, in accordance with paragraph (a)(1) of this section, and the Notice of Intent was mailed less than 60 days before the mailing of the Notice of Quiet Zone Establishment, the Notice of Quiet Zone Establishment shall also contain a written statement affirming that written comments and/or "no-comment" statements have been received from each railroad operating over public highway-rail grade crossings within the proposed quiet zone, the State agency responsible for grade crossing safety, and the State agency responsible for highway and road safety, in accordance with paragraph (b)(3)(ii) of this section.

(ix) The name and title of the person responsible for monitoring compliance with the requirements of this part and the manner in which that person can be contacted.

(x) A list of the names and addresses of each party that shall be notified in accordance with paragraph (a)(3) of this section.

(xi) A statement signed by the chief executive officer of each public authority participating in the establishment of the quiet zone, in which the chief executive officer shall certify that the information submitted by the public authority is accurate and complete to the best of his/her knowledge and belief.

**§ 222.45 When is a railroad required to cease routine sounding of locomotive horns at crossings?**

On the date specified in a Notice of Quiet Zone Continuation or Notice of Quiet Zone Establishment that complies with the requirements set forth in § 222.43 of this part, a railroad shall refrain from, or cease, routine sounding of the locomotive horn at all public, private and pedestrian grade crossings identified in the Notice.

**§ 222.47 What periodic updates are required?**

(a) *Quiet zones with SSMs at each public crossing.* This paragraph



addresses quiet zones established pursuant to §§ 222.39(a)(1), 222.41(a)(1)(i), and 222.41(b)(1)(i) (quiet zones with an SSM implemented at every public crossing within the quiet zone) of this part. Between 4½ and 5 years after the date of the quiet zone establishment notice provided by the public authority under § 222.43 of this part, and between 4½ and 5 years after the last affirmation under this section, the public authority must:

(1) Affirm in writing to the Associate Administrator that the SSMs implemented within the quiet zone continue to conform to the requirements of appendix A of this part. Copies of such affirmation must be provided by certified mail, return receipt requested, to the parties identified in § 222.43(a)(3) of this part; and

(2) Provide to the Associate Administrator an up-to-date, accurate, and complete Grade Crossing Inventory Form for each public highway-rail grade crossing, private highway-rail grade crossing, and pedestrian crossing within the quiet zone.

(b) *Quiet zones which do not have a supplementary safety measure at each public crossing.* This paragraph addresses quiet zones established pursuant to §§ 222.39(a)(2) and (a)(3), § 222.39(h), §§ 222.41(a)(1)(ii), (a)(1)(iii), and (a)(1)(iv), and §§ 222.41(b)(1)(ii), (b)(1)(iii), and (b)(1)(iv) (quiet zones which do not have an SSM at every public crossing within the quiet zone) of this part. Between 2½ and 3 years after the date of the quiet zone establishment notice provided by the public authority under § 222.43 of this part, and between 2½ and 3 years after the last affirmation under this section, the public authority must:

(1) Affirm in writing to the Associate Administrator that all SSMs and ASMs implemented within the quiet zone continue to conform to the requirements of Appendices A and B of this part or the terms of the Quiet Zone approval. Copies of such notification must be provided to the parties identified in § 222.43(a)(3) of this part by certified mail, return receipt requested; and

(2) Provide to the Associate Administrator an up-to-date, accurate, and complete Grade Crossing Inventory Form for each public highway-rail grade crossing, private highway-rail grade crossing, and pedestrian grade crossing within the quiet zone.

#### § 222.49 Who may file Grade Crossing Inventory Forms?

(a) Grade Crossing Inventory Forms required to be filed with the Associate Administrator in accordance with §§ 222.39, 222.43 and 222.47 of this part

may be filed by the public authority if, for any reason, such forms are not timely submitted by the State and railroad.

(b) Within 30 days after receipt of a written request of the public authority, the railroad owning the line of railroad that includes public or private highway rail grade crossings within the quiet zone or proposed quiet zone shall provide to the State and public authority sufficient current information regarding the grade crossing and the railroad's operations over the grade crossing to enable the State and public authority to complete the Grade Crossing Inventory Form.

#### § 222.51 Under what conditions will quiet zone status be terminated?

(a) *New Quiet Zones—Annual risk review.* (1) FRA will annually calculate the Quiet Zone Risk Index for each quiet zone established pursuant to §§ 222.39(a)(2) and 222.39(b) of this part, and in comparison to the Nationwide Significant Risk Threshold. FRA will notify each public authority of the Quiet Zone Risk Index for the preceding calendar year. FRA will not conduct annual risk reviews for quiet zones established by having an SSM at every public crossing within the quiet zone or for quiet zones established by reducing the Quiet Zone Risk Index to the Risk Index With Horns.

(2) *Actions to be taken by public authority to retain quiet zone.* If the Quiet Zone Risk Index is above the Nationwide Significant Risk Threshold, the quiet zone will terminate six months from the date of receipt of notification from FRA that the Quiet Zone Risk Index exceeds the Nationwide Significant Risk Threshold, unless the public authority takes the following actions:

(i) Within six months after the date of receipt of notification from FRA that the Quiet Zone Risk Index exceeds the Nationwide Significant Risk Threshold, provide to the Associate Administrator a written commitment to lower the potential risk to the traveling public at the crossings within the quiet zone to a level at, or below, the Nationwide Significant Risk Threshold or the Risk Index With Horns. Included in the commitment statement shall be a discussion of the specific steps to be taken by the public authority to increase safety at the crossings within the quiet zone; and

(ii) Within three years after the date of receipt of notification from FRA that the Quiet Zone Risk Index exceeds the Nationwide Significant Risk Threshold, complete implementation of SSMs or ASMs sufficient to reduce the Quiet

Zone Risk Index to a level at, or below, the Nationwide Significant Risk Threshold, or the Risk Index With Horns, and receive approval from the Associate Administrator, under the procedures set forth in § 222.39(b) of this part, for continuation of the quiet zone. If the Quiet Zone Risk Index is reduced to the Risk Index With Horns, the quiet zone will be considered to have been established pursuant to § 222.39(a)(3) of this part and subsequent annual risk reviews will not be conducted for that quiet zone.

(iii) Failure to comply with paragraph (a)(2)(i) of this section shall result in the termination of the quiet zone six months after the date of receipt of notification from FRA that the Quiet Zone Risk Index exceeds the Nationwide Significant Risk Threshold. Failure to comply with paragraph (a)(2)(ii) of this section shall result in the termination of the quiet zone three years after the date of receipt of notification from FRA that the Quiet Zone Risk Index exceeds the Nationwide Significant Risk Threshold.

(b) *Pre-Rule Quiet Zones—Annual risk review.* (1) FRA will annually calculate the Quiet Zone Risk Index for each Pre-Rule Quiet Zone and Pre-Rule Partial Quiet Zone that qualified for automatic approval pursuant to §§ 222.41(a)(1)(ii), 222.41(a)(1)(iii), 222.41(b)(1)(ii), and 222.41(b)(1)(iii) of this part. FRA will notify each public authority of the Quiet Zone Risk Index for the preceding calendar year. FRA will also notify each public authority if a relevant collision occurred at a grade crossing within the quiet zone during the preceding calendar year.

(2) *Pre-Rule Quiet Zones and Pre-Rule Partial Quiet Zones authorized under §§ 222.41(a)(1)(ii) and 222.41(b)(1)(ii).* (i) If a Pre-Rule Quiet Zone or Pre-Rule Partial Quiet Zone originally qualified for automatic approval because the Quiet Zone Risk Index was at, or below, the Nationwide Significant Risk Threshold, the quiet zone may continue unchanged if the Quiet Zone Risk Index as last calculated by the FRA remains at, or below, the Nationwide Significant Risk Threshold.

(ii) If the Quiet Zone Risk Index as last calculated by FRA is above the Nationwide Significant Risk Threshold, but is lower than twice the Nationwide Significant Risk Threshold and no relevant collisions have occurred at crossings within the quiet zone within the five years preceding the annual risk review, then the quiet zone may continue as though it originally received automatic approval pursuant to § 222.41(a)(1)(iii) or 222.41(b)(1)(iii) of this part.

(iii) If the Quiet Zone Risk Index as last calculated by FRA is at, or above, twice the Nationwide Significant Risk Threshold, or if the Quiet Zone Risk Index is above the Nationwide Significant Risk Threshold, but is lower than twice the Nationwide Significant Risk Threshold and a relevant collision occurred at a crossing within the quiet zone within the preceding five calendar years, the quiet zone will terminate six months after the date of receipt of notification from FRA of the Nationwide Significant Risk Threshold level, unless the public authority takes the actions specified in paragraph (b)(4) of this section.

(3) *Pre-Rule Quiet Zones and Pre-Rule Partial Quiet Zones authorized under §§ 222.41(a)(1)(iii) and 222.41(b)(1)(iii).*  
 (i) If a Pre-Rule Quiet Zone or Pre-Rule Partial Quiet Zone originally qualified for automatic approval because the Quiet Zone Risk Index was above the Nationwide Significant Risk Threshold, but below twice the Nationwide Significant Risk Threshold, and no relevant collisions had occurred within the five-year qualifying period, the quiet zone may continue unchanged if the Quiet Zone Risk Index as last calculated by FRA remains below twice the Nationwide Significant Risk Threshold and no relevant collisions occurred at a public grade crossing within the quiet zone during the preceding calendar year.

(ii) If the Quiet Zone Risk Index as last calculated by FRA is at, or above, twice the Nationwide Significant Risk Threshold, or if a relevant collision occurred at a public grade crossing within the quiet zone during the preceding calendar year, the quiet zone will terminate six months after the date of receipt of notification from FRA that the Quiet Zone Risk Index is at, or exceeds twice the Nationwide Significant Risk Threshold or that a relevant collision occurred at a crossing within the quiet zone, unless the public authority takes the actions specified in paragraph (b)(4) of this section.

(4) *Actions to be taken by the public authority to retain a quiet zone.*

(i) Within six months after the date of FRA notification, the public authority shall provide to the Associate Administrator a written commitment to lower the potential risk to the traveling public at the crossings within the quiet zone by reducing the Quiet Zone Risk Index to a level at, or below, the Nationwide Significant Risk Threshold or the Risk Index With Horns. Included in the commitment statement shall be a discussion of the specific steps to be taken by the public authority to increase

safety at the public crossings within the quiet zone; and

(ii) Within three years of the date of FRA notification, the public authority shall complete implementation of SSMs or ASMs sufficient to reduce the Quiet Zone Risk Index to a level at, or below, the Nationwide Significant Risk Threshold, or the Risk Index With Horns, and receive approval from the Associate Administrator, under the procedures set forth in § 222.39(b) of this part, for continuation of the quiet zone. If the Quiet Zone Risk Index is reduced to a level that fully compensates for the absence of the train horn, the quiet zone will be considered to have been established pursuant to § 222.39(a)(3) of this part and subsequent annual risk reviews will not be conducted for that quiet zone.

(iii) Failure to comply with paragraph (b)(4)(i) of this section shall result in the termination of the quiet zone six months after the date of receipt of notification from FRA. Failure to comply with paragraph (b)(4)(ii) of this section shall result in the termination of the quiet zone three years after the date of receipt of notification from FRA.

(c) *Review at FRA's initiative.* (1) The Associate Administrator may, at any time, review the status of any quiet zone.

(2) If the Associate Administrator makes any of the following preliminary determinations, the Associate Administrator will provide written notice to the public authority, all railroads operating over public highway-rail grade crossings within the quiet zone, the highway or traffic control authority or law enforcement authority having control over vehicular traffic at the crossings within the quiet zone, the landowner having control over any private crossings within the quiet zone, the State agency responsible for grade crossing safety, and the State agency responsible for highway and road safety and will publish a notice of the determination in the **Federal Register**:

(i) Safety systems and measures implemented within the quiet zone do not fully compensate for the absence of the locomotive horn due to a substantial increase in risk;

(ii) Documentation relied upon to establish the quiet zone contains substantial errors that may have an adverse impact on public safety; or

(iii) Significant risk with respect to loss of life or serious personal injury exists within the quiet zone.

(3) After providing an opportunity for comment, the Associate Administrator may require that additional safety measures be taken or that the quiet zone

be terminated. The Associate Administrator will provide a copy of his/her decision to the public authority and all parties listed in paragraph (c)(2) of this section. The public authority may appeal the Associate Administrator's decision in accordance with § 222.57(c) of this part. Nothing in this section is intended to limit the Administrator's emergency authority under 49 U.S.C. 20104 and 49 CFR part 211.

(d) *Termination by the public authority.* (1) Any public authority that participated in the establishment of a quiet zone under the provisions of this part may, at any time, withdraw its quiet zone status.

(2) A public authority may withdraw its quiet zone status by providing written notice of termination, by certified mail, return receipt requested, to all railroads operating the public highway-rail grade crossings within the quiet zone, the highway or traffic control authority or law enforcement authority having control over vehicular traffic at the crossings within the quiet zone, the landowner having control over any private crossings within the quiet zone, the State agency responsible for grade crossing safety, the State agency responsible for highway and road safety, and the Associate Administrator.

(3)(i) If the quiet zone that is being withdrawn was part of a multi-jurisdictional quiet zone, the remaining quiet zones may remain in effect, provided the public authorities responsible for the remaining quiet zones provide statements to the Associate Administrator certifying that the Quiet Zone Risk Index for each remaining quiet zone is at, or below, the Nationwide Significant Risk Threshold or the Risk Index With Horns. These statements shall be provided, no later than six months after the date on which the notice of quiet zone termination was mailed, to all parties listed in paragraph (d)(2) of this section.

(ii) If any remaining quiet zone has a Quiet Zone Risk Index in excess of the Nationwide Significant Risk Threshold and the Risk Index With Horns, the public authority responsible for the quiet zone shall submit a written commitment, to all parties listed in paragraph (d)(2) of this section, to reduce the Quiet Zone Risk Index to a level at or below the Nationwide Significant Risk Threshold or the Risk Index With Horns within three years. Included in the commitment statement shall be a discussion of the specific steps to be taken by the public authority to reduce the Quiet Zone Risk Index. This commitment statement shall be provided to all parties listed in

paragraph (d)(2) of this section no later than six months after the date on which the notice of quiet zone termination was mailed.

(iii) Failure to comply with paragraphs (d)(3)(i) and (d)(3)(ii) of this section shall result in the termination of the remaining quiet zone(s) six months after the date on which the notice of quiet zone termination was mailed by the withdrawing public authority in accordance with paragraph (d)(2) of this section.

(iv) Failure to complete implementation of SSMs and/or ASMs to reduce the Quiet Zone Risk Index to a level at, or below, the Nationwide Significant Risk Index or the Risk Index With Horns, in accordance with the written commitment provided under paragraph (d)(3)(ii) of this section, shall result in the termination of quiet zone status three years after the date on which the written commitment was received by FRA.

(e) *Notification of termination.* (1) In the event that a quiet zone is terminated under the provisions of this section, it shall be the responsibility of the public authority to immediately provide written notification of the termination by certified mail, return receipt requested, to all railroads operating over public highway-rail grade crossings within the quiet zone, the highway or traffic control authority or law enforcement authority having control over vehicular traffic at the crossings within the quiet zone, the landowner having control over any private crossings within the quiet zone, the State agency responsible for grade crossing safety, the State agency responsible for highway and road safety, and the Associate Administrator.

(2) Notwithstanding paragraph (e)(1) of this section, if a quiet zone is terminated under the provisions of this section, FRA shall also provide written notification to all parties listed in paragraph (e)(1) of this section.

(f) *Requirement to sound the locomotive horn.* Upon receipt of notification of quiet zone termination pursuant to paragraph (e) of this section, railroads shall, within seven days, and in accordance with the provisions of this part, sound the locomotive horn when approaching and passing through every public highway-rail grade crossing within the former quiet zone.

**§ 222.53 What are the requirements for supplementary and alternative safety measures?**

(a) Approved SSMs are listed in appendix A of this part. Approved SSMs can qualify for quiet zone risk

reduction credit in the manner specified in appendix A of this part.

(b) Additional ASMs that may be included in a request for FRA approval of a quiet zone under § 222.39(b) of this part are listed in appendix B of this part. Modified SSMs can qualify for quiet zone risk reduction credit in the manner specified in appendix B of this part.

(c) The following do not, individually or in combination, constitute SSMs or ASMs: Standard traffic control device arrangements such as reflectorized crossbucks, STOP signs, flashing lights, or flashing lights with gates that do not completely block travel over the line of railroad, or traffic signals.

**§ 222.55 How are new supplementary or alternative safety measures approved?**

(a) The Associate Administrator may add new SSMs and standards to appendix A of this part and new ASMs and standards to appendix B of this part when the Associate Administrator determines that such measures or standards are an effective substitute for the locomotive horn in the prevention of collisions and casualties at public highway-rail grade crossings.

(b) Interested parties may apply for approval from the Associate Administrator to demonstrate proposed new SSMs or ASMs to determine whether they are effective substitutes for the locomotive horn in the prevention of collisions and casualties at public highway-rail grade crossings.

(c) The Associate Administrator may, after notice and opportunity for comment, order railroad carriers operating over a public highway-rail grade crossing or crossings to temporarily cease the sounding of locomotive horns at such crossings to demonstrate proposed new SSMs or ASMs, provided that such proposed new SSMs or ASMs have been subject to prior testing and evaluation. In issuing such order, the Associate Administrator may impose any conditions or limitations on such use of the proposed new SSMs or ASMs which the Associate Administrator deems necessary in order to provide the level of safety at least equivalent to that provided by the locomotive horn.

(d) Upon completion of a demonstration of proposed new SSMs or ASMs, interested parties may apply to the Associate Administrator for their approval. Applications for approval shall be in writing and shall include the following:

(1) The name and address of the applicant;

(2) A description and design of the proposed new SSM or ASM;

(3) A description and results of the demonstration project in which the proposed SSMs or ASMs were tested;

(4) Estimated costs of the proposed new SSM or ASM; and

(5) Any other information deemed necessary.

(e) If the Associate Administrator is satisfied that the proposed safety measure fully compensates for the absence of the warning provided by the locomotive horn, the Associate Administrator will approve its use as an SSM to be used in the same manner as the measures listed in appendix A of this part, or the Associate Administrator may approve its use as an ASM to be used in the same manner as the measures listed in appendix B of this part. The Associate Administrator may impose any conditions or limitations on use of the SSMs or ASMs which the Associate Administrator deems necessary in order to provide the level of safety at least equivalent to that provided by the locomotive horn.

(f) If the Associate Administrator approves a new SSM or ASM, the Associate Administrator will: Notify the applicant, if any; publish notice of such action in the *Federal Register*; and add the measure to the list of approved SSMs or ASMs.

(g) A public authority or other interested party may appeal to the Administrator from a decision by the Associate Administrator granting or denying an application for approval of a proposed SSM or ASM, or the conditions or limitations imposed on its use, in accordance with § 222.57 of this part.

**§ 222.57 Can parties seek review of the Associate Administrator's actions?**

(a) A public authority or other interested party may petition the Administrator for review of any decision by the Associate Administrator granting or denying an application for approval of a new SSM or ASM under § 222.55 of this part. The petition must be filed within 60 days of the decision to be reviewed, specify the grounds for the requested relief, and be served upon the following parties: All railroads ordered to temporarily cease sounding of the locomotive horn over public highway-rail grade crossings for the demonstration of the proposed new SSM or ASM, the highway or traffic control authority or law enforcement authority having control over vehicular traffic at the crossings affected by the new SSM/ASM demonstration, the State agency responsible for grade crossing safety, the State agency responsible for highway and road safety, and the Associate Administrator. Unless the

Administrator specifically provides otherwise, and gives notice to the petitioner or publishes a notice in the **Federal Register**, the filing of a petition under this paragraph does not stay the effectiveness of the action sought to be reviewed. The Administrator may reaffirm, modify, or revoke the decision of the Associate Administrator without further proceedings and shall notify the petitioner and other interested parties in writing or by publishing a notice in the **Federal Register**.

(b) A public authority may request reconsideration of a decision by the Associate Administrator to deny an application by that authority for approval of a quiet zone, or to require additional safety measures, by filing a petition for reconsideration with the Associate Administrator. The petition must specify the grounds for asserting that the Associate Administrator improperly exercised his/her judgment in finding that the proposed SSMs and ASMs would not result in a Quiet Zone Risk Index that would be at or below the Risk Index With Horns or the Nationwide Significant Risk Threshold. The petition shall be filed within 60 days of the date of the decision to be reconsidered and be served upon all parties listed in § 222.39(b)(3) of this part. Upon receipt of a timely and proper petition, the Associate Administrator will provide the petitioner an opportunity to submit additional materials and to request an informal hearing. Upon review of the additional materials and completion of any hearing requested, the Associate Administrator shall issue a decision on the petition that will be administratively final.

(c) A public authority may request reconsideration of a decision by the Associate Administrator to terminate quiet zone status by filing a petition for reconsideration with the Associate Administrator. The petition must be filed within 60 days of the date of the decision, specify the grounds for the requested relief, and be served upon all parties listed in § 222.51(c)(2) of this part. Unless the Associate Administrator publishes a notice in the **Federal Register** that specifically stays the effectiveness of his/her decision, the filing of a petition under this paragraph will not stay the termination of quiet zone status. Upon receipt of a timely and proper petition, the Associate Administrator will provide the petitioner an opportunity to submit additional materials and to request an informal hearing. Upon review of the additional materials and completion of any hearing requested, the Associate Administrator shall issue a decision on

the petition that will be administratively final. A copy of this decision shall be served upon all parties listed in § 222.51(c)(2) of this part.

(d) A railroad may request reconsideration of a decision by the Associate Administrator to approve an application for approval of a proposed quiet zone under § 222.39(b) of this part by filing a petition for reconsideration with the Associate Administrator. The petition must specify the grounds for asserting that the Associate Administrator improperly exercised his/her judgment in finding that the proposed SSMs and ASMs would result in a Quiet Zone Risk Index that would be at or below the Risk Index With Horns or the Nationwide Significant Risk Threshold. The petition shall be filed within 60 days of the date of the decision to be reconsidered, and be served upon all parties listed in § 222.39(b)(3) of this part. Upon receipt of a timely and proper petition, the Associate Administrator will provide the petitioner an opportunity to submit additional materials and to request an informal hearing. Upon review of the additional materials and completion of any hearing requested, the Associate Administrator shall issue a decision that will be administratively final.

**§ 222.59 When may a wayside horn be used?**

(a)(1) A wayside horn conforming to the requirements of appendix E of this part may be used in lieu of a locomotive horn at any highway-rail grade crossing equipped with an active warning system consisting of, at a minimum, flashing lights and gates.

(2) A wayside horn conforming to the requirements of appendix E of this part may be installed within a quiet zone. For purposes of calculating the length of a quiet zone, the presence of a wayside horn at a highway-grade crossing within a quiet zone shall be considered in the same manner as a grade crossing treated with an SSM. A grade crossing equipped with a wayside horn shall not be considered in calculating the Quiet Zone Risk Index or Crossing Corridor Risk Index.

(b) A public authority installing a wayside horn at a grade crossing within a quiet zone shall provide written notice that a wayside horn is being installed to all railroads operating over the public highway-rail grade crossings within the quiet zone, the highway or traffic control authority or law enforcement authority having control over vehicular traffic at the crossings within the quiet zone, the landowner having control over any private crossings within the quiet zone, the State agency responsible for

grade crossing safety, the State agency responsible for highway and road safety, and the Associate Administrator. This notice shall provide the date on which the wayside horn will be operational and identify the grade crossing at which the wayside horn shall be installed by both the U.S. DOT National Highway-Rail Grade Crossing Inventory Number and street or highway name. The railroad or public authority shall provide notification of the operational date at least 21 days in advance.

(c) A railroad or public authority installing a wayside horn at a grade crossing located outside a quiet zone shall provide written notice that a wayside horn is being installed to all railroads operating over the public highway-rail grade crossing, the highway or traffic control authority or law enforcement authority having control over vehicular traffic at the crossing, the State agency responsible for grade crossing safety, the State agency responsible for highway and road safety, and the Associate Administrator. This notice shall provide the date on which the wayside horn will be operational and identify the grade crossing at which the wayside horn shall be installed by both the U.S. DOT National Highway-Rail Grade Crossing Inventory Number and street or highway name. The railroad or public authority shall provide notification of the operational date at least 21 days in advance.

(d) A railroad operating over a grade crossing equipped with an operational wayside horn installed within a quiet zone pursuant to this section shall cease routine locomotive horn use at the grade crossing. A railroad operating over a grade crossing that is equipped with a wayside horn and located outside of a quiet zone shall cease routine locomotive horn use at the grade crossing on the operational date specified in the notice required by paragraph (c) of this section.

**Appendix A to Part 222—Approved Supplementary Safety Measures**

*A. Requirements and Effectiveness Rates for Supplementary Safety Measures*

This section provides a list of approved supplementary safety measures (SSMs) that may be installed at highway-rail grade crossings within quiet zones for risk reduction credit. Each SSM has been assigned an effectiveness rate, which may be subject to adjustment as research and demonstration projects are completed and data is gathered and refined. Sections B and C govern the process through which risk reduction credit for pre-existing SSMs can be determined.

1. *Temporary Closure of a Public Highway-Rail Grade Crossing:* Close the crossing to

highway traffic during designated quiet periods. (This SSM can only be implemented within Partial Quiet Zones.)

*Effectiveness:* 1.0.

Because an effective closure system prevents vehicle entrance onto the crossing, the probability of a collision with a train at the crossing is zero during the period the crossing is closed. Effectiveness would therefore equal 1. However, analysis should take into consideration that traffic would need to be redistributed among adjacent crossings or grade separations for the purpose of estimating risk following the silencing of train horns, unless the particular "closure" was accomplished by a grade separation.

*Required:*

- a. The closure system must completely block highway traffic on all approach lanes to the crossing.
- b. The closure system must completely block adjacent pedestrian crossings.
- c. Public highway-rail grade crossings located within New Partial Quiet Zones shall be closed from 10 p.m. until 7 a.m. every day. Public highway-rail grade crossings located within Pre-Rule Partial Quiet Zones may only be closed during one period each 24 hours.
- d. Barricades and signs used for closure of the roadway shall conform to the standards contained in the MUTCD.
- e. Daily activation and deactivation of the system is the responsibility of the public authority responsible for maintenance of the street or highway crossing the railroad tracks. The public authority may provide for third party activation and deactivation; however, the public authority shall remain fully responsible for compliance with the requirements of this part.

f. The system must be tamper and vandal resistant to the same extent as other traffic control devices.

g. The closure system shall be equipped with a monitoring device that contains an indicator which is visible to the train crew prior to entering the crossing. The indicator shall illuminate whenever the closure device is deployed.

*Recommended:*

Signs for alternate highway traffic routes should be erected in accordance with MUTCD and State and local standards and should inform pedestrians and motorists that the streets are closed, the period for which they are closed, and that alternate routes must be used.

2. *Four-Quadrant Gate System:* Install gates at a crossing sufficient to fully block highway traffic from entering the crossing when the gates are lowered, including at least one gate for each direction of traffic on each approach.

*Effectiveness:*

Four-quadrant gates only, no presence detection: .82.

Four-quadrant gates only, with presence detection: .77.

Four-quadrant gates with traffic of at least 60 feet (with or without presence detection): .92.

*Note:* The higher effectiveness rate for four-quadrant gates without presence detection does not mean that they are inherently safer than four-quadrant gates with presence detection. Four-quadrant gates with presence detection have been assigned a lower

effectiveness rate because motorists may learn to delay the lowering of the exit gates by driving onto the opposing lane of traffic immediately after an opposing car has driven over the grade crossing. Since the presence detection will keep the exit gate raised, other motorists at the crossing who observe this scenario may also be tempted to take advantage of the raised exit gate by driving around the lowered entrance gates, thus increasing the potential for a crossing collision.

It should, however, be noted that there are site-specific circumstances (such as nearby highway intersections that could cause traffic to back up and stop on the grade crossing), under which the use of presence detection would be advisable. For this reason, the various effectiveness rates assigned to four-quadrant gate systems should not be the sole determining factor as to whether presence detection would be advisable. A site-specific study should be performed to determine the best application for each proposed installation. Please refer to paragraphs (f) and (g) for more information.

*Required:*

Four-quadrant gate systems shall conform to the standards for four-quadrant gates contained in the MUTCD and shall, in addition, comply with the following:

a. When a train is approaching, all highway approach and exit lanes on both sides of the highway-rail crossing must be spanned by gates, thus denying to the highway user the option of circumventing the conventional approach lane gates by switching into the opposing (oncoming) traffic lane in order to enter the crossing and cross the tracks.

b. Crossing warning systems must be activated by use of constant warning time devices unless existing conditions at the crossing would prevent the proper operation of the constant warning time devices.

c. Crossing warning systems must be equipped with power-out indicators.

*Note:* Requirements b and c apply only to New Quiet Zones or New Partial Quiet Zones. Constant warning time devices and power-out indicators are not required to be added to existing warning systems in Pre-Rule Quiet Zones and Pre-Rule Partial Quiet Zones. However, if existing automatic warning device systems in Pre-Rule Quiet Zones and Pre-Rule Partial Quiet Zones are renewed, or new automatic warning device systems are installed, power-out indicators and constant warning time devices are required, unless existing conditions at the crossing would prevent the proper operation of the constant warning devices.

d. The gap between the ends of the entrance and exit gates (on the same side of the railroad tracks) when both are in the fully lowered, or down, position must be less than two feet if no median is present. If the highway approach is equipped with a median or a channelization device between the approach and exit lanes, the lowered gates must reach to within one foot of the median or channelization device, measured horizontally across the road from the end of the lowered gate to the median or channelization device or to a point over the edge of the median or channelization device. The gate and the median top or

channelization device do not have to be at the same elevation.

e. "Break-away" channelization devices must be frequently monitored to replace broken elements.

*Recommendations for new installations only:*

f. Gate timing should be established by a qualified traffic engineer based on site specific determinations. Such determination should consider the need for and timing of a delay in the descent of the exit gates (following descent of the conventional entrance gates). Factors to be considered may include available storage space between the gates that is outside the fouling limits of the track(s) and the possibility that traffic flows may be interrupted as a result of nearby intersections.

g. A determination should be made as to whether it is necessary to provide vehicle presence detectors (VPDs) to open or keep open the exit gates until all vehicles are clear of the crossing. VPD should be installed on one or both sides of the crossing and/or in the surface between the rails closest to the field. Among the factors that should be considered are the presence of intersecting roadways near the crossing, the priority that the traffic crossing the railroad is given at such intersections, the types of traffic control devices at those intersections, and the presence and timing of traffic signal preemption.

h. Highway approaches on one or both sides of the highway-rail crossing may be provided with medians or channelization devices between the opposing lanes. Medians should be defined by a non-traversable curb or traversable curb, or by reflectorized channelization devices, or by both.

i. Remote monitoring (in addition to power-out indicators, which are required) of the status of these crossing systems is preferable. This is especially important in those areas in which qualified railroad signal department personnel are not readily available.

3. *Gates With Medians or Channelization Devices:* Install medians or channelization devices on both highway approaches to a public highway-rail grade crossing denying to the highway user the option of circumventing the approach lane gates by switching into the opposing (oncoming) traffic lane and driving around the lowered gates to cross the tracks.

*Effectiveness:*

Channelization devices—.75.

Non-traversable curbs with or without channelization devices—.80.

*Required:*

a. Opposing traffic lanes on both highway approaches to the crossing must be separated by either: (1) medians bounded by non-traversable curbs or (2) channelization devices.

b. Medians or channelization devices must extend at least 100 feet from the gate arm, or if there is an intersection within 100 feet of the gate, the median or channelization device must extend at least 60 feet from the gate arm.

c. Intersections of two or more streets, or a street and an alley, that are within 60 feet of the gate arm must be closed or relocated.

Driveways for private, residential properties (up to four units) within 60 feet of the gate arm are not considered to be intersections under this part and need not be closed. However, consideration should be given to taking steps to ensure that motorists exiting the driveways are not able to move against the flow of traffic to circumvent the purpose of the median and drive around lowered gates. This may be accomplished by the posting of "no left turn" signs or other means of notification. For the purpose of this part, driveways accessing commercial properties are considered to be intersections and are not allowed. It should be noted that if a public authority can not comply with the 60 feet or 100 feet requirement, it may apply to FRA for a quiet zone under § 222.39(b), "Public authority application to FRA." Such arrangement may qualify for a risk reduction credit in calculation of the Quiet Zone Risk Index. Similarly, if a public authority finds that it is feasible to only provide channelization on one approach to the crossing, it may also apply to FRA for approval under § 222.39(b). Such an arrangement may also qualify for a risk reduction credit in calculation of the Quiet Zone Risk Index.

d. Crossing warning systems must be activated by use of constant warning time devices unless existing conditions at the crossing would prevent the proper operation of the constant warning time devices.

e. Crossing warning systems must be equipped with power-out indicators. Note: Requirements d and e apply only to New Quiet Zones and New Partial Quiet Zones. Constant warning time devices and power-out indicators are not required to be added to existing warning systems in Pre-Rule Quiet Zones or Pre-Rule Partial Quiet Zones. However, if existing automatic warning device systems in Pre-Rule Quiet Zones and Pre-Rule Partial Quiet Zones are renewed, or new automatic warning device systems are installed, power-out indicators and constant warning time devices are required, unless existing conditions at the crossing would prevent the proper operation of the constant warning devices.

f. The gap between the lowered gate and the curb or channelization device must be one foot or less, measured horizontally across the road from the end of the lowered gate to the curb or channelization device or to a point over the curb edge or channelization device. The gate and the curb top or channelization device do not have to be at the same elevation.

g. "Break-away" channelization devices must be frequently monitored to replace broken elements.

4. *One Way Street with Gate(s)*: Gate(s) must be installed such that all approaching highway lanes to the public highway-rail grade crossing are completely blocked.

*Effectiveness*: .82.

*Required*:

a. Gate arms on the approach side of the crossing should extend across the road to within one foot of the far edge of the pavement. If a gate is used on each side of the road, the gap between the ends of the gates when both are in the lowered, or down, position must be no more than two feet.

b. If only one gate is used, the edge of the road opposite the gate mechanism must be configured with a non-traversable curb extending at least 100 feet.

c. Crossing warning systems must be activated by use of constant warning time devices unless existing conditions at the crossing would prevent the proper operation of the constant warning time devices.

d. Crossing warning systems must be equipped with power-out indicators.

**Note:** Requirements c and d apply only to New Quiet Zones and New Partial Quiet Zones. Constant warning time devices and power-out indicators are not required to be added to existing warning systems in Pre-Rule Quiet Zones or Pre-Rule Partial Quiet Zones. If automatic warning systems are, however, installed or renewed in a Pre-Rule Quiet or Pre-Rule Partial Quiet Zone, power-out indicators and constant warning time devices shall be installed, unless existing conditions at the crossing would prevent the proper operation of the constant warning time devices.

5. *Permanent Closure of a Public Highway-Rail Grade Crossing*: Permanently close the crossing to highway traffic.

*Effectiveness*: 1.0.

*Required*:

a. The closure system must completely block highway traffic from entering the grade crossing.

b. Barricades and signs used for closure of the roadway shall conform to the standards contained in the MUTCD.

c. The closure system must be tamper and vandal resistant to the same extent as other traffic control devices.

d. Since traffic will be redistributed among adjacent crossings, the traffic counts for adjacent crossings shall be increased to reflect the diversion of traffic from the closed crossing.

*B. Credit for Pre-Existing SSMs in New Quiet Zones and New Partial Quiet Zones*

A community that has implemented a pre-existing SSM at a public grade crossing can receive risk reduction credit by inflating the Risk Index With Horns as follows:

1. Calculate the current risk index for the grade crossing that is equipped with a qualifying, pre-existing SSM. (See appendix D. FRA's web-based Quiet Zone Calculator may be used to complete this calculation.)

2. Adjust the risk index by accounting for the increased risk that was avoided by implementing the pre-existing SSM at the public grade crossing. This adjustment can be made by dividing the risk index by one minus the SSM effectiveness rate. (For example, the risk index for a crossing equipped with pre-existing channelization devices would be divided by .25.)

3. Add the current risk indices for the other public grade crossings located within the proposed quiet zone and divide by the number of crossings. The resulting risk index will be the new Risk Index With Horns for the proposed quiet zone.

*C. Credit for Pre-Existing SSMs in Pre-Rule Quiet Zones and Pre-Rule Partial Quiet Zones*

A community that has implemented a pre-existing SSM at a public grade crossing can

receive risk reduction credit by inflating the Risk Index With Horns as follows:

1. Calculate the current risk index for the grade crossing that is equipped with a qualifying, pre-existing SSM. (See appendix D. FRA's web-based Quiet Zone Calculator may be used to complete this calculation.)

2. Reduce the current risk index for the grade crossing to reflect the risk reduction that would have been achieved if the locomotive horn was routinely sounded at the crossing. The following list sets forth the estimated risk reduction for certain types of crossings:

a. Risk indices for passive crossings shall be reduced by 43%;

b. Risk indices for grade crossings equipped with automatic flashing lights shall be reduced by 27%; and

c. Risk indices for gated crossings shall be reduced by 40%.

3. Adjust the risk index by accounting for the increased risk that was avoided by implementing the pre-existing SSM at the public grade crossing. This adjustment can be made by dividing the risk index by one minus the SSM effectiveness rate. (For example, the risk index for a crossing equipped with pre-existing channelization devices would be divided by .25.)

4. Adjust the risk indices for the other crossings that are included in the Pre-Rule Quiet Zone or Pre-Rule Partial Quiet Zone by reducing the current risk index to reflect the risk reduction that would have been achieved if the locomotive horn was routinely sounded at each crossing. Please refer to step two for the list of approved risk reduction percentages by crossing type.

5. Add the new risk indices for each crossing located within the proposed quiet zone and divide by the number of crossings. The resulting risk index will be the new Risk Index With Horns for the quiet zone.

## Appendix B to Part 222—Alternative Safety Measures

### Introduction

A public authority seeking approval of a quiet zone under public authority application to FRA (§ 222.39(b)) may include ASMs listed in this appendix in its proposal. This appendix addresses three types of ASMs: Modified SSMs, Non-Engineering ASMs, and Engineering ASMs. Modified SSMs are SSMs that do not fully comply with the provisions listed in appendix A. As provided in section I.B. of this appendix, public authorities can obtain risk reduction credit for pre-existing modified SSMs under the final rule. Non-engineering ASMs consist of programmed enforcement, public education and awareness, and photo enforcement programs that may be used to reduce risk within a quiet zone. Engineering ASMs consist of engineering improvements that address underlying geometric conditions, including sight distance, that are the source of increased risk at crossings.

### I. Modified SSMs

#### A. Requirements and Effectiveness Rates for Modified SSMs

1. If there are unique circumstances pertaining to a specific crossing or number of

crossings which prevent SSMs from being fully compliant with all of the SSM requirements listed in appendix A, those SSM requirements may be adjusted or revised. In that case, the SSM, as modified by the public authority, will be treated as an ASM under this appendix B, and not as a SSM under appendix A. After reviewing the estimated safety effect of the modified SSM and the proposed quiet zone, FRA will approve the proposed quiet zone if FRA finds that the Quiet Zone Risk Index will be reduced to a level at or below either the Risk Index With Horns or the Nationwide Significant Risk Threshold.

2. The public authority must provide estimates of effectiveness. These estimates may be based upon adjustments from the effectiveness levels provided in appendix A or from actual field data derived from the crossing sites. The specific crossing and applied mitigation measure will be assessed to determine the effectiveness of the modified SSM. FRA will continue to develop and make available effectiveness estimates and data from experience under the final rule.

3. If one or more of the requirements associated with an SSM as listed in appendix A is revised or deleted, data or analysis supporting the revision or deletion must be provided to FRA for review. The following engineering types of ASMs may be included in a proposal for approval by FRA for creation of a quiet zone: (1) Temporary Closure of a Public Highway-Rail Grade Crossing, (2) Four-Quadrant Gate System, (3) Gates With Medians or Channelization Devices, and (4) One-Way Street With Gate(s).

#### *B. Credit for Pre-Existing Modified SSMs in New Quiet Zones and New Partial Quiet Zones*

A community that has implemented a pre-existing modified SSM at a public grade crossing can receive risk reduction credit by inflating the Risk Index With Horns as follows:

1. Calculate the current risk index for the grade crossing that is equipped with a pre-existing modified SSM. (See appendix D. FRA's web-based Quiet Zone Calculator may be used to complete this calculation.)

2. Obtain FRA approval of the estimated effectiveness rate for the pre-existing modified SSM. Estimated effectiveness rates may be based upon adjustments from the SSM effectiveness rates provided in appendix A or actual field data derived from crossing sites.

3. Adjust the risk index by accounting for the increased risk that was avoided by implementing the pre-existing modified SSM at the public grade crossing. This adjustment can be made by dividing the risk index by one minus the FRA-approved modified SSM effectiveness rate.

4. Add the current risk indices for the other public grade crossings located within the proposed quiet zone and divide by the number of crossings. The resulting risk index will be the new Risk Index With Horns for the proposed quiet zone.

#### *C. Credit for Pre-Existing Modified SSMs in Pre-Rule Quiet Zones and Pre-Rule Partial Quiet Zones*

A community that has implemented a pre-existing modified SSM at a public grade crossing can receive risk reduction credit by inflating the Risk Index With Horns as follows:

1. Calculate the current risk index for the grade crossing that is equipped with a pre-existing modified SSM. (See appendix D. FRA's web-based Quiet Zone Calculator may be used to complete this calculation.)

2. Reduce the current risk index for the grade crossing to reflect the risk reduction that would have been achieved if the locomotive horn was routinely sounded at the crossing. The following list sets forth the estimated risk reduction for certain types of crossings:

a. Risk indices for passive crossings shall be reduced by 43%;

b. Risk indices for grade crossings equipped with automatic flashing lights shall be reduced by 27%; and

c. Risk indices for gated crossings shall be reduced by 40%.

3. Obtain FRA approval of the estimated effectiveness rate for the pre-existing modified SSM. Estimated effectiveness rates may be based upon adjustments from the SSM effectiveness rates provided in appendix A or actual field data derived from crossing sites.

4. Adjust the risk index by accounting for the increased risk that was avoided by implementing the pre-existing modified SSM at the public grade crossing. This adjustment can be made by dividing the risk index by one minus the FRA-approved modified SSM effectiveness rate.

5. Adjust the risk indices for the other crossings that are included in the Pre-Rule Quiet Zone or Pre-Rule Partial Quiet Zone by reducing the current risk index to reflect the risk reduction that would have been achieved if the locomotive horn was routinely sounded at each crossing. Please refer to step two for the list of approved risk reduction percentages by crossing type.

6. Add the new risk indices for each crossing located within the proposed quiet zone and divide by the number of crossings. The resulting risk index will be the new Risk Index With Horns for the quiet zone.

#### **II. Non-Engineering ASMs**

A. The following non-engineering ASMs may be used in the creation of a Quiet Zone: (The method for determining the effectiveness of the non-engineering ASMs, the implementation of the quiet zone, subsequent monitoring requirements, and dealing with an unacceptable effectiveness rate is provided in paragraph B.)

1. *Programmed Enforcement:* Community and law enforcement officials commit to a systematic and measurable crossing monitoring and traffic law enforcement program at the public highway-rail grade crossing, alone or in combination with the Public Education and Awareness ASM.

##### *Required:*

a. Subject to audit, a statistically valid baseline violation rate must be established through automated or systematic manual

monitoring or sampling at the subject crossing(s); and

b. A law enforcement effort must be defined, established and continued along with continual or regular monitoring that provides a statistically valid violation rate that indicates the effectiveness of the law enforcement effort.

c. The public authority shall retain records pertaining to monitoring and sampling efforts at the grade crossing for a period of not less than five years. These records shall be made available, upon request, to FRA as provided by 49 U.S.C. 20107.

##### *2. Public Education and Awareness:*

Conduct, alone or in combination with programmed law enforcement, a program of public education and awareness directed at motor vehicle drivers, pedestrians and residents near the railroad to emphasize the risks associated with public highway-rail grade crossings and applicable requirements of state and local traffic laws at those crossings.

##### *Requirements:*

a. Subject to audit, a statistically valid baseline violation rate must be established through automated or systematic manual monitoring or sampling at the subject crossing(s); and

b. A sustainable public education and awareness program must be defined, established and continued along with continual or regular monitoring that provides a statistically valid violation rate that indicates the effectiveness of the public education and awareness effort. This program shall be provided and supported primarily through local resources.

c. The public authority shall retain records pertaining to monitoring and sampling efforts at the grade crossing for a period of not less than five years. These records shall be made available, upon request, to FRA as provided by 49 U.S.C. 20107.

3. *Photo Enforcement:* This ASM entails automated means of gathering valid photographic or video evidence of traffic law violations at a public highway-rail grade crossing together with follow-through by law enforcement and the judiciary.

##### *Requirements:*

a. State law authorizing use of photographic or video evidence both to bring charges and sustain the burden of proof that a violation of traffic laws concerning public highway-rail grade crossings has occurred, accompanied by commitment of administrative, law enforcement and judicial officers to enforce the law;

b. Sanction includes sufficient minimum fine (e.g., \$100 for a first offense, "points" toward license suspension or revocation) to deter violations;

c. Means to reliably detect violations (e.g., loop detectors, video imaging technology);

d. Photographic or video equipment deployed to capture images sufficient to document the violation (including the face of the driver, if required to charge or convict under state law).

**Note:** This does not require that each crossing be continually monitored. The objective of this option is deterrence, which may be accomplished by moving photo/video equipment among several crossing locations,

as long as the motorist perceives the strong possibility that a violation will lead to sanctions. Each location must appear identical to the motorist, whether or not surveillance equipment is actually placed there at the particular time. Surveillance equipment should be in place and operating at each crossing at least 25 percent of each calendar quarter.

e. Appropriate integration, testing and maintenance of the system to provide evidence supporting enforcement;

f. Public awareness efforts designed to reinforce photo enforcement and alert motorists to the absence of train horns;

g. Subject to audit, a statistically valid baseline violation rate must be established through automated or systematic manual monitoring or sampling at the subject crossing(s); and

h. A law enforcement effort must be defined, established and continued along with continual or regular monitoring.

1. The public authority shall retain records pertaining to monitoring and sampling efforts at the grade crossing for a period of not less than five years. These records shall be made available, upon request, to FRA as provided by 49 U.S.C. 20107.

B. The effectiveness of an ASM will be determined as follows:

1. Establish the quarterly (three months) baseline violation rates for each crossing in the proposed quiet zone.

a. A violation in this context refers to a motorist not complying with the automatic warning devices at the crossing (not stopping for the flashing lights and driving over the crossing after the gate arms have started to descend, or driving around the lowered gate arms). A violation does not have to result in a traffic citation for the violation to be considered.

b. Violation data may be obtained by any method that can be shown to provide a statistically valid sample. This may include the use of video cameras, other technologies (e.g., inductive loops), or manual observations that capture driver behavior when the automatic warning devices are operating.

c. If data is not collected continuously during the quarter, sufficient detail must be provided in the application in order to validate that the methodology used results in a statistically valid sample. FRA recommends that at least a minimum of 600 samples (one sample equals one gate activation) be collected during the baseline and subsequent quarterly sample periods.

d. The sampling methodology must take measures to avoid biases in their sampling technique. Potential sampling biases could include: Sampling on certain days of the week but not others; sampling during certain times of the day but not others; sampling immediately after implementation of an ASM while the public is still going through an adjustment period; or applying one sample method for the baseline rate and another for the new rate.

e. The baseline violation rate should be expressed as the number of violations per gate activations in order to normalize for unequal gate activations during subsequent data collection periods.

f. All subsequent quarterly violation rate calculations must use the same methodology as stated in this paragraph unless FRA authorizes another methodology.

2. The ASM should then be initiated for each crossing. Train horns are still being sounded during this time period.

3. In the calendar quarter following initiation of the ASM, determine a new quarterly violation rate using the same methodology as in paragraph (1) above.

4. Determine the violation rate reduction for each crossing by the following formula:

Violation rate reduction = (new rate – baseline rate)/baseline rate

5. Determine the effectiveness rate of the ASM for each crossing by multiplying the violation rate reduction by .78.

6. Using the effectiveness rates for each grade crossing treated by an ASM, determine the Quiet Zone Risk Index. If and when the Quiet Zone Risk Index for the proposed quiet zone has been reduced to a level at, or below, the Risk Index With Horns or the Nationwide Significant Risk Threshold, the public authority may apply to FRA for approval of the proposed quiet zone. Upon receiving written approval of the quiet zone application from FRA, the public authority may then proceed with notifications and implementation of the quiet zone.

7. Violation rates must be monitored for the next two calendar quarters and every second quarter thereafter. If, after five years from the implementation of the quiet zone, the violation rate for any quarter has never exceeded the violation rate that was used to determine the effectiveness rate that was approved by FRA, violation rates may be monitored for one quarter per year.

8. In the event that the violation rate is ever greater than the violation rate used to determine the effectiveness rate that was approved by FRA, the public authority may continue the quiet zone for another quarter. If, in the second quarter the violation rate is still greater than the rate used to determine the effectiveness rate that was approved by FRA, a new effectiveness rate must be calculated and the Quiet Zone Risk Index recalculated using the new effectiveness rate. If the new Quiet Zone Risk Index indicates that the ASM no longer fully compensates for the lack of a train horn, or that the risk level is equal to, or exceeds the National Significant Risk Threshold, the procedures for dealing with unacceptable effectiveness after establishment of a quiet zone should be followed.

### III. Engineering ASMs

A. Engineering improvements, other than modified SSMs, may be used in the creation of a Quiet Zone. These engineering improvements, which will be treated as ASMs under this appendix, may include improvements that address underlying geometric conditions, including sight distance, that are the source of increased risk at the crossing.

B. The effectiveness of an Engineering ASM will be determined as follows:

1. Establish the quarterly (three months) baseline violation rate for the crossing at which the Engineering ASM will be applied.

a. A violation in this context refers to a motorist not complying with the automatic

warning devices at the crossing (not stopping for the flashing lights and driving over the crossing after the gate arms have started to descend, or driving around the lowered gate arms). A violation does not have to result in a traffic citation for the violation to be considered.

b. Violation data may be obtained by any method that can be shown to provide a statistically valid sample. This may include the use of video cameras, other technologies (e.g. inductive loops), or manual observations that capture driver behavior when the automatic warning devices are operating.

c. If data is not collected continuously during the quarter, sufficient detail must be provided in the application in order to validate that the methodology used results in a statistically valid sample. FRA recommends that at least a minimum of 600 samples (one sample equals one gate activation) be collected during the baseline and subsequent quarterly sample periods.

d. The sampling methodology must take measures to avoid biases in their sampling technique. Potential sampling biases could include: Sampling on certain days of the week but not others; sampling during certain times of the day but not others; sampling immediately after implementation of an ASM while the public is still going through an adjustment period; or applying one sample method for the baseline rate and another for the new rate.

e. The baseline violation rate should be expressed as the number of violations per gate activations in order to normalize for unequal gate activations during subsequent data collection periods.

f. All subsequent quarterly violation rate calculations must use the same methodology as stated in this paragraph unless FRA authorizes another methodology.

2. The Engineering ASM should be initiated at the crossing. Train horns are still being sounded during this time period.

3. In the calendar quarter following initiation of the Engineering ASM, determine a new quarterly violation rate using the same methodology as in paragraph (1) above.

4. Determine the violation rate reduction for the crossing by the following formula:

Violation rate reduction = (new rate – baseline rate)/baseline rate

5. Using the Engineering ASM effectiveness rate, determine the Quiet Zone Risk Index. If and when the Quiet Zone Risk Index for the proposed quiet zone has been reduced to a risk level at or below the Risk Index With Horns or the Nationwide Significant Risk Threshold, the public authority may apply to FRA for approval of the quiet zone. Upon receiving written approval of the quiet zone application from FRA, the public authority may then proceed with notifications and implementation of the quiet zone.

6. Violation rates must be monitored for the next two calendar quarters. Unless otherwise provided in FRA's notification of quiet zone approval, if the violation rate for these two calendar quarters does not exceed the violation rate that was used to determine the effectiveness rate that was approved by FRA, the public authority can cease violation rate monitoring.



7. In the event that the violation rate over either of the next two calendar quarters are greater than the violation rate used to determine the effectiveness rate that was approved by FRA, the public authority may continue the quiet zone for a third calendar quarter. However, if the third calendar quarter violation rate is also greater than the rate used to determine the effectiveness rate that was approved by FRA, a new effectiveness rate must be calculated and the Quiet Zone Risk Index re-calculated using the new effectiveness rate. If the new Quiet Zone Risk Index exceeds the Risk Index With Horns and the Nationwide Significant Risk Threshold, the procedures for dealing with unacceptable effectiveness after establishment of a quiet zone should be followed.

### Appendix C to Part 222—Guide to Establishing Quiet Zones

#### Introduction

This Guide to Establishing Quiet Zones (Guide) is divided into five sections in order to address the variety of methods and conditions that affect the establishment of quiet zones under this rule.

Section I of the Guide provides an overview of the different ways in which a quiet zone may be established under this rule. This includes a brief discussion on the safety thresholds that must be attained in order for train horns to be silenced and the relative merits of each. It also includes the two general methods that may be used to reduce risk in the proposed quiet zone, and the different impacts that the methods have on the quiet zone implementation process. This section also discusses Partial (e.g. night time only quiet zones) and Intermediate Quiet Zones. An Intermediate Quiet Zone is one where horn restrictions were in place after October 9, 1996, but as of December 18, 2003.

Section II of the Guide provides information on establishing New Quiet Zones. A New Quiet Zone is one at which train horns are currently being sounded at crossings. The Public Authority Designation and Public Authority Application to FRA methods will be discussed in depth.

Section III of the Guide provides information on establishing Pre-Rule Quiet Zones. A Pre-Rule Quiet Zone is one where train horns were not routinely sounded as of October 9, 1996 and December 18, 2003. The differences between New and Pre-Rule Quiet Zones will be explained. Public Authority Designation and Public Authority Application to FRA methods also apply to Pre-Rule Quiet Zones.

Section IV of the Guide deals with the required notifications that must be provided by public authorities when establishing both New and continuing Pre-Rule or Intermediate Quiet Zones.

Section V of the Guide provides examples of quiet zone implementation.

#### Section I—Overview

In order for a quiet zone to be qualified under this rule, it must be shown that the lack of the train horn does not present a significant risk with respect to loss of life or serious personal injury, or that the significant

risk has been compensated for by other means. The rule provides four basic ways in which a quiet zone may be established. Creation of both New Quiet Zones and Pre-Rule Quiet Zones are based on the same general guidelines; however, there are a number of differences that will be noted in the discussion on Pre-Rule Quiet Zones.

#### A. Qualifying Conditions

(1) One of the following four conditions or scenarios must be met in order to show that the lack of the train horn does not present a significant risk, or that the significant risk has been compensated for by other means:

- a. One or more SSMs as identified in appendix A are installed at each public crossing in the quiet zone; or
- b. The Quiet Zone Risk Index is equal to, or less than, the Nationwide Significant Risk Threshold without implementation of additional safety measures at any crossings in the quiet zone; or
- c. Additional safety measures are implemented at selected crossings resulting in the Quiet Zone Risk Index being reduced to a level equal to, or less than, the Nationwide Significant Risk Threshold; or
- d. Additional safety measures are taken at selected crossings resulting in the Quiet Zone Risk Index being reduced to at least the level of the Risk Index With Horns (that is, the risk that would exist if train horns were sounded at every public crossing in the quiet zone).

(2) It is important to consider the implications of each approach before deciding which one to use. If a quiet zone is qualified based on reference to the Nationwide Significant Risk Threshold (i.e. the Quiet Zone Risk Index is equal to, or less than, the Nationwide Significant Risk Threshold—see the second and third scenarios above), then an annual review will be done by FRA to determine if the Quiet Zone Risk Index remains equal to, or less than, the Nationwide Significant Risk Threshold. Since the Nationwide Significant Risk Threshold and the Quiet Zone Risk Index may change from year to year, there is no guarantee that the quiet zone will remain qualified. The circumstances that cause the disqualification may not be subject to the control of the public authority. For example, an overall national improvement in safety at gated crossings may cause the Nationwide Significant Risk Threshold to fall. This may cause the Quiet Zone Risk Index to become greater than the Nationwide Significant Risk Threshold. If the quiet zone is no longer qualified, then the public authority will have to take additional measures, and may incur additional costs that might not have been budgeted, to once again lower the Quiet Zone Risk Index to at least the Nationwide Significant Risk Threshold in order to retain the quiet zone. Therefore, while the initial cost to implement a quiet zone under the second or third scenario may be lower than the other options, these scenarios also carry a degree of uncertainty about the quiet zone's continued existence.

(3) The use of the first or fourth scenarios reduces the risk level to at least the level that would exist if train horns were sounding in the quiet zone. These methods may have higher initial costs because more safety

measures may be necessary in order to achieve the needed risk reduction. Despite the possibility of greater initial costs, there are several benefits to these methods. The installation of SSMs at every crossing will provide the greatest safety benefit of any of the methods that may be used to initiate a quiet zone. With both of these methods (first and fourth scenarios), the public authority will never need to be concerned about the Nationwide Significant Risk Threshold, annual reviews of the Quiet Zone Risk Index, or failing to be qualified because the Quiet Zone Risk Index is higher than the Nationwide Significant Risk Threshold. Public authorities are strongly encouraged to carefully consider both the pros and cons of all of the methods and to choose the method that will best meet the needs of its citizens by providing a safer and quieter community.

(4) For the purposes of this Guide, the term "Risk Index with Horns" is used to represent the level of risk that would exist if train horns were sounded at every public crossing in the proposed quiet zone. If a public authority decides that it would like to fully compensate for the lack of a train horn and not install SSMs at each public crossing in the quiet zone, it must reduce the Quiet Zone Risk Index to a level that is equal to, or less than, the Risk Index with Horns. The Risk Index with Horns is similar to the Nationwide Significant Risk Threshold in that both are targets that must be reached in order to establish a quiet zone under the rule. Quiet zones that are established by reducing the Quiet Zone Risk Index to at least the level of the Nationwide Significant Risk Threshold will be reviewed annually by FRA to determine if they still qualify under the rule to retain the quiet zone. Quiet zones that are established by reducing the Quiet Zone Risk Index to at least the level of the Risk Index with Horns will not be subject to annual reviews.

(5) The use of FRA's web-based Quiet Zone Calculator is recommended to aid in the decision making process (<http://www.fra.dot.gov/us/content/1337>). The Quiet Zone Calculator will allow the public authority to consider a variety of options in determining which SSMs make the most sense. It will also perform the necessary calculations used to determine the existing risk level and whether enough risk has been mitigated in order to create a quiet zone under this rule.

#### B. Risk Reduction Methods

FRA has established two general methods to reduce risk in order to have a quiet zone qualify under this rule. The method chosen impacts the manner in which the quiet zone is implemented.

1. *Public Authority Designation (SSMs)*—The Public Authority Designation method (§ 222.39(a)) involves the use of SSMs (see appendix A) at some or all crossings within the quiet zone. The use of only SSMs to reduce risk will allow a public authority to designate a quiet zone without approval from FRA. If the public authority installs SSMs at every crossing within the quiet zone, it need not demonstrate that they will reduce the risk sufficiently in order to qualify under the rule since FRA has already assessed the ability of

the SSMs to reduce risk. In other words, the Quiet Zone Calculator does not need to be used. However, if only SSMs are installed within the quiet zone, but not at every crossing, the public authority must calculate that sufficient risk reduction will be accomplished by the SSMs. Once the improvements are made, the public authority must make the required notifications (which includes a copy of the report generated by the Quiet Zone Calculator showing that the risk in the quiet zone has been sufficiently reduced), and the quiet zone may be implemented. FRA does not need to approve the plan as it has already assessed the ability of the SSMs to reduce risk.

**2. Public Authority Application to FRA (ASMs)**—The Public Authority Application to FRA method (§ 222.39(b)) involves the use of ASMs (see appendix B). ASMs include modified SSMs that do not fully comply with the provisions found in appendix A (e.g., shorter than required traffic channelization devices), non-engineering ASMs (e.g., programmed law enforcement), and engineering ASMs (i.e., engineering improvements other than modified SSMs). If the use of ASMs (or a combination of ASMs and SSMs) is elected to reduce risk, then the public authority must provide a Notice of Intent and then apply to FRA for approval of the quiet zone. The application must contain sufficient data and analysis to confirm that the proposed ASMs do indeed provide the necessary risk reduction. FRA will review the application and will issue a formal approval if it determines that risk is reduced to a level that is necessary in order to comply with the rule. Once FRA approval has been received and the safety measures fully implemented, the public authority would then provide a Notice of Quiet Zone Establishment and the quiet zone may be implemented. The use of non-engineering ASMs will require continued monitoring and analysis throughout the existence of the quiet zone to ensure that risk continues to be reduced.

**3. Calculating Risk Reduction**—The following should be noted when calculating risk reductions in association with the establishment of a quiet zone. This information pertains to both New Quiet Zones and Pre-Rule Quiet Zones and to the Public Authority Designation and Public Authority Application to FRA methods.

**Crossing closures:** If any public crossing within the quiet zone is proposed to be closed, include that crossing when calculating the Risk Index with Horns. The effectiveness of a closure is 1.0. However, be sure to increase the traffic counts at other crossings within the quiet zone and recalculate the risk indices for those crossings that will handle the traffic diverted from the closed crossing. It should be noted that crossing closures that are already in existence are not considered in the risk calculations.

**Example:** A proposed New Quiet Zone contains four crossings: A, B, C and D streets. A, B and D streets are equipped with flashing lights and gates. C Street is a passive crossbuck crossing with a traffic count of 400 vehicles per day. It is decided that C Street will be closed as part of the project. Compute the risk indices for all four streets. The

calculation for C Street will utilize flashing lights and gates as the warning device. Calculate the Crossing Corridor Risk Index by averaging the risk indices for all four of the crossings. This value will also be the Risk Index with Horns since train horns are currently being sounded. To calculate the Quiet Zone Risk Index, first re-calculate the risk indices for B and D streets by increasing the traffic count for each crossing by 200. (Assume for this example that the public authority decided that the traffic from C Street would be equally divided between B and D streets.) Increase the risk indices for A, B and D streets by 66.8% and divide the sum of the three remaining crossings by four. This is the initial Quiet Zone Risk Index and accounts for the risk reduction caused by closing C Street.

**Grade Separation:** Grade separated crossings that were in existence before the creation of a quiet zone are not included in any of the calculations. However, any public crossings within the quiet zone that are proposed to be treated by grade separation should be treated in the same manner as crossing closures. Highway traffic that may be diverted from other crossings within the quiet zone to the new grade separated crossing should be considered when computing the Quiet Zone Risk Index.

**Example:** A proposed New Quiet Zone contains four crossings: A, B, C and D streets. All streets are equipped with flashing lights and gates. C Street is a busy crossing with a traffic count of 25,000 vehicles per day. It is decided that C Street will be grade separated as part of the project and the existing at-grade crossing closed. Compute the risk indices for all four streets. Calculate the Crossing Corridor Risk Index, which will also be the Risk Index with Horns, by averaging the risk indices for all four of the crossings. To calculate the Quiet Zone Risk Index, first re-calculate the risk indices for B and D streets by decreasing the traffic count for each crossing by 1,200. (The public authority decided that 2,400 motorists will decide to use the grade separation at C Street in order to avoid possible delays caused by passing trains.) Increase the risk indices for A, B and D streets by 66.8% and divide the sum of the three remaining crossings by four. This is the initial Quiet Zone Risk Index and accounts for the risk reduction caused by the grade separation at C Street.

**Pre-Existing SSMs:** Risk reduction credit may be taken by a public authority for a SSM that was previously implemented and is currently in place in the quiet zone. If an existing improvement meets the criteria for a SSM as provided in appendix A, the improvement is deemed a Pre-Existing SSM. Risk reduction credit is obtained by inflating the Risk Index With Horns to show what the risk would have been at the crossing if the pre-existing SSM had not been implemented. Crossing closures and grade separations that occurred prior to the implementation of the quiet zone are not Pre-Existing SSMs and do not receive any risk reduction credit.

**Example 1**—A proposed New Quiet Zone has one crossing that is equipped with flashing lights and gates and has medians 100 feet in length on both sides of the crossing. The medians conform to the requirements in

appendix A and qualify as a Pre-Existing SSM. The risk index as calculated for the crossing is 10,000. To calculate the Risk Index With Horns for this crossing, you divide the risk index by difference between one and the effectiveness rate of the pre-existing SSM ( $10,000 \div (1 - 0.75) = 40,000$ ). This value (40,000) would then be averaged in with the risk indices of the other crossings to determine the proposed quiet zone's Risk Index With Horns. To calculate the Quiet Zone Risk Index, the original risk index is increased by 66.8% to account for the additional risk attributed to the absence of the train horn ( $10,000 \times 1.668 = 16,680$ ). This value (16,680) is then averaged into the risk indices of the other crossings that have also been increased by 66.8%. The resulting average is the Quiet Zone Risk Index.

**Example 2**—A Pre-Rule Quiet Zone consisting of four crossings has one crossing that is equipped with flashing lights and gates and has medians 100 feet in length on both sides of the crossing. The medians conform to the requirements in appendix A and qualify as a Pre-Existing SSM. The risk index as calculated for the crossing is 20,000. To calculate the Risk Index With Horns for this crossing, first reduce the risk index by 40 percent to reflect the risk reduction that would be achieved if train horns were routinely sounded ( $20,000 \times 0.6 = 12,000$ ). Next, divide the resulting risk index by difference between one and the effectiveness rate of the pre-existing SSM ( $12,000 \div (1 - 0.75) = 48,000$ ). This value (48,000) would then be averaged with the adjusted risk indices of the other crossings to determine the pre-rule quiet zone's Risk Index With Horns. To calculate the Quiet Zone Risk Index, the original risk index (20,000) is then averaged into the risk original indices of the other crossings. The resulting average is the Quiet Zone Risk Index.

**Pre-Existing Modified SSMs:** Risk reduction credit may be taken by a public authority for a modified SSM that was previously implemented and is currently in place in the quiet zone. Modified SSMs are Alternative Safety Measures which must be approved by FRA. If an existing improvement is approved by FRA as a modified SSM as provided in appendix B, the improvement is deemed a Pre-Existing Modified SSM. Risk reduction credit is obtained by inflating the Risk Index With Horns to show what the risk would have been at the crossing if the pre-existing SSM had not been implemented. The effectiveness rate of the modified SSM will be determined by FRA. The public authority may provide information to FRA to be used in determining the effectiveness rate of the modified SSM. Once an effectiveness rate has been determined, follow the procedure previously discussed for Pre-Existing SSMs to determine the risk values that will be used in the quiet zone calculations.

**Wayside Horns:** Crossings with wayside horn installations will be treated as a one for one substitute for the train horn and are not to be included when calculating the Crossing Corridor Risk Index, the Risk Index with Horns or the Quiet Zone Risk Index.

**Example**—A proposed New Quiet Zone contains four crossings: A, B, C and D streets. All streets are equipped with flashing lights

and gates. It is decided that C Street will have a wayside horn installed. Compute the risk indices for A, B and D streets. Since C Street is being treated with a wayside horn, it is not included in the calculation of risk. Calculate the Crossing Corridor Risk Index by averaging the risk indices for A, B and D streets. This value is also the Risk Index with Horns. Increase the risk indices for A, B and D streets by 66.8% and average the results. This is the initial Quiet Zone Risk Index for the proposed quiet zone.

#### C. Partial Quiet Zones

A Partial Quiet Zone is a quiet zone in which locomotive horns are not routinely sounded at public crossings for a specified period of time each day. For example, a quiet zone during only the nighttime hours would be a partial quiet zone. Partial quiet zones may be either New or Pre-Rule and follow the same rules as 24 hour quiet zones. New Partial Quiet Zones must be in effect during the hours of 10 p.m. to 7 a.m. All New Partial Quiet Zones must comply with all of the requirements for New Quiet Zones. For example, all public grade crossings that are open during the time that horns are silenced must be equipped with flashing lights and gates that are equipped with constant warning time (where practical) and power out indicators. Risk is calculated in exactly the same manner as for New Quiet Zones. The Quiet Zone Risk Index is calculated for the entire 24-hour period, even though the train horn will only be silenced during the hours of 10 p.m. to 7 a.m.

A Pre-Rule Partial Quiet Zone is a partial quiet zone at which train horns were not sounding as of October 9, 1996 and on December 18, 2003. All of the regulations that pertain to Pre-Rule Quiet Zones also pertain to Pre-Rule Partial Quiet Zones. The Quiet Zone Risk Index is calculated for the entire 24-hour period for Pre-Rule Partial Quiet Zones, even though train horns are only silenced during the nighttime hours. Pre-Rule Partial Quiet Zones may qualify for automatic approval in the same manner as Pre-Rule Quiet Zones with one exception. If the Quiet Zone Risk Index is less than twice the National Significant Risk Threshold, and there have been no relevant collisions during the time period when train horns are silenced, then the Pre-Rule Partial Quiet Zone is automatically qualified. In other words, a relevant collision that occurred during the period of time that train horns were sounded will not disqualify a Pre-Rule Partial Quiet Zone that has a Quiet Zone Risk Index that is less than twice the National Significant Risk Index. Pre-Rule Partial Quiet Zones must provide the notification as required in § 222.43 in order to keep train horns silenced. A Pre-Rule Partial Quiet Zone may be converted to a 24 hour New Quiet Zone by complying with all of the New Quiet Zone regulations.

#### D. Intermediate Quiet Zones

An Intermediate Quiet Zone is one where horn restrictions were in place after October 9, 1996, but as of December 18, 2003 (the publication date of the Interim Final Rule). Intermediate Quiet Zones and Intermediate Partial Quiet Zones will be able to keep train

horns silenced until June 24, 2006, provided notification is made per § 222.43. This will enable public authority to have additional time to make the improvement necessary to come into compliance with the rule. Intermediate Quiet Zones must conform to all the requirements for New Quiet Zones by June 24, 2006. Other than having the horn silenced for an additional year, Intermediate Quiet Zones are treated exactly like New Quiet Zones.

#### Section II—New Quiet Zones

FRA has established several approaches that may be taken in order to establish a New Quiet Zone under this rule. Please see the preceding discussions on "Qualifying Conditions" and "Risk Reduction Methods" to assist in the decision-making process on which approach to take. This following discussion provides the steps necessary to establish New Quiet Zones and includes both the Public Authority Designation and Public Authority Application to FRA methods. It must be remembered that in a New Quiet Zone all public crossings must be equipped with flashing lights and gates. The requirements are the same regardless of whether a 24-hour or partial quiet zone is being created.

##### A. Requirements for Both Public Authority Designation and Public Authority Application

The following steps are necessary when establishing a New Quiet Zone. This information pertains to both the Public Authority Designation and Public Authority Application to FRA methods.

1. The public authority must provide a written Notice of Intent (§ 222.43(a)(1) and § 222.43(b)) to the railroads that operate over the proposed quiet zone, the State agency responsible for highway and road safety and the State agency responsible for grade crossing safety. The purpose of this Notice of Intent is to provide an opportunity for the railroads and the State agencies to provide comments and recommendations to the public authority as it is planning the quiet zone. They will have 60 days to provide these comments to the public authority. The quiet zone cannot be created unless the Notice of Intent has been provided. FRA encourages public authorities to provide the required Notice of Intent early in the quiet zone development process. The railroads and State agencies can provide an expertise that very well may not be present within the public authority. FRA believes that it will be very useful to include these organizations in the planning process. For example, including railroads and State agencies in the inspections of the crossing will help ensure accurate inventory information for the crossings. The railroad can provide information on whether the flashing lights and gates are equipped with constant warning time and power out indicators. Pedestrian crossings and private crossings with public access, industrial or commercial use that are within the quiet zone must have a diagnostic team review and be treated according to the team's recommendations. Railroads and the State agency responsible for grade crossing safety must be invited to

the diagnostic team review. Note: Please see Section IV for details on the requirements of a Notice of Intent.

2. Determine all public, private and pedestrian at-grade crossings that will be included within the quiet zone. Also, determine any existing grade-separated crossings that fall within the quiet zone. Each crossing must be identified by the U.S. DOT Crossing Inventory number and street or highway name. If a crossing does not have a U.S. DOT Crossing Inventory number, then contact FRA's Office of Safety (202-493-6299) for assistance.

3. Ensure that the quiet zone will be at least one-half mile in length. (§ 222.35(a)(1)) If more than one New Quiet Zone or New Partial Quiet Zone will be created within a single political jurisdiction, ensure that each New Quiet Zone or New Partial Quiet Zone will be separated by at least one public highway-rail grade crossing. (§ 222.35(a)(1)(iii))

4. A complete and accurate Grade Crossing Inventory Form must be on file with FRA for all crossings (public, private and pedestrian) within the quiet zone. An inspection of each crossing in the proposed quiet zone should be performed and the Grade Crossing Inventory Forms updated, as necessary, to reflect the current conditions at each crossing.

5. Every public crossing within the quiet zone must be equipped with active warning devices comprising both flashing lights and gates. The warning devices must be equipped with power out indicators. Constant warning time circuitry is also required unless existing conditions would prevent the proper operation of the constant warning time circuitry. FRA recommends that these automatic warning devices also be equipped with at least one bell to provide an audible warning to pedestrians. If the warning devices are already equipped with a bell (or bells), the bells may not be removed or deactivated. The plans for the quiet zone may be made assuming that flashing lights and gates are at all public crossings; however the quiet zone may not be implemented until all public crossings are actually equipped with the flashing lights and gates. (§§ 222.35(b)(1) and 222.35(b)(2))

6. Private crossings must have cross-bucks and "STOP" signs on both approaches to the crossing. Private crossings with public access, industrial or commercial use must have a diagnostic team review and be treated according to the team's recommendations. The public authority must invite the State agency responsible for grade crossing safety and all affected railroads to participate in the diagnostic review. (§§ 222.25(b) and (c))

7. Each highway approach to every public and private crossing must have an advance warning sign (in accordance with the MUTCD) that advises motorists that train horns are not sounded at the crossing, unless the public or private crossing is equipped with a wayside horn. (§ 222.35(c))

8. Each pedestrian crossing must be reviewed by a diagnostic team and equipped or treated in accordance with the recommendation of the diagnostic team. The public authority must invite the State agency responsible for grade crossing safety and all

affected railroads to participate in the diagnostic review. At a minimum, each approach to every pedestrian crossing must be equipped with a sign that conforms to the MUTCD and advises pedestrians that train horns are not sounded at the crossing. (§ 222.27)

#### B. New Quiet Zones—Public Authority Designation

Once again it should be remembered that all public crossings must be equipped with automatic warning devices consisting of flashing lights and gates in accordance with § 222.35(b). In addition, one of the following conditions must be met in order for a public authority to designate a new quiet zone without FRA approval:

a. One or more SSMs as identified in appendix A are installed at each public crossing in the quiet zone (§ 222.39(a)(1)); or

b. The Quiet Zone Risk Index is equal to, or less than, the Nationwide Significant Risk Threshold without SSMs installed at any crossings in the quiet zone (§ 222.39(a)(2)(i)); or

c. SSMs are installed at selected crossings, resulting in the Quiet Zone Risk Index being reduced to a level equal to, or less than, the Nationwide Significant Risk Threshold (§ 222.39(a)(2)(ii)); or

d. SSMs are installed at selected crossings, resulting in the Quiet Zone Risk Index being reduced to a level of risk that would exist if the horn were sounded at every crossing in the quiet zone (i.e., the Risk Index with Horns) (§ 222.39(a)(3)).

Steps necessary to establish a New Quiet Zone using the Public Authority Application to FRA method:

1. If one or more SSMs as identified in appendix A are installed at each public crossing in the quiet zone, the requirements for a public authority designation quiet zone will have been met. It is not necessary for the same SSM to be used at each crossing. However, before any improvements are implemented, the public authority must provide a Notice of Intent, which will trigger a 60-day comment period. During the 60-day comment period, railroads operating within the proposed quiet zone and State agencies responsible for grade crossing, highway and road safety may submit comments on the proposed quiet zone improvements to the public authority. Once the necessary improvements have been installed, Notice of Quiet Zone Establishment shall be provided and the quiet zone implemented in accordance with the rule. If SSMs are not installed at each public crossing, proceed on to Step 2 and use the risk reduction method.

2. To begin, calculate the risk index for each public crossing within the quiet zone (See appendix D. FRA's web-based Quiet Zone Calculator may be used to do this calculation). If flashing lights and gates have to be installed at any public crossings, calculate the risk indices for such crossings as if lights and gates were installed. (**Note:** Flashing lights and gates must be installed prior to initiation of the quiet zone.) If the Inventory record does not reflect the actual conditions at the crossing, be sure to use the conditions that currently exist when calculating the risk index. **Note:** Private

crossings and pedestrian crossings are not included when computing the risk for the proposed quiet zone.

3. The Crossing Corridor Risk Index is then calculated by averaging the risk index for each public crossing within the proposed quiet zone. Since train horns are routinely being sounded for crossings in the proposed quiet zone, this value is also the Risk Index with Horns.

4. In order to calculate the initial Quiet Zone Risk Index, first adjust the risk index at each public crossing to account for the increased risk due to the absence of the train horn. The absence of the horn is reflected by an increased risk index of 66.8% at gated crossings. The initial Quiet Zone Risk Index is then calculated by averaging the increased risk index for each public crossing within the proposed quiet zone. At this point the Quiet Zone Risk Index will equal the Risk Index with Horns multiplied by 1.668.

5. Compare the Quiet Zone Risk Index to the Nationwide Significant Risk Threshold. If the Quiet Zone Risk Index is equal to, or less than, the Nationwide Significant Risk Threshold, then the public authority may decide to designate a quiet zone and provide the Notice of Intent, followed by the Notice of Quiet Zone Establishment. With this approach, FRA will annually recalculate the Nationwide Significant Risk Threshold and the Quiet Zone Risk Index. If the Quiet Zone Risk Index for the quiet zone rises above the Nationwide Significant Risk Threshold, FRA will notify the Public Authority so that appropriate measures can be taken. (See § 222.51(a)).

6. If the Quiet Zone Risk Index is greater than the Nationwide Significant Risk Threshold, then select an appropriate SSM for a crossing. Reduce the inflated risk index calculated in Step 4 for that crossing by the effectiveness rate of the chosen SSM. (See appendix A for the effectiveness rates for the various SSMs). Recalculate the Quiet Zone Risk Index by averaging the revised inflated risk index with the inflated risk indices for the other public crossings. If this new Quiet Zone Risk Index is equal to, or less than, the Nationwide Significant Risk Threshold, the quiet zone would qualify for public authority designation. If the Quiet Zone Risk Index is still higher than the Nationwide Significant Risk Threshold, treat another public crossing with an appropriate SSM and repeat the process until the Quiet Zone Risk Index is equal to, or less than, the Nationwide Significant Risk Threshold. Once this result is obtained, the quiet zone will qualify for establishment by public authority designation. Early in the quiet zone development process, a Notice of Intent should be provided by the public authority, which will trigger a 60-day comment period. During this 60-day comment period, railroads operating within the proposed quiet zone and State agencies responsible for grade crossing, highway and road safety may provide comments on the proposed quiet zone improvements described in the Notice of Intent. Once all the necessary safety improvements have been implemented, Notice of Quiet Zone Establishment must be provided. With this approach, FRA will annually recalculate the Nationwide

Significant Risk Threshold and the Quiet Zone Risk Index. If the Quiet Zone Risk Index for the quiet zone rises above the Nationwide Significant Risk Threshold, FRA will notify the public authority so that appropriate measures can be taken. (See § 222.51(a)).

7. If the public authority wishes to reduce the risk of the quiet zone to the level of risk that would exist if the horn were sounded at every crossing within the quiet zone, the public authority should calculate the initial Quiet Zone Risk Index as in Step 4. The objective is to now reduce the Quiet Zone Risk Index to the level of the Risk Index with Horns by adding SSMs at the crossings. The difference between the Quiet Zone Risk Index and the Risk Index with Horns is the amount of risk that will have to be reduced in order to fully compensate for lack of the train horn. The use of the Quiet Zone Calculator will aid in determining which SSMs may be used to reduce the risk sufficiently. Follow the procedure stated in Step 6, except that the Quiet Zone Risk Index must be equal to, or less than, the Risk Index with Horns instead of the Nationwide Significant Risk Threshold. Once this risk level is attained, the quiet zone will qualify for establishment by public authority designation. Early in the quiet zone development process, a Notice of Intent should be provided by the public authority, which will trigger a 60-day comment period. During this 60-day comment period, railroads operating within the proposed quiet zone and State agencies responsible for grade crossing, highway and road safety may provide comments on the proposed quiet zone improvements described in the Notice of Intent. Once all the necessary safety improvements have been implemented, Notice of Quiet Zone Establishment must be provided. One important distinction with this option is that the public authority will never need to be concerned with the Nationwide Significant Risk Threshold or the Quiet Zone Risk Index. The rule's intent is to make the quiet zone as safe as if the train horns were sounding. If this is accomplished, the public authority may designate the crossings as a quiet zone and need not be concerned with possible fluctuations in the Nationwide Significant Risk Threshold or annual risk reviews.

#### C. New Quiet Zones—Public Authority Application to FRA

A public authority must apply to FRA for approval of a quiet zone under three conditions. First, if any of the SSMs selected for the quiet zone do not fully conform to the design standards set forth in appendix A. These are referred to as modified SSMs in appendix B. Second, when programmed law enforcement, public education and awareness programs, or photo enforcement is used to reduce risk in the quiet zone, these are referred to as non-engineering ASMs in appendix B. It should be remembered that non-engineering ASMs will require periodic monitoring as long as the quiet zone is in existence. Third, when engineering ASMs are used to reduce risk. Please see appendix B for detailed explanations of ASMs and the periodic monitoring of non-engineering ASMs.

The public authority is strongly encouraged to submit the application to FRA for review and comment before the appendix B treatments are initiated. This will enable FRA to provide comments on the proposed ASMs to help guide the application process. If non-engineering ASMs or engineering ASMs are proposed, the public authority also may wish to confirm with FRA that the methodology it plans to use to determine the effectiveness rates of the proposed ASMs is appropriate. A quiet zone that utilizes a combination of SSMS from appendix A and ASMs from appendix B must make a Public Authority Application to FRA. A complete and thoroughly documented application will help to expedite the approval process.

The following discussion is meant to provide guidance on the steps necessary to establish a new quiet zone using the Public Authority Application to FRA method. Once again it should be remembered that all public crossings must be equipped with automatic warning devices consisting of flashing lights and gates in accordance with § 222.35(b).

1. Gather the information previously mentioned in the section on "Requirements for both Public Authority Designation and Public Authority Application."

2. Calculate the risk index for each public crossing as directed in Step 2—Public Authority Designation.

3. Calculate the Crossing Corridor Risk Index, which is also the Risk Index with Horns, as directed in Step 3—Public Authority Designation.

4. Calculate the initial Quiet Zone Risk Index as directed in Step 4—Public Authority Designation.

5. Begin to reduce the Quiet Zone Risk Index through the use of ASMs and SSMS. Follow the procedure provided in Step 6—Public Authority Designation until the Quiet Zone Risk Index has been reduced to equal to, or less than, either the Nationwide Significant Risk Threshold or the Risk Index with Horns. (Remember that the public authority may choose which level of risk reduction is the most appropriate for its community.) Effectiveness rates for ASMs should be provided as follows:

a. Modified SSMS—Estimates of effectiveness for modified SSMS may be based upon adjustments from the effectiveness rates provided in appendix A or from actual field data derived from the crossing sites. The application must provide an estimated effectiveness rate and the rationale for the estimate.

b. Non-engineering ASMs—Effectiveness rates are to be calculated in accordance with the provisions of appendix B, paragraph II B.

c. Engineering ASMs—Effectiveness rates are to be calculated in accordance with the provisions of appendix B, paragraph III B.

6. Once it has been determined through analysis that the Quiet Zone Risk Index will be reduced to a level equal to, or less than, either the Nationwide Significant Risk Threshold or the Risk Index with Horns, the public authority must provide a Notice of Intent. The mailing of the Notice of Intent will trigger a 60-day comment period, during which railroads operating within the proposed quiet zone and State agencies responsible for grade crossing, highway and

road safety may provide comments on the proposed quiet zone improvements. After reviewing any comments received, the public authority may make application to FRA for a quiet zone under § 222.39(b). FRA will review the application to determine the appropriateness of the proposed effectiveness rates, and whether or not the proposed application demonstrates that the quiet zone meets the requirements of the rule. When submitting the application to FRA for approval, the application must contain the following (§ 222.39(b)(1)):

a. Sufficient detail concerning the present safety measures at all crossings within the proposed quiet zone. This includes current and accurate crossing inventory forms for each public, private, and pedestrian grade crossing.

b. Detailed information on the safety improvements that are proposed to be implemented at public, private and pedestrian grade crossings within the proposed quiet zone.

c. Membership and recommendations of the diagnostic team (if any) that reviewed the proposed quiet zone.

d. Statement of efforts taken to address comments submitted by affected railroads, the State agency responsible for grade crossing safety, and the State agency responsible for highway and road safety, including a list of any objections raised by the railroads or State agencies.

e. A commitment to implement the proposed safety measures.

f. Demonstrate through data and analysis that the proposed measures will reduce the Quiet Zone Risk Index to a level equal to, or less than, either the Nationwide Significant Risk Threshold or the Risk Index with Horns.

g. A copy of the application must be provided to: All railroads operating over the public highway-rail grade crossings within the quiet zone; the highway or traffic control or law enforcement authority having jurisdiction over vehicular traffic at grade crossings within the quiet zone; the landowner having control over any private crossings within the quiet zone; the State agency responsible for highway and road safety; the State agency responsible for grade crossing safety; and the Associate Administrator. (§ 222.39(b)(3))

7. Upon receiving written approval from FRA of the quiet zone application, the public authority may then provide the Notice of Quiet Zone Establishment and implement the quiet zone. If the quiet zone is qualified by reducing the Quiet Zone Risk Index to a level at, or below, the Nationwide Significant Risk Threshold, FRA will annually recalculate the Nationwide Significant Risk Threshold and the Quiet Zone Risk Index. If the Quiet Zone Risk Index for the quiet zone rises above the Nationwide Significant Risk Threshold, FRA will notify the public authority so that appropriate measures can be taken. (See § 222.51(a))

**Note:** The provisions stated above for crossing closures, grade separations, wayside horns, pre-existing SSMS and pre-existing modified SSMS apply for Public Authority Application to FRA as well.

### Section III—Pre-Rule Quiet Zones

Pre-Rule Quiet Zones are treated slightly differently from New Quiet Zones in the rule. This is a reflection of the statutory requirement to "take into account the interest of communities that have in effect restrictions on the sounding of a locomotive horn at highway-rail grade crossings. \* \* \* (49 U.S.C. 20153(i)) It also recognizes the historical experience of train horns not being sounded at Pre-Rule Quiet Zones.

#### Overview

Pre-Rule Quiet Zones that are not established by automatic approval (see discussion that follows) must meet the same requirements as New Quiet Zones as provided in § 222.39. In other words, risk must be reduced through the use of SSMS or ASMs so that the Quiet Zone Risk Index for the quiet zone has been reduced to either the risk level which would exist if locomotive horns sounded at all crossings in the quiet zone (*i.e.* the Risk Index with Horns) or to a risk level equal to, or less than, the Nationwide Significant Risk Threshold. There are four differences in the requirements between Pre-Rule Quiet Zones and New Quiet Zones that must be noted.

(1) First, since train horns have not been routinely sounded in the Pre-Rule Quiet Zone, it is not necessary to increase the risk indices of the public crossings to reflect the additional risk caused by the lack of a train horn. Since the train horn has already been silenced, the added risk caused by the lack of a horn is reflected in the actual collision history at the crossings. Collision history is an important part in the calculation of the severity risk indices. In other words, the Quiet Zone Risk Index is calculated by averaging the existing risk index for each public crossing without the need to increase the risk index by 66.8%. For Pre-Rule Quiet Zones, the Crossing Corridor Risk Index and the initial Quiet Zone Risk Index have the same value.

(2) Second, since train horns have been silenced at the crossings, it will be necessary to mathematically determine what the risk level would have been at the crossings if train horns had been routinely sounded. These revised risk levels then will be used to calculate the Risk Index with Horns. This calculation is necessary to determine how much risk must be eliminated in order to compensate for the lack of the train horn. This will allow the public authority to have the choice to reduce the risk to at least the level of the Nationwide Significant Risk Threshold or to fully compensate for the lack of the train horn.

To calculate the Risk Index with Horns, the first step is to divide the existing severity risk index for each crossing by the appropriate value as shown in Table 1. This process eliminates the risk that was caused by the absence of train horns. The table takes into account that the train horn has been found to produce different levels of effectiveness in preventing collisions depending on the type of warning device at the crossing. (Note: FRA's web-based Quiet Zone Calculator will perform this computation automatically for Pre-Rule Quiet Zones.) The Risk Index with Horns is the average of the revised risk

indices. The difference between the calculated Risk Index with Horns and the Quiet Zone Risk Index is the amount of risk that would have to be reduced in order to fully compensate for the lack of train horns.

TABLE 1.—RISK INDEX DIVISOR VALUES

	Passive	Flashing lights	Lights & gates
U.S. ....	1.749	1.309	1.668

(3) The third difference is that credit is given for the risk reduction that is brought about through the upgrading of the warning devices at public crossings (§ 222.35(b)(3)). For New Quiet Zones, all crossings must be equipped with automatic warning devices consisting of flashing lights and gates. Crossings without gates must have gates installed. The severity risk index for that crossing is then calculated to establish the risk index that is used in the Risk Index with Horns. The Risk Index with Horns is then increased by 66.8% to adjust for the lack of the train horn. The adjusted figure is the initial Quiet Zone Risk Index. There is no credit received for the risk reduction that is attributable to warning device upgrades in New Quiet Zones.

For Pre-Rule Quiet Zones, the Risk Index with Horns is calculated from the initial risk indices which use the warning devices that are currently installed. If a public authority elects to upgrade an existing warning device as part of its quiet zone plan, the accident prediction value for that crossing will be recalculated based on the upgraded warning device. (Once again, FRA's web-based Quiet Zone Calculator can do the actual computation.) The new accident prediction value is then used in the severity risk index formula to determine the risk index for the crossing. This adjusted risk index is then used to compute the new Quiet Zone Risk Index. This computation allows the risk reduction attributed to the warning device upgrades to be used in establishing a quiet zone.

(4) The fourth difference is that Pre-Rule Quiet Zones have different minimum requirements under § 222.35. A Pre-Rule Quiet Zone may be less than one-half mile in length if that was its length as of October 9, 1996 (§ 222.35(a)(2)). A Pre-Rule Quiet Zone does not have to have automatic warning devices consisting of flashing lights and gates at every public crossing (§ 222.35(b)(3)). The existing crossing safety warning systems in place as of December 18, 2003 may be retained but cannot be downgraded. It also is not necessary for the automatic warning devices to be equipped with constant warning time devices or power out indicators; however, when the warning devices are upgraded, constant warning time and power out indicators will be required if reasonably practical (§ 222.35(b)(3)). Advance warning signs that notify the motorist that train horns are not sounded do not have to be installed on each approach to public, private, and pedestrian grade crossings within the quiet zone until June 24, 2008. (§§ 222.27(d) and 222.35(c)) Similarly, STOP

signs and crossbucks do not have to be installed on each approach to private crossings within the quiet zone until June 24, 2008. (§ 222.25(c)).

*A. Requirements for Both Public Authority Designation and Public Authority Application—Pre-Rule Quiet Zones*

The following is necessary when establishing a Pre-Rule Quiet Zone. This information pertains to Automatic Approval, the Public Authority Designation and Public Authority Application to FRA methods.

1. Determine all public, private and pedestrian at-grade crossings that will be included within the quiet zone. Also determine any existing grade separated crossings that fall within the quiet zone. Each crossing must be identified by the U.S. DOT Crossing Inventory number and street name. If a crossing does not have a U.S. DOT crossing number, then contact FRA for assistance.

2. Document the length of the quiet zone. It is not necessary that the quiet zone be at least one-half mile in length. Pre-Rule Quiet Zones may be shorter than one-half mile. However, the addition of a new crossing that is not a part of an existing Pre-Rule Quiet Zone to a quiet zone nullifies its pre-rule status, and the resulting New Quiet Zone must be at least one-half mile. The deletion of a crossing from a Pre-Rule Quiet Zone (except through closure or grade separation) must result in a quiet zone that is at least one-half mile in length. It is the intent of the rule to allow adjacent Pre-Rule Quiet Zones to be combined into one large pre-rule quiet zone if the respective public authorities desire to do so. (§ 222.35(a)(2))

3. A complete and accurate Grade Crossing Inventory Form must be on file with FRA for all crossings (public, private and pedestrian) within the quiet zone. An inspection of each crossing in the proposed quiet zone should be performed and the Grade Crossing Inventory Forms updated, as necessary, to reflect the current conditions at each crossing.

4. Pre-Rule Quiet Zones must retain, and may upgrade, the existing grade crossing safety warning systems. Unlike New Quiet Zones, it is not necessary that every public crossing within a Pre-Rule Quiet Zone be equipped with active warning devices comprising both flashing lights and gates. Existing warning devices need not be equipped with power out indicators and constant warning time circuitry. If warning devices are upgraded to flashing lights, or flashing lights and gates, the upgraded equipment must include, as is required for New Quiet Zones, power out indicators and constant warning time devices (if reasonably practical). (§ 222.35(b)(3))

5. By June 24, 2008, private crossings must have cross-bucks and "STOP" signs on both approaches to the crossing. (§ 222.25(c))

6. By June 24, 2008, each approach to a public, private, and pedestrian crossing must be equipped with an advance warning sign that conforms to the MUTCD and advises pedestrians and motorists that train horns are not sounded at the crossing. (§§ 222.27(d), 222.35(c))

7. It will be necessary for the public authority to provide a Notice of Quiet Zone

Continuation in order to prevent the resumption of locomotive horn sounding when the rule becomes effective. A detailed discussion of the requirements of § 222.43(c) is provided in Section IV of this appendix. The Notice of Quiet Zone Continuation must be provided to the appropriate parties by all Pre-Rule Quiet Zones that have not established quiet zones by automatic approval. This should be done no later than June 3, 2005 to ensure that train horns will not start being sounded on June 24, 2005. A Pre-Rule Quiet Zone may provide a Notice of Quiet Zone Continuation before it has determined whether or not it qualifies for automatic approval. Once it has been determined that the Pre-Rule Quiet Zone will be established by automatic approval, the Public Authority must provide the Notice of Quiet Zone Establishment. This must be accomplished no later than December 24, 2005. If the Pre-Rule Quiet Zone will not be established by automatic approval, the Notice of Quiet Zone Continuation will enable the train horns to be silenced until June 24, 2008. (Please refer to § 222.41(c) for more information.)

*B. Pre-Rule Quiet Zones—Automatic Approval*

In order for a Pre-Rule Quiet Zone to be established under this rule (§ 222.41(a)), one of the following conditions must be met:

a. One or more SSMS as identified in appendix A are installed at each public crossing in the quiet zone;

b. The Quiet Zone Risk Index is equal to, or less than, the Nationwide Significant Risk Threshold;

c. The Quiet Zone Risk Index is above the Nationwide Significant Risk Threshold but less than twice the Nationwide Significant Risk Threshold and there have been no relevant collisions at any public grade crossing within the quiet zone for the preceding five years; or

d. The Quiet Zone Risk Index is equal to, or less than, the Risk Index With Horns.

Additionally, the Pre-Rule Quiet Zone must be in compliance with the minimum requirements for quiet zones (§ 222.35) and the notification requirements in § 222.43.

The following discussion is meant to provide guidance on the steps necessary to determine if a Pre-Rule Quiet Zone qualifies for automatic approval.

1. All of the items listed in *Requirements for Both Public Authority Designation and Public Authority Application—Pre-Rule Quiet Zones* previously mentioned are to be accomplished. Remember that a Pre-Rule Quiet Zone may be less than one-half mile in length if that was its length as of October 9, 1996. Also, a Pre-Rule Quiet Zone does not have to have automatic warning devices consisting of flashing lights and gates at every public crossing.

2. If one or more SSMS as identified in appendix A are installed at each public crossing in the quiet zone, the quiet zone qualifies and the public authority may provide the Notice of Quiet Zone Establishment. If the Pre-Rule Quiet Zone does not qualify by this step, proceed on to the next step.

3. Calculate the risk index for each public crossing within the quiet zone (See appendix

D.) Be sure that the risk index is calculated using the formula appropriate for the type of warning device that is actually installed at the crossing. Unlike New Quiet Zones, it is not necessary to calculate the risk index using flashing lights and gates as the warning device at every public crossing. (FRA's web-based Quiet Zone Calculator may be used to simplify the calculation process). If the inventory record does not reflect the actual conditions at the crossing, be sure to use the conditions that currently exist when calculating the risk index.

4. The Quiet Zone Risk Index is then calculated by averaging the risk index for each public crossing within the proposed quiet zone. (Note: The initial Quiet Zone Risk Index and the Crossing Corridor Risk Index are the same for Pre-Rule Quiet Zones.)

5. Compare the Quiet Zone Risk Index to the Nationwide Significant Risk Threshold. If the Quiet Zone Risk Index is equal to, or less than, the Nationwide Significant Risk Threshold, then the quiet zone qualifies, and the public authority may provide the Notice of Quiet Zone Establishment. With this approach, FRA will annually recalculate the Nationwide Significant Risk Threshold and the Quiet Zone Risk. If the Quiet Zone Risk Index for the quiet zone is found to be above the Nationwide Significant Risk Threshold, FRA will notify the public authority so that appropriate measures can be taken (See § 222.51(b)). If the Pre-Rule Quiet Zone is not established by this step, proceed on to the next step.

6. If the Quiet Zone Risk Index is above the Nationwide Significant Risk Threshold but less than twice the Nationwide Significant Risk Threshold and there have been no relevant collisions at any public grade crossing within the quiet zone for the preceding five years, then the quiet zone qualifies for automatic approval. However, in order to qualify on this basis, the public authority must provide a Notice of Quiet Zone Establishment by December 24, 2005. (Note: A relevant collision means a collision at a highway-rail grade crossing between a train and a motor vehicle, excluding the following: a collision resulting from an activation failure of an active grade crossing warning system; a collision in which there is no driver in the motor vehicle; or a collision where the highway vehicle struck the side of the train beyond the fourth locomotive unit or rail car.) With this approach, FRA will annually recalculate the Nationwide Significant Risk Threshold and the Quiet Zone Risk. If the Quiet Zone Risk Index for the quiet zone is above two times the Nationwide Significant Risk Threshold, or a relevant collision has occurred during the preceding year, FRA will notify the public authority so that appropriate measures can be taken (See § 222.51(b)).

If the Pre-Rule Quiet Zone is not established by automatic approval, continuation of the quiet zone may require implementation of SSMs or ASMs to reduce the Quiet Zone Risk Index for the quiet zone to a risk level equal to, or below, either the risk level which would exist if locomotive horns sounded at all crossings in the quiet zone (*i.e.* the Risk Index with Horns) or the Nationwide Significant Risk Threshold. This

is the same methodology used to create New Quiet Zones with the exception of the four differences previously noted. A review of the previous discussion on the two methods used to establish quiet zones may prove helpful in determining which would be the most beneficial to use for a particular Pre-Rule Quiet Zone.

#### *C. Pre-Rule Quiet Zones—Public Authority Designation*

The following discussion is meant to provide guidance on the steps necessary to establish a Pre-Rule Quiet Zone using the Public Authority Designation method.

1. The public authority must provide a Notice of Intent (§§ 222.43(a)(1) and 222.43(b)) to the railroads that operate within the proposed quiet zone, the State agency responsible for highway and road safety and the State agency responsible for grade crossing safety. This notice must be mailed by February 24, 2008, in order to continue existing locomotive horn restrictions beyond June 24, 2008 without interruption. The purpose of this Notice of Intent is to provide an opportunity for the railroads and the State agencies to provide comments and recommendations to the public authority as it is planning the quiet zone. They will have 60 days to provide these comments to the public authority. The Notice of Intent must be provided, if new SSMs or ASMs will be implemented within the quiet zone. FRA encourages public authorities to provide the required Notice of Intent early in the quiet zone development process. The railroads and State agencies can provide an expertise that very well may not be present within the public authority. FRA believes that it will be very useful to include these organizations in the planning process. For example, including them in the inspections of the crossing will help ensure accurate inventory information for the crossings. Note: Please see Section IV for details on the requirements of a Notice of Intent.

2. All of the items listed in "Requirements for Both Public Authority Designation and Public Authority Application—Pre-Rule Quiet Zones" previously mentioned are to be accomplished. Remember that a Pre-Rule Quiet Zone may be less than one-half mile in length if that was its length as of October 9, 1996. Also, a Pre-Rule Quiet Zone does not have to have automatic warning devices consisting of flashing lights and gates at every public crossing.

3. Calculate the risk index for each public crossing within the quiet zone as in Step 3—Pre-Rule Quiet Zones—Automatic Approval.

4. The Crossing Corridor Risk Index is then calculated by averaging the risk index for each public crossing within the proposed quiet zone. Since train horns are not being sounded for crossings, this value is actually the initial Quiet Zone Risk Index.

5. Calculate Risk Index with Horns by the following:

a. For each public crossing, divide the risk index that was calculated in Step 2 by the appropriate value in Table 1. This produces the risk index that would have existed had the train horn been sounded.

b. Average these reduced risk indices together. The resulting average is the Risk Index with Horns.

6. Begin to reduce the Quiet Zone Risk Index through the use of SSMs or by upgrading existing warning devices. Follow the procedure provided in Step 6—Public Authority Designation until the Quiet Zone Risk Index has been reduced to a level equal to, or less than, either the Nationwide Significant Risk Threshold or the Risk Index with Horns. A public authority may elect to upgrade an existing warning device as part of its Pre-Rule Quiet Zone plan. When upgrading a warning device, the accident prediction value for that crossing must be recalculated for the new warning device. Determine the new risk index for the upgraded crossing by using the new accident prediction value in the severity risk index formula. This new risk index is then used to compute the new Quiet Zone Risk Index. (Remember that FRA's web-based Quiet Zone Calculator will be able to do the actual computations.) Once the Quiet Zone Risk Index has been reduced to a level equal to, or less than, either the Nationwide Significant Risk Threshold or the Risk Index with Horns, the quiet zone may be established by the Public Authority Designation method, and the public authority may provide the Notice of Quiet Zone Establishment once all the necessary improvements have been installed. If the quiet zone is established by reducing the Quiet Zone Risk Index to a risk level equal to, or less than, the Nationwide Significant Risk Threshold, FRA will annually recalculate the Nationwide Significant Risk Threshold and the Quiet Zone Risk Index. If the Quiet Zone Risk Index for the quiet zone rises above the Nationwide Significant Risk Threshold, FRA will notify the public authority so that appropriate measures can be taken (See § 222.51(b)).

7. If the Pre-Rule Quiet Zone will not be established before June 24, 2008, the public authority must file a detailed plan for quiet zone improvements with the Associate Administrator by June 24, 2008. By providing a Notice of Intent (see Step 1 above) and a detailed plan for quiet zone improvements, existing locomotive horn restrictions may continue until June 24, 2010. (If a comprehensive State-wide implementation plan and funding commitment are also provided and safety improvements are initiated within at least one Pre-Rule Quiet Zone or Pre-Rule Partial Quiet Zone, existing locomotive horn restrictions may continue until June 24, 2013.) (See § 222.41(c) for more information.)

**Note:** The provisions stated above for crossing closures, grade separations, wayside horns, pre-existing SSMs and pre-existing modified SSMs apply for Public Authority Application to FRA as well.

#### *D. Pre-Rule Quiet Zones—Public Authority Application to FRA*

The following discussion is meant to provide guidance on the steps necessary to establish a Pre-Rule Quiet Zone using the Public Authority Application to FRA method.

1. The public authority must provide a Notice of Intent (§§ 222.43(a)(1) and 222.43(b)) to the railroads that operate within the proposed quiet zone, the State agency







# LETTER 10

**WESTERN PLACER**  
WASTE MANAGEMENT AUTHORITY

GEORGE MAGNUSON, ROCKLIN  
PAUL JOINER, LINCOLN  
ROBERT WEYGANDT, PLACER COUNTY  
JOHN ALLARD, ROSEVILLE  
JACK DURAN, PLACER COUNTY  
JAMES DURFEE, EXECUTIVE DIRECTOR

September 26, 2011

Laura Webster, Acting Program Services Manager  
City of Rocklin  
3970 Rocklin Road  
Rocklin, CA 95677

[via email to Laura.Webster@rocklin.ca.us](mailto:Laura.Webster@rocklin.ca.us)

## RE: ROCKLIN GENERAL PLAN UPDATE, DRAFT EIR

Dear Ms. Webster:

Thank you for providing us with the opportunity to review the above mentioned Draft EIR (DEIR). The Western Placer Waste Management Authority (WPWMA) is a regional agency comprised of Placer County and the Cities of Roseville, Rocklin and Lincoln. WPWMA owns and operates the Western Regional Sanitary Landfill (WRSL) and Materials Recovery Facility (MRF) at Athens Avenue and Fiddymont Road, and provides recycling and waste disposal opportunities to the member agencies as well as the cities of Auburn and Colfax and the Town of Loomis.

10-1

Our comments are as follows:

### 4.13.2.1 Solid Waste

#### 1. Page 4.13-16 – Western Placer Waste Management Authority

- a. Clarification regarding the WPWMA's funding sources: "The WPWMA's primary source of funding, with the exception of...and other minor sources of revenue ...is from tipping fees..."
- b. Clarification regarding the last sentence which states "...the MRF diverts approximately 50 percent of the material received..." The MRF typically diverts approximately 30 percent from the MRF processing lines; combined with the additional recyclables received and diverted via the facility's buy-back center, drop-off center, compost facility, and landfill diversion (inert waste and construction / demolition waste). Facility-wide, the overall diversion achieved is nearly 50 percent.

10-2

10-3

#### 2. Page 4.13-17 - Materials Recovery Facility and Western Regional Sanitary Landfill

- a. The first sentence states "...the MRF recently completed an expansion..." The MRF expansion was completed in 2007.

10-4

### RECYCLING AND DISPOSAL MADE EASY

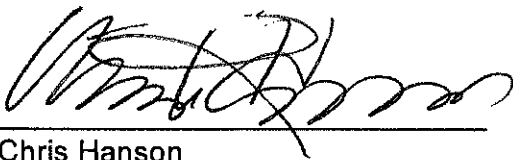
11476 C AVENUE AUBURN, CA 95603  
(916) 543-3960 / (916) 543-3990 FAX  
WWW.WPWMA.COM

<p>b. Please make the following edit: “This expansion...<del>increased the amount of materials recovered from the waste stream by approximately 20 percent</del>” because the recovery rates at the MRF are not solely due to the expansion or added technology; actual recovery rates are highly affected by other factors, including commodity markets.</p>	<p>10-5</p>
<p>c. 2<sup>nd</sup> paragraph states the landfill is 320 acres; the landfill is <u>281</u> acres.</p>	<p>10-6</p>
<p>d. The second paragraph discusses landfill capacity. The WRSL has a total permitted <u>design</u> capacity of 36,350,000 cubic yards <u>and a remaining capacity of 25,094,157 cubic yards.</u></p>	<p>10-7</p>
<p>e. In addition to landfill capacity, the DEIR should also discuss the MRF’s capacity to handle additional solid waste from development projects. The MRF has a processing permitted capacity of 1,750 tons per day and 1,014 vehicles per day; for the period of July 1, 2009 to June 30, 2010, the average weekday tonnage received at the MRF was 815 tons and the average weekday vehicle count at the MRF was 532.</p>	<p>10-8</p>
<p>f. Please note, in addition to the 465 acres owned to the west, WPWMA also owns 158 acres to the east, although there is no defined use for that property as of yet. Currently it will be used as a land use buffer.</p>	<p>10-9</p>
<p>g. “The WPWMA has contracted with Energy 2011...which is eventually sold to <u>Roseville Power.</u>”</p>	<p>10-10</p>
<p>3. Page 4.13-18 -</p>	
<p>a. Table 4.13.2-1 lists a history of the City’s diversion rates, but only through 2006. It may provide a more complete discussion to include recent years, with a discussion of SB 1016 (2008) which changed the compliance measurement to per capita disposal for years 2007 and later.</p>	<p>10-11</p>
<p>b. California Integrated Waste Management Act - The third paragraph discusses AB 939; it would be more accurate to state that AB 939 “requires all California cities and counties to <u>divert 50 percent of waste generated...</u>”</p>	<p>10-12</p>
<p>4. Page 4.13-20 – Impact 4.13.2.1 Increased Demand for Solid Waste Services</p>	
<p>a. The impact analysis should not be based on the landfill’s maximum permitted capacity, but rather on the available capacity. The WRSL is permitted to accept 1,900 tons per day and 624 vehicles per day; it currently receives an average of 607 tons per weekday and 81 vehicles per day (2010 average).</p>	<p>10-13</p>
<p>b. Since growth in Rocklin was assumed when developing the WRSL and MRF, it would aid in the impact analysis of this General Plan Update to discuss or compare the <i>additional</i> amount of solid waste generated as a result of the update.</p>	<p>10-14</p>

- c. The last paragraph states, "The MRF is located at the same site as the landfill and there is substantial land available for expansion of the MRF." Although the WPWMA has additional land available for future use, because of the current configuration of the MRF and landfill it would be difficult to expand the current facility. Any future increases in capacity needs would require construction of a new facility. 10-15
- 5. Page 4.13-21 – Proposed General Plan Update Policies that Provide Mitigation
  - a. The impact analysis states that the listed policies would reduce impacts to solid waste services by requiring solid waste collection services; however by virtue of generating and sending more waste to WPWMA, there is the potential for certain infrastructure impacts at the MRF and on the lifespan of the landfill, both which are not, and should be, discussed in the DEIR. 10-16
  - b. None of the policies listed would assist in actually reducing the volume of waste generated by the anticipated growth in the City. To reduce solid waste related impacts, the policies should not just support planning processes, but also support education, programs, and requirements promoting waste reduction. 10-17
  - c. The paragraph states that the impacts are less than significant also because the landfill has capacity until 2042; however, the impacts on the lifespan of the landfill can be reduced with each project. As discussed above, the analysis should discuss whether the additional solid waste generated as a result of the update would significantly reduce the life of the landfill. 10-18

Should you have any questions, please do not hesitate to call me at 530-886-4965 or Eric Oddo, Senior Engineer, at 916-543-3984.

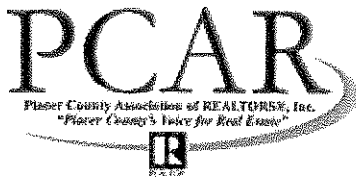
Sincerely,



Chris Hanson  
Senior Planner

CH:lm

# LETTER 11



September 26, 2011

City of Rocklin  
ATTN: Laura Webster, Acting Planning Services Manager  
3970 Rocklin road  
Rocklin CA 95677

RE: DEIR, Draft General Plan Update document and Associated Draft Climate Action Plan

Dear Laura,

The Placer County Association of Realtors has read the PMC CAP dated April 2011. We obtained it immediately prior to the joint meeting of your Planning Commission and City Council on your General Plan Update and DEIR.

11-1

Our membership represents both buyers and sellers of predominately residential properties. As our memberships' professional organization, we have assumed responsibility to participate in public affairs not only for the welfare of our membership, but also our clients.

The inclusion of a green house gas emissions reduction goal that would require all the existing buildings in your City to be retrofitted before each building can be sold to reduce greenhouse gas emissions is of serious concern for our clients who are attempting to exchange property in the most seriously depressed real estate market since the 30's. Further, there is no clear consensus about when the market may change, especially in the Sacramento region.

11-2

Rocklin is a unique community with a rich history, a visible record of stability and prosperity and good planning for a positive future. But that is precisely why a "point of sale" measure will be uniquely challenging, given the upheaval in the real estate market. Newer product, with no (or less) energy retrofit costs will be significantly advantaged. Had PMC been directed by your staff to seek local real estate market input from the Placer County Association of Realtors (located in

Rocklin) in the preparation of this CAP, the problems with applying an affluent captive infill Bay Area market to Rocklin in this economic climate could have been avoided.

11-2  
cont'd

Your staff maintains the actual decision to implement the goal is "in the future". But our grave concerns over the lack of consideration of economic impacts of this proposal, our firm belief that property owners in your community are unaware of this proposal, and the staff's decision to attach this proposal to your environmental document, thereby making it a first step in processing such an ordinance, has led us to seek counsel in preparing comments. These comments are attached.

11-3

We ask your Planning Commission express concerns that the community has not been broadly advised of this proposal and to recommend removal of the goal for energy retrofits from the CAP.

11-4

Sincerely,



Dave Johnson  
President

**Comments Regarding Climate Action Plan and DEIR Air Quality Impact Analysis and  
Mitigation**

**For the General Plan Update Process, Rocklin CA**

**Autumn Wind Associates, Inc.  
Newcastle, CA**

**Prepared for the Placer Association of Realtors**

**September 24, 2011**

The following comments are based on review of air quality impact analysis and mitigations discussed within the Air Quality element of the Rocklin General Plan Update Draft EIR (DEIR) and the Rocklin Climate Action Plan (April 2011), and are provided at the request of the Placer Association of Realtors.

11-5

**I. Climate Action Plan Point-of-Sale Measure Benefits Are Uncertain; Emission Reduction Estimates Lack Adequate Supporting Information**

1-A. At Climate Action Plan (CAP) Appendix B, pg. 1, item 1, "Energy and Efficiency Conservation" will produce - 212 "Metric Tons CO<sub>2</sub>e per Service Population" in 2020, and a larger (negative) amount in 2030. Does this mean that the item will provide about one-fifth of a ton of carbon benefits in 2020? How were these figures derived and what assumptions were used in calculating the two values? No information is provided in or with the unlabeled table to explain how the units were calculated and what assumptions underlie them. Are the 212 tons of carbon reductions expressed as annual value, or are they expected to accumulate to that value by 2020? Why are values listed here exponentially different than those listed for what appears to be the same mitigation showing at CAP Appendix B, pg. 3, item 3?

11-6

1-B. At CAP Appendix B, pg. 3, item 3, the "Energy Conservation Ordinance" reduction measure will produce - 19,594 "Metric Tons CO<sub>2</sub>e" in 2020 and a greater (negative) number in 2030. How were these figures derived and what assumptions were used in calculating these two values? No information is provided in or with the table to explain how the units were calculated and what assumptions underlie them. 2030 carbon benefits from the "Energy Conservation Ordinance" are noted to be twice the value in the 2020 column. Why is this? What rationale was used to assume a doubling of the tons of carbon reduced across that ten-year period?

11-7

1-C. What essential point of sale turnover rate assumptions were made for the Climate Action Plan's RECO/CECO measures to allow for CO<sub>2</sub>e benefits (in metric tons) identified in Appendix B at pg. 1 and pg. 3? Berkeley's RECO/CECO measures were implemented about 20 years ago and did not evaluate turnover rates that are typical of today's depressed CA real estate market, and lower actual turnover rates along with other confounding factors have significantly reduced the efficacy of the measure in reducing tons of CO<sub>2</sub>e. Did the City (Rocklin) consider this information when modeling their RECO/CECO measures (as contained in the CAP) on Berkeley's ordinance?

11-8

## II. AB 32 Does Not Require Rocklin To Implement A Climate Action Plan

2-A. At CAP pg. 4, Introduction, the following information is found:

AB 32 has caused a ripple effect among cities, counties, and environmental groups throughout the state. In *State of California Attorney General v. San Bernardino County* in 2007, the California Attorney General's Office argued that the environmental impact report for San Bernardino's new general plan did not conform to the overall goals of AB 32 because it did not adequately analyze or mitigate the effects of development on global warming. The County settled with the State by agreeing to produce a greenhouse gas emissions reduction plan much like this report. The Rocklin reduction plan at the same time furthers California's commitment to addressing climate change.

11-9

The quotation above implies that the CAP is made necessary by actions of the Attorney General against San Bernardino County because in that case "their new general plan did not conform to the overall goals of AB 32". In fact, the Attorney General's actions were aimed at correcting perceived CEQA deficiencies in the County's EIR with regard to identifying, evaluating, and mitigating green house gases associated with the General Plan's approval, and that, further, AB 32 legislation does not (as is implied in the section quoted above) require either a Climate Action Plan or any of the mitigation measures contained within the City's CAP produced in April, 2011.

2-B. While it is laudable that the City seeks to reduce its carbon emissions, nothing in AB 32 requires the City to produce a CAP or use measures such as those identified in Rocklin's CAP. From 2009 guidance issued by the State's Attorney General:

"AB 32 does not purport to establish a CEQA threshold or to establish a specific emission reduction goal for local land use projects. In promulgating the most recent revisions to the State CEQA Guidelines to address GHG emissions, the Resources Management Agency specifically cautioned that AB 32 does not provide a performance standard for CEQA significance determinations."

11-10

In fact, AB 32 requires the California Air Resources Board (CARB) to develop regulations and market mechanisms to reduce California's greenhouse gas emissions, and no regulations have been produced that require the City to prepare a Climate Action Plan or determine or enact CO<sub>2</sub>e mitigation measures such as those contained in its CAP. Why, in contrast, is the CAP (and by default, the DEIR in which it is now placed for public review) written in such a way as to imply a legal requirement for a CAP and the use of specific measures in the San Bernardino case "much like those in this report"? Why have the CAP and DEIR failed to provide an accurate discussion regarding



the voluntary nature of commitments to reduce Rocklin’s green house gases associated with the General Plan Update process?

11-10  
cont'd

### **III. CAP Point-of-Sale Measures Lack Consideration and Discussion of Important Analytical Information and Implementation Factors**

**3 –A.** At CAP pg. 23, under Supporting Measure 3 – Energy Conservation Ordinance, the following information is provided:

“The ordinance will require that every home, apartment building, and commercial building sold or transferred in Rocklin meets energy and water efficiency requirements for a range of building systems and features, including toilets, showerheads, water heaters, attic insulation, exterior door weather stripping, and more. Energy savings associated with ECO measures average about 20% per building. [Footnote: City of Berkeley. City of Berkeley 2009 Climate Action Plan. [www.BerkeleyClimateAction.org](http://www.BerkeleyClimateAction.org) (accessed October 1, 2009).] ECOs also have the potential to increase the value of commercial and residential real estate in the long run and will contribute to decreased water and energy costs for ongoing operations and use of the property.

The information makes clear that the ordinance will require actions at point-of-sale, but it fails to provide any specifics on how the measure will be implemented, when inspections are required, what entities will be involved with inspecting and verifying buildings at point-of-sale for conservation upgrades, average costs or cost ranges for compliance, hardship provisions (if any), how revenues will be generated to pay for the implementation and enforcement at the City, etc. As written, the measure is nothing more than a vague promise to create an ordinance, as noted at CAP pg. 58, sometime in the 2015 – 2020 timeframe. Even this timeframe makes little sense---how can the varying emission reductions ascribed to the point-of-sale energy conservation ordinances found at various locations in the CAP be produced by 2020 if the conservation measures are, say, enacted in 2020? More importantly for the purposes of clearly identifying mitigation measures that are not speculative or otherwise so poorly or vaguely designed that they are unlikely to ever be implemented, what information is presented in the CAP that ensures that the point of sale ordinances will be enacted at all?

11-11

**3-B.** At CAP pg. 21 information is provided at the right-hand side of the page regarding estimated “Cost Savings to the City” and “Cost to the City” for Energy Efficiency and Conservation. Various conservation measures are subsequently identified and discussed in the following pages, including “Supporting Measure 3 – Energy Conservation Ordinance” (RECO-CECO measures), yet no information is provided in the document that would enable the public or CEQA decisionmakers to understand or compare the costs for this measure or any other.

11-12

While CEQA requires the use of reasonable, feasible mitigations to reduce significant environmental impacts, excessive mitigation cost typically result in findings of significant and unavoidable impacts. (If the specific economic, legal, social, technological or other benefits of a proposed project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered "acceptable." (Public Resources Code, §21081, subdivision [B]), (CEQA Guidelines, §15093, subdivision [a];15021, subdivision [d].)

11-12  
cont'd

**3-C.** In this case without any cost-related information pertinent to each measure, how will decisionmakers (and the public) ascertain whether the point-of-sale energy conservation ordinances---listed as mitigations in the General Plan Update EIR for Rocklin's carbon emissions--are reasonably and feasibly affordable? Based on information supplied by the Berkeley Association of Realtors, costs to upgrade some older buildings at point of sale have resulted in tens of thousands of dollars in extra costs and these costs have delayed or resulted in cancellations of sales. Similarly, California's recession is now in its fourth year, and in Placer County 71% of current real estate sales are for distressed properties: short-sales, REOs, and bank foreclosures. In distressed sales, lenders and bank-owners will not provide energy conservation upgrades since the property at hand is already upside-down on its loan-to-value. Buyers, faced with perhaps thirty thousand dollars of expenses to comply with the energy conservation measure, are far more likely to either select a newer home (with less potential for CO2e reductions provided by the RECO measure) in Rocklin or, more likely, to purchase a home in nearby Roseville, Loomis, Lincoln, or Penryn (where no such ordinances exist).

11-13

**3-D.** Older homes and commercial buildings affecting sales patterns and competitive market forces in the Rocklin area are notably different than those for similar types of older structures in Berkeley; many of Rocklin's older homes were built in the early 60's with few energy conservation features and are outdated by today's standards, and will compete poorly for sales against newer homes that will require no or fewer conservation energy upgrades. By comparison Berkeley's built environment cannot expand, its supply of houses and commercial buildings essentially being fixed at a physical maximum---virtually all its lots are built out, as are those lots in surrounding communities. In such a setting, older buildings retain more of their value---and are thus worth relatively more in comparison to costs for compliance with RECO/CECO measures---than to older homes and buildings in the Rocklin area where an older building will compete for sale with newer buildings and against options to build entirely new buildings on open lots available throughout the region.

11-14

**3-E.** Because the supply of structures in Berkeley is limited, sales of older buildings retain more relative value and will automatically fare better than in Rocklin, and their costs to comply with RECO/CECO measures are

11-15

lower in relation to their market value. This illustrates a substantial and essential difference between Rocklin and Berkeley---sales of buildings, particularly older buildings that would provide relatively greater CO2e benefits, are influenced by fundamentally different competitive and market force factors that were not considered in the Rocklin CAP's adoption of the Berkeley RECO/CECO measures. The CAP, and by default the GPU in which it has been inserted by the Lead Agency, lacks information or discussion of anticipated RECO/CECO compliance costs or the essential differences in market conditions between the exurban Rocklin with local and regional greenfield-related competition and Berkeley---a highly urbanized city in a largely built-out region marked by greater population densities competing for a relatively fixed supply of houses and commercial buildings. Why was no economic analysis of the point-of-sale energy conservation measures and comparative costs between measures prepared and made available in the CAP or the DEIR? At the very least, the CAP should have contained analysis comparing closing costs on typical purchase prices locally and regionally with currently available financing, with related discussion of how much the point-of-sale requirements would be expected to add to sales expenses. Without such information the public and decision-makers are denied information essential to evaluating the measures' cost-effectiveness and determining whether they are reasonable and feasible mitigation options.

11-15  
cont'd

#### **IV. Real Estate Measure Turnover Rates Utilize Unproven Assumptions and Overestimate CO2e Benefits**

**4-A.** Turnover rates of residential and commercial properties subject to RECO/CECO measures are critical to reliably estimating CO2e benefits over time. Point-of-sales measures in Berkeley reflect turnover rates that differ appreciably from those in Rocklin, although the CAP has failed to mention this. Turnover rates are artificially over-estimated at CAP pg. 11, item 3 – Energy Conservation Ordinance. This excerpt identifies assumptions of CAP's consultants used to estimate related CO2e benefits:

11-16

“It is generally understood that the average person stays in a home or business for 5–7 years. To make a conservative estimate, assume that 50% of existing (pre-2008) homes are turned over between the time of this measure's implementation and 2020 and 100% are turned over between the time of implementation of this measure and 2030.”

On the next page, under Assumptions:

Average of 3,500 homes per year were sold in Rocklin between 2004 and 2009 (total of 87,500 sales within the 25-year time period).

Why does the CAP fail to provide the number of buildings it has assumed, for purposes of estimating tons of CO<sub>2</sub>e reductions, will be subject to the RECO/CECO measures? Without this information it is not possible to verify the accuracy or validity of quantities of emission benefits predicted for 2020 and 2030 at CAP Appendix B.

11-16  
cont'd

**4-B.** The assumption of property sale turnover rates from “the average person stays in a home or business for 5-7 years” is based on 2007 and earlier real estate market and general economic conditions, and is patently invalid for application to Rocklin in 2011—and is likely to remain so for the next ten years or more.

Economic conditions and housing values in Rocklin and the Sacramento region remain depressed, and have declined at a greater rate over the last four or more years in comparison to Berkeley and the Bay Area rates during the same time period. The economy began to falter in December 2007 (the official start of the recession) and went into a freefall in September 2008. Short-sales, REOs, and bank foreclosures in Rocklin and the surrounding greater Sacramento region continue to increase at rates unmatched in California’s history; distressed sales for Rocklin now represent 71% of the market. 56% of sales in 2009 were for distressed properties and the figure rose to 62% in 2010. Why were these or similar statistics not presented in the CAP and DEIR? Why is there no discussion of the steadily worsening sales trend indicated by this data?

11-17

**4-C.** This information clearly shows that the CAP’s use of generalized and outdated assumptions is not appropriate and must render substantially over-estimated carbon benefits for use of the Berkeley RECO/CECO measures. Worse, the lack of an adequate discussion of relevant cost and market factors and information denies the public and decisionmakers vitally important information regarding the CAP’s proposal to use point-of-sale ordinances to reduce Rocklin’s CO<sub>2</sub>e emissions. As noted at pg. 15 of “CEQA and Climate Change” of the California Air Pollution Control Officers Association:

11-18

“CEQA analyses need not be perfect or exhaustive -- the depth and breadth of the analysis is limited to what is “reasonably feasible.” (Guidelines §15151). At the same time, the analysis “must include detail sufficient to enable those who did not participate in its preparation to understand and to consider meaningfully the issues raised by the proposed project.” (Laurel Heights Improvement Assn. v. Regents of University of California (1988) 47 Cal.3d 376)

4-D. The CAP's reliance on actual sales data from 2004 – 2009 of 3500 homes conflicts with information obtained from the Placer Association of Realtors.<sup>1</sup> Rocklin is estimated with ~22,000 residential properties, and turnover of the entire housing stock is likely to take about 28 years at current sales rates. And because not every home would sell just once during that period, it would actually take much longer to turn over the entire inventory. Clearly, RECO/CECO CO2e benefits are grossly overestimated in the CAP when accounting for actual market conditions and sales information over the last several years. Information regarding Rocklin property sales by year, and distressed sales for two years, is provided in the table below.

Year	Rocklin Sales
Dec-2010	778
Dec-2009	703
Dec-2008	745
Dec-2007	602
Dec-2006	696
Dec-2005	973
Dec-2004	1113
Dec-2003	953
Dec-2002	1897
Dec-2001	1655
<i>Total:</i>	<i>10,115</i>
2009 Partial Distressed:	394
2010 Partial Distressed:	481

11-19

4-E. Not surprisingly, 2011 data reflect a higher percentage of distressed sales (to date) as the recession continues its downward slide. The CAP fails to note that distressed properties are the vast majority of sales, nor does it reflect that banks and lending entities will not pay to retrofit homes for compliance with a RECO measure prior to sale. As a practical reality, buyers simply will not retrofit a home spending their own cash and particularly when such costs could easily run into tens of thousands of dollars—and in most cases they can't technically make changes to the property anyway. Why were compliance cost estimates not provided in the CAP? Why did the CAP fail to recognize current market conditions that are certain to cause considerable risks to achieving the objectives (in tons of CO2e reduction) of the proposed point-of-sale measures? As noted from

11-20

<sup>1</sup> Personal communication; Dean Anderson, Placer County Association of Realtors; Sept. 22, 2011.

communications with the Association of Realtors of Berkeley (where RECO/CECO ordinances are undergoing their third revision in 20 years) and the Placer Association of Realtors, “who in their right mind would pay \$5,000, \$10,000 or even \$25,000 to retrofit a home that they don't own on the hopes that they could close escrow on it? To make matters worse, short sale/foreclosure market continues won't get better anytime soon. The economy, jobs, inability of move-up sales, and new sales by owners who now can't get a mortgage for the next 7 years will all take a serious toll on the number of homes sold per year”.

11-20  
cont'd

4-F. The CAP lacks robust, accurate information necessary for the evaluation of the point-of-sale measures' likely real costs and effectiveness, and it has similarly failed to provide important contextual information to the public and decisionmakers on shortfalls discovered with the Berkeley measures it copies virtually verbatim. San Francisco had an ordinance that required commercial buildings to meet energy efficiency standards when they were sold or transferred. The Commercial Energy Conservation Ordinance was passed in 1989 but repealed in 1996 because it was unpopular and problematic to enforce. Information obtained from the Berkeley Association of Realtors for Berkeley reflects roughly 8,612 housing sales, 1996 – 20102. Across this twenty-year period only about half of the housing stock has been captured by their RECO measure. Why was this information not provided in the CAP or GPU DEIR? At pg. 7 of the CAP it states that “the CAP serves as an analytical link for the City between local development, state requirements, and regional efforts”. With such limited analytical information provided in the CAP, it is very likely that the point-of-sales measures were copied virtually intact, drawbacks and all, from Berkeley's ordinances without discussion with Rocklin residents, professionals, or decisionmakers. Worse, important information and discussion reflecting the true nature of Berkeley's experiences—costs, defects, limitations, and changes in the point-of-sale measures across three versions of the Berkeley RECO/CECO ordinances over the years—have been omitted from Rocklin's CAP.

11-21

## V. CAP Mitigation Measures or “Feasible Strategies” For CO<sub>2</sub>e Reductions Fail To Comply With CEQA Requirements

5-A. At CAP pg. 1, Executive Summary:

“The 2008 community-wide baseline GHG Inventory represents a key step in the City of Rocklin's effort to improve air quality, enhance environmental sustainability, and ensure the safety and comfort of its residents for generations to come. In addition, this Inventory allows the City to quantitatively track and

11-22

<sup>2</sup> Personal communications with Mary Canavan, Berkeley Association of Realtors; September 2011

take credit for its numerous efforts related to energy efficiency and the mitigation of global climate change.”

The CAP has been made a part of the GPU DEIR and, therefore, the CEQA review process, functioning as both the “analytical link” between City-specified CO<sub>2</sub>e emission sources and measures proposed to reduce quantities of emissions in keeping with schedules identified in AB 32. Functionally, the CAP appears to be intended to provide mitigation measures within the GPU EIR process to reduce the significance of the City’s incremental share of carbon-related impacts on global climate change.

Under CEQA, a lead agency has a duty to identify feasible mitigation measures for significant impacts [CEQA Guidelines section 15126.4(a)]. The GPU EIR must set forth either specific mitigation measures or performance standards that mitigation measures would achieve by various, specified approaches. ([CEQA Guidelines § 15126.4; Sacramento Old City Association v. City Council of Sacramento, 229 Cal. App. 3d 1011, 1034 (1991).] When a Lead Agency relies on mitigation measures to reduce the significance of project impacts, there must be substantial evidence in the record demonstrating that the measures are feasible and will be effective. Substantial evidence consists of “facts, a reasonable presumption predicated on fact, or expert opinion supported by fact,” not “argument, speculation, unsubstantiated opinion or narrative.” Pub. Res. Code § 21080(e)(1)-(2).

11-22  
cont'd

In this case, the CAP serves as the “analytical link” and the functional implementation arm of Rocklin’s CEQA duty to mitigate its carbon emissions, including reliance on point-of-sale energy conservation measures that, as noted earlier in this review, lack sufficient analytical detail and discussion on a variety of critical factors (real estate turnover rates and essential market differences between Berkeley and Rocklin; actual sales data for Rocklin; increasing rates and effects of short-sales, REOs, and bank foreclosures; defects discovered with the Berkeley ordinances over time; failures of RECO’s in other municipalities; City duties, responsibilities, and funding mechanisms required to implement, track, and enforce RECO/CECO measures; average conservation-measure costs for representative segments of the real estate market in Rocklin; cost-effectiveness calculations and comparative costs for RECO/CECO measures vs. other mitigation options, etc.). Without consideration or any meaningful discussion of these important factors, the point-of-sale measures proposed in the CAP and accepted into the GPU DEIR to mitigate the City’s CO<sub>2</sub>e emissions are not based “substantial evidence” of issues and influences in Rocklin that are certain to reduce the measures’ effectiveness.

**5-B.** An EIR is inadequate if its suggested mitigation measures are so poorly developed that it is impossible to evaluate their effectiveness. [San Franciscans for Reasonable Growth v. City and County of San Francisco (1984) 151 Cal.App.3d 61, 79.] The CAP is intended to provide mitigations for the City's carbon emissions for decades to come, yet data and conclusions regarding the estimated CO<sub>2</sub>e benefits for the point-of-sale energy conservation measures are inaccurate and over-represented for emission reductions based on flawed inputs that fail to recognize critical differences between Berkeley and Rocklin real estate markets and account for at least four years of precipitous economic decline. Without effective consideration of these factors certain to influence the point-of-sales measures, their costs, and their potential emission benefits, the CAP's point-of-sale mitigations are simply too poorly developed to reliably provide—at high relative cost—anywhere near the tons of emissions estimated in Appendix B.

11-23

**5-C.** The CAP similarly fails to make clear that its measures are to act as GPU EIR mitigations under CEQA. At pg. 4.2-32 of GPU DEIR:

It should also be noted that the City's CAP provides feasible strategies to reduce emissions from energy use, transportation, land use, and solid waste. As such, strategies implemented in association with the CAP would also be expected to reduce emissions and improve air quality.

Here the EIR considers the CAP measures as "feasible strategies" to "reduce emissions and improve air quality". Are they CEQA mitigations or are they simply "feasible strategies" under City consideration for possible use at some future date? This essential uncertainty fatally compromises the EIR since it is not possible to tell whether the City considers the point-of-sales measures simply a "feasible strategy", or whether they will actually be specified for mitigating CO<sub>2</sub>e impacts associated with the GPU EIR under the requirements of CEQA Guidelines §15126.4(a)]. The CAP prepared for the City and issued in April, 2011 was not reviewed under CEQA, and it appears that it has never been accepted by the Rocklin City Council. Nonetheless, because it is cited in the GPU EIR its measures must be considered mitigations and are therefore subject to CEQA requirements. Why, then, does the Lead Agency fail to make clear that the measures in the CAP are mitigations—not speculative feasible strategies—that are made part of the CEQA review process for the GPU DEIR, and therefore must be fully effective, enforceable, and supported by substantial evidence in the record that show the measure are reasonable and feasible.

11-24

**5-D.** The CAP and DEIR similarly fail to make clear how the CO<sub>2</sub>e mitigation measures ("feasible strategies") including the point-of-sale ordinances will be implemented and enforced. Mitigation measures must be "fully

11-25



enforceable” through permit conditions, agreements, or other legally binding instruments. Pub. Res. Code § 21081.6(b); CEQA Guidelines §15126.4(a)(2). Uncertain, vague, and speculative mitigation measures have been held inadequate because they lack a commitment to enforcement. [See, e.g., *Anderson First Coalition v. City of Anderson* (2005) 130 Cal. App. 4th at 1173, 1188-89 (holding traffic mitigation fee measure inadequate under CEQA due to vagueness in program for implementing required improvements.)] No information is presented in either the CAP or the GPU DEIR that commits the City to the passage of the point-of-sale ordinances (identified as a “Phase II” measure for the 2015-2020 timeframe) and therefore they cannot be relied upon with any certainty to provide actual CO<sub>2</sub>e benefits.

At CAP pg. 23, Goal 1 identifies action that will follow initiation of the implementation of the RECO/CECO measures:

“As Phase II implementation begins, designate a committee or elected body such as the City Council to facilitate development of this program. This will entail coordination with City staff to develop recommendations for implementation.

Why would the committee noted above develop recommendations for implementation after the point-of-sale ordinances were already enacted and implementation of the measures had begun? This is yet further evidence that the CAP’s point-of-sale measures have not been given adequate consideration or CEQA review and cannot be relied upon to provide the thousands of tons of CO<sub>2</sub>e benefits estimated in the CAP at Appendix B.

11-25  
cont'd

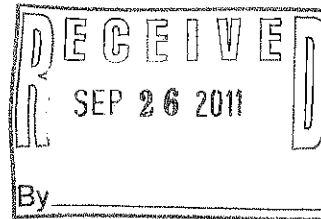
# LETTER 12

## rediscover | rocklin

c/o 3700 Rocklin Road, Rocklin, CA 95677-2716

Monday, September 26, 2011

Hon. George Magnuson, Mayor  
And Hon. City Council Members  
City of Rocklin  
3970 Rocklin Road  
Rocklin CA 95677



**RE: Draft Rocklin General Plan**

Dear City Council Members:

On behalf of the Rediscover Rocklin committee focused on Downtown, we would like to express our support of the new Draft City of Rocklin General Plan.

12-1

We support land use goals and policies that apply mixed use overlay for Downtown (LU-3), the encouragement of active involvement of stakeholders in implementation (LU-9), and the preservation and adaptive reuse of significant historic structures and sites (LU-10). We have concern that LU-11 (infill consistent with character and scale of surrounding neighborhood) might be at odds with the downtown overlay, which seeks more dense, two to four story development as encouraged by the SACOG Blueprint (as encouraged by LU-24 thru LU-30 and LU-38 thru LU-41).

12-2

Related to the General Plan Noise Element, identified environmental noise and vibration impacts, and to encourage the residential development needed and called for in the Downtown overlay zone, the City should add to the Capital Improvement Plan (CIP) and prioritize the establishment of a Federal Railroad Administration (FRA) Quiet Zone (Use of Locomotive Horns at Highway-Rail Grade Crossings, 70 Fed. Reg. 21844 (2005) "Final Rule") for all Railroad crossings between Ferron Street and Del Mar. Quiet Zones has successfully been implemented in Roseville, CA, Elk Grove, CA, and Sacramento, CA to mitigate noise impacts to existing residents and would greatly enhance the neighborhood and retail environment in the Rocklin Downtown. Why was this not considered as a mitigation measure?

12-3

As the planning effort and outreach focused specifically on downtown was done back in 2005, we strongly encourage the City to work with this committee, and other downtown stakeholders in the preparation of new standards, documents and policies to implement the Downtown overlay. These should be consistent with the Rocklin Redevelopment Plan, the Rocklin Downtown Revitalization Plan and the Front Street Historical Area Master Plan. The development of these policies and standards needs to be a priority of the City.

12-4

Sincerely,

A handwritten signature in black ink that reads "Dan Gayaldo".

**Dan Gayaldo**  
**Committee Chairman**  
Rediscover Rocklin

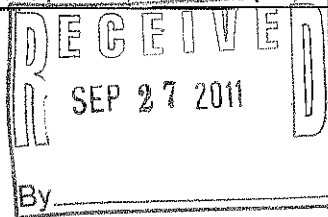
# LETTER 13



110 Maple Street, Auburn, CA 95603 • (530) 745-2330 • Fax (530) 745-2373 • [www.placer.ca.gov/apcd](http://www.placer.ca.gov/apcd)

Thomas J. Christoff, Air Pollution Control Officer

September 26, 2011



SENT VIA: email to  
[David.Mohlenbrok@rocklin.ca.us](mailto:David.Mohlenbrok@rocklin.ca.us);  
[Laura.Webster@rocklin.ca.us](mailto:Laura.Webster@rocklin.ca.us)  
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Laura Webster  
Acting Planning Services Manager  
City of Rocklin Dept. of Community Development  
3970 Rocklin Road  
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**SUBJECT: Draft Environmental Impact Report for City of Rocklin Draft General Plan Update;  
Draft General Plan Update and Draft Climate Action Plan**

Dear Mrs. Webster,

Thank you for providing the Placer County Air Pollution Control District (District) the opportunity to review the City of Rocklin's (City) DEIR for the General Plan Update (GPU) and associated Climate Action Plan (CAP). The District applauds the City's comprehensive approach to reducing criteria pollutants and greenhouse gas (GHG) emissions and supports its efforts in updating the City's General Plan and developing a GHG reduction CAP.

13-1

The District understands that the Draft Environmental Impact Report (DEIR) prepared for the 2011 GPU analyzes the proposed increase of residential units by 8,247, non-residential area by 5,909,830 square feet (DEIR, Table 3.0-1 & 3.0-2) and increase in jobs by 13,171 (CAP, Table ES-1). The District's comments focus on the technical review for air quality as well as the climate change analyses and the supplemental information such as modeling setting and methodologies for the reduction calculation. The goal of our comments is to provide the technical assistance for the City to prepare defensible documents for the CEQA review process.

13-2

In conjunction with the General Plan Update, the District supports the City's approach to develop a GHG reduction plan as the CAP being used in tiering and streamlining GHG emission analyses for the City's future development. CEQA Guidelines Section 15183.5(b) provides six (6) criteria for determining if a GHG reduction plan is appropriate for tiering for the cumulative impacts analysis. District staff uses these criteria to review and comment on the analyses proposed by the CAP to ensure that the CAP would provide quantitative analyses to support the City's goal.

13-3

The District's comment on proposed General Plan Update's Goals and Policies, the General Plan Update's DEIR, and associated Climate Action Plan is attached for the City's consideration. District staff looks forward to discussing any question regarding the District's comments and working with the City of Rocklin as you move forward with your General Plan Update to mitigate the related air pollutant emission and improved air quality efforts. If we can be of assistance, please do not hesitate to contact with me or Yu-Shuo Chang at 530-745-2325.

13-4

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Sincerely,



Angel Green  
Associate Planner

Cc: Yushuo Chang, PCAPCD  
Heather Kuklo, PCAPCD

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## I. General Plan Update: Summary of Goals & Policies & Action Plans

GP-1 The "Summary of Goals & Policies & Action Plans" chapter provided in the proposed General Plan Update does not include the goals and policies proposed by the draft Climate Action Plan (CAP). Further, this section does not make any reference to the CAP goals. The District recommends the City consider including the CAP goals and policies within the General Plan's "Summary of Goals & Policies & Action Plans" or group all GHG reduction policies under one or multiple existing elements within the Summary. Alternatively, a Greenhouse Gas Reduction Planning or Climate Change element could be broadened to accommodate this recommendation. If the CAP goals and policies are not incorporated in the Summary, it is recommended that a reference of the CAP goals be provided as done so for the Housing Element.

13-5

The CAPCOA's Model Policies for Greenhouse Gases in General Plans (June, 2009) is available via the web at [www.capcoa.org](http://www.capcoa.org) which can be as the reference for additional goal and policy recommendations. This guidance document contains additional goals and policies not considered in the City's goals and policies of the proposed General Plan Update.

## II. General Plan Update and DEIR:

EIR-1. Discussion for Impact 4.2.1: Conflict with Air Quality Plan. The District would recommend the discussion for this potential impact focus on whether the projected vehicle miles traveled (VMT) and its associated ozone precursor's emissions could influence the Sacramento Federal Ozone Nonattainment Area (SFONA) to attain the federal 8-hour ozone standards in 2018. The current 8-hour ozone Attainment Plan prepared for the SFONA demonstrates that the on-mobile source is the major contributor to the regional ozone precursor emissions. VMT is the factor resulting in the mobile ozone precursor emissions.

The District realizes that the actual rate at which growth will occur will be determined by housing market conditions, the General Plan itself dictates the level of growth which will occur. The DEIR concludes that subsequent land use activities associated with implementation of the proposed project are consistent with the Sacramento Area Council of Governments (SACOG) population projections for 2030 and therefore would not conflict with the Attainment Plan. The District recommends that the DEIR's substitution of a determination of whether air pollution resulting from the proposed General Plan Update is significant under CEQA should focus on how the related ozone precursor emissions projection would influence the SFONA to attain the federal 8-hour ozone standard. The Attainment Plan's mobile emission projections are based on the mobile budget from the SACOG Metropolitan Transportation Plan (MTP). Therefore, additional discussion between the increase of projected VMT from the City future development and SACOG's VMT projections used in the Attainment Plan should be the component for the discussion of the impact significance determination.

13-6

EIR-2. The second paragraph on page 4.2-21 should be corrected to state "...attain ozone standard by 2018".

13-7

EIR-3. The second paragraph on page 4.2-25 should be corrected to state "...Sacramento Regional 8-Hour Ozone Standard".

13-8

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**EIR-4. Analysis for Impact 4.2-2 Violate Air Quality Standards: Short-term Emissions from Construction.**

It appears that the methodology used to determine significance of construction related emission impacts associated with the buildout of the General Plan Update assumes that grading and construction activities would not exceed one acre per day for the entire City. Depending on the DEIR, at buildout of the Project construction would consist of an additional 8,247 residential units by 2021 and over 21 million square feet of non-residential land uses to be built out beyond 2030. Annual projections for development provided in Table 3.0-1 assume a high projection scenario of 600 residential units and 267,982 square feet of non-residential development per year. According the District's preliminary analysis, the average area of construction needed to build out the estimated annual projections for development would far exceed the need to grade more than one acre per day, with the potential maximum daily emissions exceeding the PCAPCD's threshold of 82 lbs per day.

Tables 3.0-1 & 4.4-24 Growth & Development Projections - High Projections				
Land Use Type	Existing Conditions	Buildout	Rate of Change	Annual Average
Residential	20,682 DUs	29,283 DUs	+8,601/13 yrs	600 units
Non-residential	7,195 KSF	21,036 KSF	+13,841 KSF/22 yrs	267,982 sq ft

13-9

The District recommends URBEMIS outputs for construction activity should use the assumptions based on in Table 3.0-1 and Table 4.4-24 to determine potential maximum daily emissions resulting from the anticipated rate of change, or average of construction activity.

It should be noted that the construction related impacts are analyzed at full buildout of the General Plan Update. The analysis for construction related impacts should be consistent with the analysis used for operational emissions.

If the analysis concludes that emissions would exceed the District's thresholds, it is recommended that the City's "Mitigation for Air Quality Impacts" form and submittal of the "PCAPCD Construction Emission/Dust Control Plan" be implemented as mitigation for this impact. For consistency, the City may consider using the format used within other sections of the DEIR (example from mitigation in Section 4.5 shown below).

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Implementation of the proposed General Plan Update noise policies identified above and their associated action steps would reduce potential noise impacts associated with development and operation of land uses of the proposed General Plan Update. Future development projects would be required to analyze project-related noise impacts and incorporate necessary noise reduction measures sufficient to achieve the applicable noise standards of the City's Noise Element. Implementation of these policies and actions will help to reduce impacts associated with proposed development. Noise reduction measures typically implemented to reduce traffic noise include increased insulation, setbacks, and construction of sound barriers. Some measures, such as construction of sound barriers, may have secondary impacts related to aesthetics and safety. The feasibility of these measures would be determined on a project-by-project basis. However, it may not be possible to fully mitigate noise in excess of City standards in all areas, particularly in existing development that may be constrained due to age, placement, or other factors which limit the feasibility of mitigation (e.g., residences fronting on the roadway that limits the ability to utilize noise barrier). As a result, the proposed General Plan Update could result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance or of applicable standards of other agencies, which is considered to be a significant and unavoidable impact.

13-9  
 cont'd

According to the DEIR, policies listed under Impact 4.2.1 would assist in reducing the city's contribution to Regional Air Quality Impacts. Consistent with the implementation of mitigation as demonstrated in other impact statements of the DEIR, the District recommends listing the mitigation measures from the Master Mitigation List (Appendix B-4), as applicable to be implemented for subsequent land development projects.

- EIR-5. Analysis for Impact 4.2.3 Increase in Criteria Pollutants: Operational Air Pollutants. The Rocklin area is located within the Federal Non-Attainment Area and is classified as serious nonattainment for particulate matter (PM<sub>2.5</sub>). According to the DEIR, PM emissions are anticipated to increase as a result of the buildout of the General Plan Update and could possibly result in exceedence of state and federal standards. Wood-burning is a major source of PM<sub>2.5</sub> emissions. In an effort to further reduce PM emissions, the District would recommend the City considering the incorporation of the following mitigation measure.

13-10

Only gas fireplaces should be permitted. Where propane or natural gas service is not available, only EPA Phase II certified wood-burning devices shall be allowed in single-family residences. The emission potential from each residence shall not exceed 7.5 grams per hour. Wood-burning or Pellet appliances shall not be permitted in multi-family developments.

- EIR-6. Tables 4.2-6 & 4.2-7. The data provided in these tables is not consistent with the URBEMIS outputs which were provided in Appendix B. Table 4.2-6 and Table 4.2-7 should present the long-term operational emissions for existing condition (2008) and development projection in 2030 resulting from the URBEMIS outputs which is attached in the Appendix B. In addition, the air modeling analysis does not make it clear if the assumption for the full buildout of the City is either in 2030 or beyond 2030. Depending on the discussion of land use chapter, it appears that the proposed buildout of non-residential development is beyond 2030. The District recommends that the related air quality modeling analysis and discussion for the long-term operational emissions should be "internally consistent" with the analyses for the other elements such as traffic in General Plan Update. If the full buildout isn't within the 2030 timeframe, the air modeling analysis should present the justification for non-residential development in 2030 and reflect it in the URBEMIS modeling outputs.

13-11

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Furthermore, the VMT inputs for the URBEMIS modeling analysis should be consistent with the data shown on Table 4.4-26. The proposed CAP indicates that the vehicle related GHG emissions for the existing condition (2008) are based on the daily VMT (1,092,000 miles per day) shown on Table 4.4-26. However, the associated vehicle related ROG and NOx emissions for the existing condition is not the same daily VMT from Table 4.4-26; the Appendix B URBEMIS outputs show the daily VMT used for the existing condition is 2,657,714 miles per day. Lastly, the numbers of units for land use types used in the URBEMIS should be consistent with the numbers shown in the Project Description. For example, The Appendix B URBEMIS outputs show that the proposed buildout for residential units are 29,135 which is not consistent with the projection of 29,283 in Table 3.0-1

13-11  
 cont'd

The District recommends the inputs for the URBEMIS analysis (e.g., VMT and housing units) for all scenarios should be internally consistent with the data presented from the other associated analyses such as the traffic study and land use analysis. Changes to the trip rate, consistent with the traffic study may be necessary to demonstrate the appropriate VMT for each URBEMIS scenario.

EIR-7. Impact 4.2-5 Increase in Criteria Pollutants: Exposure to Toxic Air Contaminants. The following mitigation measure, which will further support the recommended policies, is recommended for the TAC section.

13-12

For subsequent projects which may include stationary sources (i.e. gasoline dispensing facility, auto painting, dry cleaning, large HVAC units, etc.), the applicant shall obtain an Authority to Construct (ATC) permit prior to the issuance of a Certificate of Occupancy. NOTE: A third party detailed Health Risk Assessment may be required as a part of the permitting process.

EIR-8. Impact 4.2-7 Cumulative Contribution to the Regional Air Quality Impacts. The City of Rocklin is located within the Sacramento Valley Air Basin which is classified as a severe non-attainment area for the federal ozone standards and in order to improve air quality and attain the health-based standards, reductions in emissions are necessary within non-attainment areas. It should be noted that the District has a cumulative significance threshold of ten pounds per day for project-level ROG and/or NOx emissions. The District recommends the incorporation of the feasible mitigation for subsequent land use projects associated with the General Plan Update where emissions would exceed the District's cumulative threshold. It should be noted that that the District's cumulative threshold has been established to determine when mitigation is required and is not used to determine if an environmental impact report should be prepared. The District recommends the incorporation of the following mitigation for subsequent land use projects where ozone precursors will exceed ten pounds per day.

13-13

The proposed project exceeds the cumulative air quality thresholds as established by the APCD (a maximum of 10 pounds per day of ROG and/or NOx). The estimated total amount of excessive ROG and Nox for this project is \_\_\_\_\_ pounds per day (equivalent to \_\_\_\_ tons per year). In order to mitigate the projects contribution to long-term emission of pollutants, the applicant shall either:

- A. Establish mitigation on-site by incorporating design features within the project. This may include, but not be limited to: "green" building features such solar panels, energy



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efficient heating and cooling, exceeding Title 24 standards, bike lanes, bus shelters, etc.  
 NOTE: The specific amount of "credits" received shall be established and coordinated through the Placer County Air Pollution Control District.

- B. Establish mitigation off-site within the same region (i.e. east or west Placer County) by participating in an offsite mitigation program, coordinated through the Placer County Air Pollution Control District. Examples include, but are not limited to participation in a "Biomass" program that provides emissions benefits; retrofitting, repowering, or replacing heavy duty engines from mobile sources (i.e. busses, construction equipment, on road haulers); or other program that the project proponent may propose to reduce emissions.
- C. Participate in the Placer County Air Pollution District Offsite Mitigation Program by paying the equivalent amount of money, which is equal to the projects contribution of pollutants (ROG and NOx), which exceeds the cumulative threshold of 10 pounds per day. The estimated payment for the proposed project is \$ \_\_\_\_\_ based on \$16,640 per ton for a one year period. The actual amount to be paid shall be determined, and satisfied per current California Air Resource Board guidelines, at the time of (Choose one): [recording of the Final Map, issuance of a Building Permit].
- D. Any combination of a, b, or c, as determined feasible by the APCD Officer.

13-13  
 cont'd

EIR-9. The DEIR states, "With regard to land use planning, the proposed scoping plan expects approximately 5.0 MMT CO<sub>2</sub>e will be achieved associated with the implementation of SB 375". This statement could be misleading. The Scoping Plan estimates approximately 5.0 MMT CO<sub>2</sub>e from what may be achieved from local land use changes and is not the SB375 regional target (Proposed Scoping Plan, Table 2: Recommended GHG Measures, footnote #16).

13-14

EIR-10. On page 4.15-10, the DEIR states that PG&E procured enough renewable energy to meet 13.1 percent of its electric supply during 2007. The District assumes that this reduction should be accounted for in the baseline emissions analysis (2008) already. Therefore, the potential emission reduction achieved by the PG&E early action should be subtracted from the proposed reduction when PG&E meets the 33 percent Renewable Portfolio Standard requirement in 2020. More discussion is provided in the CAP analysis discussion below.

13-15

EIR-11. On page 4.15-12, the DEIR states that the ultimate objective of the CAP is to reduce GHG emissions by 15 percent below 2008 levels by 2020 and 35 percent below 2008 by 2030. It is also stated that the quantification of total GHG emissions from the proposed General Plan Update have been done so through the preparation of the CAP and that such emission reductions will need to achieve a 15 percent below current (2005-2008) levels in order to be consistent with AB 32. However, the methodology applied in the CAP to determine emission reductions is to use the metric tons per service population. It is not consistent with the statement shown on the DEIR. See additional comments under the CAP discussion below.

13-16

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### III. Climate Action Plan

#### The Executive Summary and the Plan:

CAP-1. It is unclear as to the actual goals of the CAP. In the ES, page 3 and 4, it discusses the level of reductions that will be achieved by the implementing of the CAP and what the State recommends, however it is not clear what the goal is exactly. Is the CAP hoping to meet a 15% (2008) and 35% (2030) reduction from baseline (which is also referenced on pages 4 and 21 of Appendix A) or is the goal of the CAP to reduce 33.24% (2020) and 51.23% (2030) in GHG from business as usual (BAU) activities since this what is being claimed as the end result of the Plan? If the CAP has set a goal for emission reductions, then what are they specifically and what is the reasoning behind choosing this level of reductions?

13-17

CAP-2. Assuming that the goal of the CAP is to reduce emissions by at least 15% below 2008 levels by 2020 and 35% by 2030, the PCAPCD looked to see if this goal would be met, pending implementation of the Plan. Based on the information provided in the CAP, the following analysis was done:

Year	BAU: Annual GHG Emissions (tonnes)	Service Population (SP)	BAU: Annual GHG Emissions (tonnes)	BAU: GHG emissions by SP	DEIR Goal: Annual GHG Emission Reductions	DEIR Goal: GHG Emission by SP Goal	Net Emissions by SP Claimed by CAP	Goal Achieved?
2008	428,001	68,331	428,001	6.26				
2020	651,599	94,158	651,599	6.92	363,801*	3.86	4.62	No
2030	869,178	103,795	869,178	8.37	278,201*	2.68	4.08	No

13-18

\*DEIR 4.15-12 states a reduction of 15% in 2020 and 35% in 2030

Based on the above analysis, it appears that estimating emissions solely on service population gives a far different result than estimating a reduction of total GHG emission which is stated as the CAP objective in the DEIR. Estimating reductions based on service population alone does not represent the level of reductions to the total GHG emission inventory. The District recommends that the objectives of the GHG emission reductions be stated explicitly and be consistent with the above analysis.

CAP-3. On page 2 and 12 (also on page 5 of the ES and pg 21 of Appendix A) the Y axis label on the Business as Usual chart should read "Metric Tons CO<sub>2</sub>e per service population" for clarification.

13-19

CAP-4. Figure ES-3 on Page 5 of the ES (and elsewhere where this diagram is included) is not consistent with the % of emission reductions outlined in Table ES-2 on page 4. The discrepancies are outlined in the following table:

13-20

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Goals and Measures	What Fig. ES-3 reads	What Table ES-2 Says
Goal 1	6%	9%
Goal 3	9%	8%
Goal 5	14%	12%
Goal 6	20%	23%
Other Goals	1%	2%
Renewable Port. Stand.	12%	21%
Low Carbon Fuel Stand.	3%	4%
Pavley	33%	21%

13-20  
 cont'd

The discrepancy between Figure ES-3 and Table ES-2 should be reconciled.

CAP-5. Page 6 states that the city has adopted a NEV Transportation Master Plan. Please cite where this plan is located.

13-21

CAP-6. Within the discussion of each goal, provide the business as usual KWh, therms, and VMT so that the reductions can be compared to that total.

13-22

CAP-7. Page 47 lists the percent of reductions from Goal 7 as 19.446% for 2020 and 2030. The 19.446% is a total reduction from all of the VMT reducing measures not just from Goal 7, which on its own is 0.53% for 2020 and 0.64% for 2030. The same can be said about the associated GHG emission reductions identified for this measure. The reduction for 2020 is 0.48% and 0.61% for 2030, not 11.792%. The inconsistency should be fixed.

13-23

CAP-8. Page 59 of the CAP identifies the PCAPCD as a supporting/partnering agency in the implementation of measures 24 and 26. However, the District is not aware of its participation on these proposed mitigation measures. This question then leads to the role of all the listed agencies on pages 57 - 59. Has contact been made with these agencies to confirm that they will be able to provide the necessary support that this CAP requires? Have any agreements or confirmation been made?

13-24

CAP-9. The District recommends that a table somewhere in the body of the Plan be provided which identifies whether each measure will be voluntary or mandatory. If the measure is identified as a mandatory measure, then please specify the anticipated implementation year.

13-25

CAP-10. The District recommends that the CAP identify how often the CAP will be reviewed and re-evaluated in regards to the GHG inventory and the implementation of proposed mitigation measures in order to ensure feasibility of the CAP.

13-26

*City of Rocklin: 2011 General Plan Update (2030) and Qualified Climate Action Plan*

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### Appendix A: Emission Inventory

- |  |              |
|--|--------------|
| <p>CAP-11. The entire analysis should be provided in detail for generating the emission inventory. It should include the associated emission factors and the forecasted projection rate in 2020 and 2030 by each sector. For example, how was VMT, KWh, emission factors, growth rate, and etc... obtained? The DEIR does not project growth for 2020 so the justification should be stated in the analysis on how growth was projected for this year in the CAP. In addition, the vehicle related GHG emissions should be presented by each vehicle class (e.g., sedan, light duty trucks, medium duty trucks, etc.) so the emission reduction can be recognized when a special measure applies such as Pavley (AB 1493) and the Low Carbon Fuel Standard regulation.</p> | <p>13-27</p> |
| <p>CAP-12. Page 3 identifies 6 areas where information was not available or considered, and therefore not included, however the area of sewage treatment emissions and water usage should be included in the business as usual emission inventory in order to remain consistent with other parts of the Plan. Solid waste generated within the city that is transported to landfills outside the city was taken into consideration when estimating emissions (pg. 6 and 7). It should be the same for waste water, sewage treatment, and water usage as well.</p>  | <p>13-28</p> |
| <p>CAP-13. Page 6 under Scope 2, it should read "activities" not "activates."</p>  | <p>13-29</p> |
| <p>CAP-14. Page 7, the unit of measurements in Table 1, electricity and NG, need to be switched.</p>   | <p>13-30</p> |
| <p>CAP-15. Page 12 spelling error. The first sentence in the second to the last paragraph should read "comes" and not "came".</p>  | <p>13-31</p> |
| <p>CAP-16. Page 13, Figure 6 "Transportation" should fit on one line.</p>  | <p>13-32</p> |
| <p>CAP-17. Table 6, page 15: What is the source that provided the information in this table?</p>   | <p>13-33</p> |
| <p>CAP-18. On Page 17 the plan indicates the GHG emissions analyzed by per capita. It is not clear the rationale of this discussion when throughout the plan the calculation methodology is all based on the service population? What is the purpose/value of including this information?</p>  | <p>13-34</p> |
| <p>CAP-19. Figure 8 on page 18 outlines the growth in total GHG emissions for each year. Figure 9 on page 21 outlines the growth in GHG's per service population. However, there is not any explanation/discussion between these two Figures how the transition from total GHG's to GHG's per service population was made. The District recommends that additional information be added which explains to the reader this transition.</p>  | <p>13-35</p> |

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CAP-20. Page 19, Table 8: Where did the data in this table come from and how was the BAU estimated for 2020 and 2030? | 13-36

CAP-21. Page 19, Table 9 there are typos for years 1990, 2000, and 2008 | 13-37

**Appendix B: Quantification of Reduction Measures**

CAP-22. The District recommends that Appendix B explicitly describe the complete methodology, emission factors, assumptions with citation, and all of the calculations for each measure so that each calculation can be recreated. Assumptions should be with their citations so they can be defensible and justifiable. The District found that many of the assumptions made in this document did not include the reasoning/justification for them and therefore lead the reader to question their validity. | 13-38

CAP-23. The District recommends that the Appendix B provide a table which presents a breakdown of each measure, including the total VMT/KWh/therms (which is not provided for each measure in the CAP) that are associated with each measure and the level of reductions from each measure for each year. For example:

Measure	2020			2030		
	Total BAU Energy/VMT Usage	Usage Reduction from measure	Tonnes CO2e reduced	Total BAU Energy/VMT Usage	Usage Reduction from measure	Tonnes CO2e reduced
1: Energy Efficient Streetlights	Not provided in CAP	462,948 KWh	134	Not provided in CAP	925,896	269
2: Municipal Energy Audit	"	282,643KWh/ 3,205 therms	99	"	282,643 KWhr/ 3,205 therms	99
Etc...						

13-39

Something similar to the above table will help the reader to easily identify usage and reductions associated with each measure in a quick and easy format and will also provide a good reference for evaluating each of the measures. The reductions for each measure are listed in Appendix B, but the total BAU energy/VMT usage associated with each measure is not listed. The total BAU energy/VMT usage is listed for the primary Goals only and not for each measure within the CAP.

CAP-24. Page 1 of Appendix B and Table ES-2 on page 4 lists the total reductions from the implementation of the Renewable Portfolio Standard. The complete analysis, including emission factors, total KWh usage per year, assumptions, and methodologies should be included in the CAP. Without being able to review how the reductions were estimated for the Renewable Portfolio Standard, the PCAPCD has some concerns as to the level of | 13-40

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reductions that are being claimed. The following information, taken from the CAP, is provided in the table below:

Year	Renewable Port. Stand. GHG Reduction per SP	SP	Total GHG emissions from Electricity Usage (tonnes)	Total GHG Emission Reductions (tonnes)	% Reduced from total Electrically generated GHG Emissions
2020	0.448	94,158	150,540	42,183	28%
2030	0.914	103,795	182,388	94,869	52%

From the above table, the CAP is claiming that PG&E will reduce **28%** of GHG emissions by 2020 and another **52%** by 2030 under the actions of the Renewable Portfolio Standard. How does a 33% change to renewable energy sources required by retail electricity providers (Executive Order ES-14-08) by 2020 equate to a 28% reduction in 2020 and then an additional 52% reduction by 2030? How did the analyses estimate the level of benefits from PG&E's implementation of renewable energy? According to the GP (pg. 4.15-10) PG&E made a 13.1% switch to renewable power by 2007. Does the analysis take this into consideration when determining baseline emissions or the emission reductions for 2020 and 2030? Where are these reductions coming from and what are the assumptions being made on behalf of PG&E?

The energy reduction measures (Goals 1 – 3) in the CAP claim an additional 28.7% reduction from electrically generated GHG emissions in 2030. When added together with the Renewable Portfolio Standard, by 2030, a total of 81% of all emissions generated from electricity usage will be reduced within Rocklin. Please clarify how this achievement will be made by providing the methodology, assumptions, emission factors, and data needed to estimate these reductions.

CAP-25. Goal 1: Energy Efficiencies, page 3

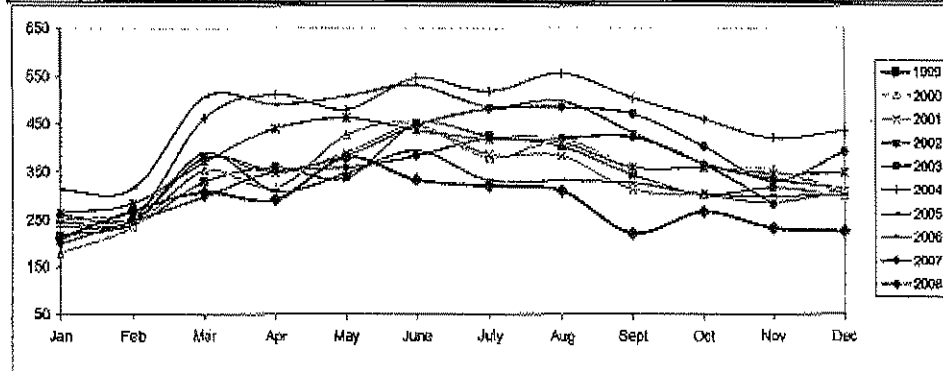
- a. *#1 Energy Efficient Street Lights*: Page 11 states that the retrofitting of existing street lights will be performed between 2009 and 2020. If this is the case, then why do the KWh reductions double for 2030? The assumption should be explained to reflect the proposed reduction in 2030.
- b. *#2 Municipal Energy Audit and Retrofit*: What were the recommendations contained in the energy audit?
- c. *#3 Energy Conservation Ordinance*:
  - i. The assumptions on page 12 state that an average of **3500 homes per year was sold in Rocklin each year between 2004 and 2009**. How was the assumption for level of sales determined? Based on a document provided by the Placer County Association of Realtors (PCAR), the number of annual

Placer County Air Pollution Control District  
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sales for Rocklin may be quite different. The figure below displays the number of home sales County wide:

**Placer County Association of REALTORS® (PCAR)  
 Monthly Closed Escrows (1999-2008)  
 (Placer County Resale Homes)**

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1999	217	239	329	399	337	450	425	403	345	302	317	289
2000	179	234	351	315	426	448	378	415	360	385	352	304
2001	249	267	379	347	389	445	385	383	312	301	285	312
2002	265	284	371	441	463	437	418	411	360	359	346	349
2003	259	252	379	353	383	447	481	486	471	403	330	392
2004	295	251	462	513	481	546	519	527	505	460	421	437
2005	313	315	507	482	503	532	486	489	493	367	334	313
2006	245	245	389	309	346	394	331	332	326	303	297	302
2007	211	268	307	291	380	393	319	310	221	268	232	226
2008	200	247	298	351	359	393	419	422	424	366	282	



Based on MetroList™ Multiple Listing Service Data. Compiled monthly by PCAR, (916) 624-8271.

Based on the above information, the total numbers of properties sold within Placer County were:

Year	# of Property Sales
2004	5387
2005	5102
2006	3819
2007	3364

To say that 3500 properties were sold each year in Rocklin would assume that an average of 79% of all property sales within the County were in Rocklin. This is a very high estimate. Another statement, which is identified in PCAR's document, under the section "Breakdown by Area", states that that the number of property sales in Rocklin in November of 2007 and 2008 were 31 and 46. In these two months, the number of sales County-wide was 232 and 282. Comparing these two sets of numbers reveals that an average of 14.5% of all property sales was sold within Rocklin. Based on this average, an estimated 641 properties were sold in

13-41  
 cont'd

Placer County Air Pollution Control District  
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Rocklin (4418 \* 14.5% = 641). (MLS Statistics November 2008 – Placer County, located at

[http://www.sacbee.com/static/weblogs/real\\_estate/NOV.placerSTATS.pdf](http://www.sacbee.com/static/weblogs/real_estate/NOV.placerSTATS.pdf))

- ii. According to the analysis, what year is assumed that this ordinance will be adopted and what is the assumed penetration rate (level of compliance)? A 100% rate of compliance cannot be presumed.
- iii. Since the methodology, on page 11, states that 50% of pre-2008 properties will be turned over by 2020 then, is the assumption that the 3500 annual property sales are sales of pre-2008 homes or does this total include all sales? How do the homes built between 2008 and the adoption of this measure factor into the equation? Again, what were the assumptions made and what data were used to come up with the reductions for 2020 and 2030?
- d. #4 *Public Outreach*: Isn't this already being done by PG&E and other agencies? What is your plan for implementing an outreach program? Will it be implemented at the same level as the Spare the Air program? The survey results of the Spare the Air program are used to assume similar results for Rocklin's outreach program. How can this be justified when the Spare the Air program is designed to promote the use of alternative transportation while Rocklin's program is designed to promote the implementation of energy conserving practices in the home or office? Page 3 & 12

13-41  
 cont'd

**CAP-26. Goal 2: Renewable Energy:**

- a. #5 *Municipal Solar Energy*: What assumptions are made for this analysis in order to claim emission reductions when this measure is voluntary? What percent of the electricity is used by city activities and were the emission reductions from the solar panels installed on the Rocklin City Police Station accounted for in the 2008 baseline inventory or were they used to contribute to the claimed reductions within the CAP's measures?
- b. #6 *Community Renewable Energy*: What is the assumption on when and how this program will be adopted and what affirmation does the City have that the CEC will continue to provide financial support for such programs? Does this measure completely rely on the availability of incentives and if so, how will the City compensate for this if incentives are not available at the time of implementation? Was this measure also evaluated for emission reductions and viability based on the assumption that no incentives would be available?
- c. #7 *Renewable Energy in Recreational and Conservation Areas*: What is the plan on implementing this measure? The measure's description on page 13 states that 500 KWh will be reduced by 2030, however, the summary table on page 4 for this measure shows that 456,250 KWh will be reduced by 2020 and then twice as much by 2030. How do the reductions double in size and how are these emissions claimed/calculated?

13-42

**CAP-27. Goal 3, Green Building and Design:**

*City of Rocklin: 2011 General Plan Update (2030) and Qualified Climate Action Plan*

13-43



Placer County Air Pollution Control District  
 September 26, 2011  
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- a. *#8 Green Building Ordinance*: According to Table 3.0-1 on page 3.0-31 of the DEIR, it states that residential build out will occur by 2021. Table 3.0-2 on page 3.0-32 of the DEIR states that non-residential development will almost double by 2030 from 2008. Page 4 of Appendix B states that GHG emission reductions will increase 3.5 times between 2020 and 2030 from this measure. Based on the available data, since residential build out will be mostly complete by 2020 then no significant increase in emissions should result from the residential sector for the 2030 reductions. Second, since non-residential build out is estimated to double between 2008 and 2030, then it could be presumed that less than half of the non-residential build out will occur between 2020 and 2030. How then, when residential build out will have occurred by 2021 and non-residential growth will have only doubled by 2030 (from 2008), does the Plan claim a 350% increase in reductions from 2020 to 2030? What assumptions were made and what methodology was used for this measure?
- b. *#9 Cool Paving Materials*:
- i. What is the source which states that Sacramento is 40% pavement? Is the 50% landscape mentioned in the methodology included in the 40% pavement assumption or is this in addition?
- c. *#10 Increased tree Cover* (page 5 & 15):
- ii. Based on the methodology on page 15, it is presumed that the City plans to plant 19,300 trees by 2015. If one tree reduces 128.16 KWh per year then wouldn't the reduction in KWh be 2,473,488 and not 6,648,810 KWh for 2020 as stated on page 10?
  - iii. What assumptions are made in order to presume that the trees will grow soon enough to achieve a maximum crown of 133 square feet per tree to generate emission reductions by 2020? That's an average of 4825 trees planted per year (2012 – 2015).  
 In detail, the analysis should include the assumptions made to determine 1) how many trees will be planted, 2) how many years until the trees will have a 133 ft<sup>2</sup> crown, 3) where will the trees be planted, 4) what type will be planted, 5) who will be responsible for planting them, 6) will there be a significant impact on water usage, and 7) how will this measure be paid for.

13-43

CAP-28. Goal 4, Downtown Rocklin, pg 6:

- a. *#11 Downtown Rocklin*: The population densities from the Downtown Rocklin Plan should be included and not solely referenced in the CAP since they are used to determine emission reductions. Page 6 & 16.
- b. *#13 Pedestrian Orientation*: The analysis should provide more detailed discussion on how reducing setbacks reduce VMT? What assumptions were made by reducing setbacks that were included in the analysis?

13-44

Placer County Air Pollution Control District  
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 Page 16 of 18

- c. The analysis described on page 17 does not explain explicitly which assumption was used: 1) for every 1% of growth in service levels then a 0.5% reduction in VMT will result or 2) for every 10% reduction between a residence and the nearest transit stop there will be a 1% reduction in annual VMT. As there is no additional methodology provided for this measure in Appendix B, it is unclear which assumption has been chosen to calculate the emission reductions. Please provide the detailed analysis to clarify which assumption has been chosen and include the associated VMT, assumptions, and emission factors used to generate the emission reductions.

13-44  
 cont'd

CAP-29.Goal 5: City-wide Land Use

- a. *#14 Mixed Use, Higher Density, and Infill Development:* The analysis for this mitigation measure should provide the assumption for the population densities for 2008, 2020, and 2030 And what percent reduction was achieved and was it taken from the total VMT or from commuter VMT?

13-45

CAP-30. Goal 6, Alternative Transportation Modes, pg 7:

- a. The Quantifying Greenhouse Gas Mitigation Measures resource guide, provided by CAPCOA (8/2010) recommends that in order to claim emission reductions from bike lane and bike parking measures they should be combined with strategies that "Improve Design of Development." The resource guide's description of improved design development states:

The project will include improved design elements to enhance walkability and connectivity. Improved street network characteristics within a neighborhood include street accessibility, usually measured in terms of average block size, proportion of four-way intersections, or number of intersections per square mile. Design is also measured in terms of sidewalk coverage, building setbacks, street widths, pedestrian crossings, presence of trees, and a host of other physical variables that differentiate pedestrian oriented environments from auto oriented environments. Page 182.

13-46

In order to evaluate such a measure, the number of intersections per square mile needs to be evaluated as outlined on page 183 of CAPCOA's resource guide.

It is unclear that the CAP has provided such a measure(s) which addresses this need in association with bike-related measures 17, 18, and 19 (which are discussed below). If this has been addressed, please identify what measure(s) will satisfy this requirement and how they meet this requirement.

- b. *#17 Non-residential Bike Parking:* Has a local study/survey been done to see that there is a need for long term storage bike racks in non-residential areas? This measure may become a requirement, but the use of the racks will be voluntary. What were the assumptions used based on level of bike rack/storage use? Was a reduction

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 September 26, 2011  
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- from the total VMT population taken or from light duty/commuter vehicles, based on the EMFAC model, or other? How many bike racks are estimated to be installed?
- c. *#18 Multi-Family Residential Bike Parking*: See comments for #17 above. Does this measure avoid double counting emissions with Measure 17 above? How many multi-family dwellings are estimated to be present and how many are estimated to be without garages in 2020 and 2030?
  - d. *#19 Bicycle Routes*: Are the planned installed bike routes associated with the rack/locker installations outlined in measures 17 & 18? If so, would there be double counting of VMT reductions since both measures above each claim a 0.625% reduction in emissions per rack/locker? Emissions more than triple from 2020 to 2030, however the infrastructure is anticipated to be installed by 2020. What were the assumptions made for determining emission reductions for 2020 and 2030 and were reductions based on total VMT or from commuter vehicles only? Please provide the complete analysis for this measure.
  - e. *#20 Pedestrian Connections*: Does this measure dovetail with any of the other measures, such as 17, 18, and 19? Will the paths and sidewalks generated by this measure connect to bike lanes, paths and trails, or transit services?
  - f. *#21 Parking Lot Design*: Are the shaded pedestrian pathways separate from the shade that the tree planting measure will incorporate? How do shaded pathways incentivize people to change their habits? What transportation measures are associated with parking lot design and what is the commercial and business square footage used to calculate emissions? Page 8 & 22
  - g. *#22 Increased Transit Service*: Have the costs associated with increasing transit service been evaluated and is it cost effective for a 1.2% increase in ridership? How do you anticipate accomplishing this goal when the City does not own its own transportation service? On page 43 of the Plan, it states that ridership will increase by 20,000 riders in 2030. This is a 20% increase from 2009 levels. How then do the emission reductions almost triple from 2020 to 2030 (pg 8 of Appendix B) from a 20% increase in ridership?

13-46  
 cont'd

CAP-31. Goal 7, Vehicle Efficiency and Alternative Fuel

- a. *#24 Vehicle Idling Limitations*: In the Table on page 9 it lists the annual VMT reduced from this measure. If this measure is designed to reduce idling time, then how does that convert into a reduction of VMT (for a vehicle does not travel when it idles)? What will you reduce idling to? When would this measure be adopted? Has a feasibility study been performed? How will this measure impact businesses (pg 9 & 24)? What was the penetration rate (level of compliance) that was used to determine emission reductions? Does the analysis assume emissions from commercial vehicles only or from all vehicles?

13-47

Placer County Air Pollution Control District  
 September 26, 2011  
 Page 18 of 18

- b. *#25 NEV Links*: How many NEV vehicles were used in this methodology to determine the emission reductions? What emission factors were used? What year would this measure be implemented? If the plan was adopted in 2008, then what will be the implementation year? How does the City ensure that it will be implemented in the future?
- c. *#26, Prioritized Parking*: Will prioritized parking for carpools, NEV's, and alt. fuel vehicles be a requirement? If so, when does the City plan to revise the municipal code to enforce this? How were the assumptions for this measure decided? Is there information available which may help to estimate the current population of NEV's, alternative fuel vehicles, hybrids, and carpools?
- d. *#27 Electric Vehicle Recharging*: If this measure requires retrofitting of already existing stations then what are the assumptions used to justify a doubling of emission reductions between 2020 and 2030? How many charging stations are currently in existence and how many are not being used due to incompatibility with current technologies? On page 25 it states that 20 stations will be installed per year. Are these new installations or retrofits? If they are new installations, then what is the value of this information since this measure only addresses the retrofitting of existing stations? What year does the City anticipate making this a requirement?

13-47  
 cont'd

CAP-32. Goal 8 Waste Reductions:

*#28 & #29*: If the MRF already recycles wood/green waste, yard trimmings, and grass (pg 53 of the Plan), then how does diverting yard trimmings, grass, and branches (pg 26 of Appendix B) benefit in GHG reductions? Appendix B should provide the generated reports from running the WARM model which shows all of the inputs into the model. In addition, since the City does not control waste management directly, what kind of assumption is made to estimate the emission reductions from these two measures?

13-48

CAP-33. State Measures: The Appendix B does not include any description on how GHG related emission reductions are calculated for the statewide regulations. The input data, emission factors, models, and the complete analysis for the Statewide measures (Renewable Portfolio Standard, Pavley, and Low Carbon Fuel Standard) need to be provided for reference and so that they can be reviewed.

13-49

# LETTER 14



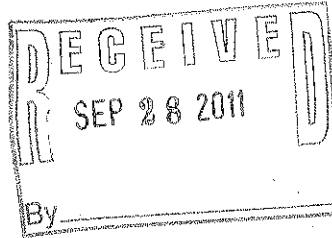
Edmund G. Brown Jr.  
Governor

STATE OF CALIFORNIA  
Governor's Office of Planning and Research  
State Clearinghouse and Planning Unit



Ken Alex  
Director

September 27, 2011



Laura Webster  
City of Rocklin Planning Division  
3970 Rocklin Road  
Rocklin, CA 95677

Subject: General Plan Update  
SCH#: 2008072115

Dear Laura Webster:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on September 26, 2011, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

"A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

14-1

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Scott Morgan  
Director, State Clearinghouse

Enclosures  
cc: Resources Agency

**Document Details Report  
State Clearinghouse Data Base**

**SCH#** 2008072115  
**Project Title** General Plan Update  
**Lead Agency** Rocklin, City of

**Type** EIR Draft EIR  
**Description** The City of Rocklin proposing the adoption of a General Plan Update. Related actions include the adoption of sixth amendment to the City's Redevelopment Plan and the adoption of a Climate Action Plan.

**Lead Agency Contact**

**Name** Laura Webster  
**Agency** City of Rocklin Planning Division  
**Phone** 916 625-5160 **Fax**  
**email**  
**Address** 3970 Rocklin Road  
**City** Rocklin **State** CA **Zip** 95677

**Project Location**

**County** Placer  
**City** Rocklin  
**Region**  
**Lat / Long** 38° 47' 26.64" N / 121° 14' 8.82" W  
**Cross Streets** Interstate 80 & SR 65  
**Parcel No.**  
**Township** **Range** **Section** **Base**

**Proximity to:**

**Highways** I-80, SR-65  
**Airports**  
**Railways** UPRR  
**Waterways** Secret Ravine, Pleasant Grove, Clover Valley, Antelope, & Sucker Ravine Creeks  
**Schools** Rocklin USD  
**Land Use** Multiple Land Use Designations

**Project Issues** Aesthetic/Visual; Air Quality; Archaeologic-Historic; Biological Resources; Drainage/Absorption; Flood Plain/Flooding; Geologic/Seismic; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Septic System; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Growth Inducing; Landuse; Cumulative Effects

**Reviewing Agencies** Resources Agency; Department of Conservation; Department of Fish and Game, Region 2; Office of Historic Preservation; Department of Parks and Recreation; Department of Water Resources; Office of Emergency Management Agency, California; Caltrans, Division of Aeronautics; California Highway Patrol; Caltrans, District 3; Regional Water Quality Control Bd., Region 5 (Sacramento); Department of Toxic Substances Control; Native American Heritage Commission

**Date Received** 08/11/2011 **Start of Review** 08/11/2011 **End of Review** 09/26/2011

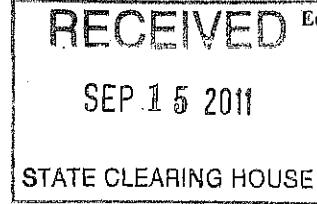


**California Regional Water Quality Control Board  
Central Valley Region  
Katherine Hart, Chair**



Matthew Rodriguez  
Secretary for  
Environmental Protection

11020 Sun Center Drive, #200, Rancho Cordova, California 95670-6114  
(916) 464-3291 • FAX (916) 464-4645  
<http://www.waterboards.ca.gov/centralvalley>



Edmund G. Brown Jr.  
Governor

clear  
9/20/2011  
e

15 September 2011

Laura Webster, Acting Planning Services Manager  
City of Rocklin Planning Division  
3970 Rocklin Road  
Rocklin, CA 95677

CERTIFIED MAIL  
7010 3090 0001 4843 3333

**COMMENTS TO DRAFT ENVIRONMENTAL IMPACT REPORT, CITY OF ROCKLIN  
GENERAL PLAN UPDATE PROJECT, SCH NO. 2008072115, PLACER COUNTY**

Pursuant to the State Clearinghouse's 11 August 2011 request, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) has reviewed the *Draft Environmental Impact Report* for the City of Rocklin General Plan Update Project, located in Placer County.

Our agency is delegated with the responsibility of protecting the quality of surface and groundwaters of the state; therefore our comments will address concerns surrounding those issues.

**Construction Storm Water General Permit**

Dischargers whose project disturb one or more acres of soil or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Storm Water Discharges Associated with Construction Activities (Construction General Permit), Construction General Permit Order No. 2009-009-DWQ. Construction activity subject to this permit includes clearing, grading, grubbing, disturbances to the ground, such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP).

For more information on the Construction General Permit, visit the State Water Resources Control Board website at:

[http://www.waterboards.ca.gov/water\\_issues/programs/stormwater/constpermits.shtml](http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml)

**Phase I and II Municipal Separate Storm Sewer System (MS4) Permits<sup>1</sup>**

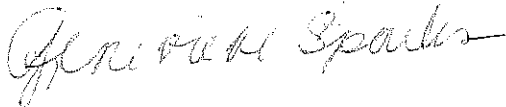
The Phase I and II MS4 permits require the Permittees reduce pollutants and runoff flows from new development and redevelopment using Best Management Practices (BMPs) to the

<sup>1</sup> Municipal Permits = The Phase I Municipal Separate Storm Water System (MS4) Permit covers medium sized Municipalities (serving between 100,000 and 250,000 people) and large sized municipalities (serving over 250,000 people). The Phase II MS4 provides coverage for small municipalities, including non-traditional Small MS4s, which include military bases, public campuses, prisons and hospitals.

For more information on the Water Quality Certification and WDR processes, visit the Central Valley Water Board website at:

[http://www.waterboards.ca.gov/centralvalley/water\\_issues/water\\_quality\\_certification/](http://www.waterboards.ca.gov/centralvalley/water_issues/water_quality_certification/)

If you have questions regarding these comments, please contact me at (916) 464-4745 or [gsparks@waterboards.ca.gov](mailto:gsparks@waterboards.ca.gov).



Genevieve (Gen) Sparks  
Environmental Scientist  
401 Water Quality Certification Program

cc: State Clearinghouse Unit, Governor's Office of Planning and Research, Sacramento



**NATIVE AMERICAN HERITAGE COMMISSION**

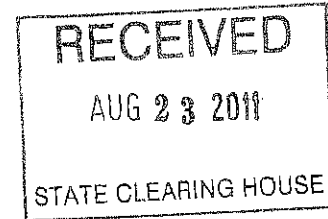
915 CAPITOL MALL, ROOM 364  
SACRAMENTO, CA 95814  
(916) 653-4082  
(916) 657-5390 - Fax



C/SAR  
9/26/11  
e

August 17, 2011

Laura Webster  
City of Rocklin Planning Division  
3970 Rocklin Road  
Rocklin, CA 95677



RE: SCH# 2008072115 City of Rocklin General Plan Update; Placer County.

Dear Ms. Webster:

The Native American Heritage Commission (NAHC) has reviewed the Notice of Completion (NOC) referenced above. The California Environmental Quality Act (CEQA) states that any project that causes a substantial adverse change in the significance of an historical resource, which includes archeological resources, is a significant effect requiring the preparation of an EIR (CEQA Guidelines 15064(b)). To comply with this provision the lead agency is required to assess whether the project will have an adverse impact on historical resources within the area of project effect (APE), and if so to mitigate that effect. To adequately assess and mitigate project-related impacts to archaeological resources, the NAHC recommends the following actions:

- ✓ Contact the appropriate regional archaeological Information Center for a record search. The record search will determine:
  - If a part or all of the area of project effect (APE) has been previously surveyed for cultural resources.
  - If any known cultural resources have already been recorded on or adjacent to the APE.
  - If the probability is low, moderate, or high that cultural resources are located in the APE.
  - If a survey is required to determine whether previously unrecorded cultural resources are present.
- ✓ If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
  - The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure.
  - The final written report should be submitted within 3 months after work has been completed to the appropriate regional archaeological Information Center.
- ✓ Contact the Native American Heritage Commission for:
  - A Sacred Lands File Check. USGS 7.5 minute quadrangle name, township, range and section required.
  - A list of appropriate Native American contacts for consultation concerning the project site and to assist in the mitigation measures. Native American Contacts List attached.
- ✓ Lack of surface evidence of archeological resources does not preclude their subsurface existence.
  - Lead agencies should include in their mitigation plan provisions for the identification and evaluation of accidentally discovered archeological resources, per California Environmental Quality Act (CEQA) §15064.5(f). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American, with knowledge in cultural resources, should monitor all ground-disturbing activities.
  - Lead agencies should include in their mitigation plan provisions for the disposition of recovered artifacts, in consultation with culturally affiliated Native Americans.
  - Lead agencies should include provisions for discovery of Native American human remains in their mitigation plan. Health and Safety Code §7050.5, CEQA §15064.5(e), and Public Resources Code §5097.98 mandates the process to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery.

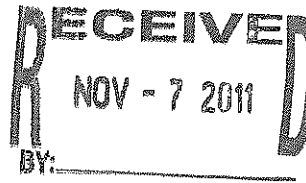
Sincerely,

Katy Sanchez  
Program Analyst  
(916) 653-4040

cc: State Clearinghouse

**DEPARTMENT OF TRANSPORTATION**

DISTRICT 3  
 703 B STREET  
 MARYSVILLE, CA 95901-0911  
 PHONE (530) 741-4233  
 FAX (530) 741-4245  
 TTY 711



*Flex your power!  
 Be energy efficient!*

**LETTER 15**

November 2, 2011

032011PLA0030  
 03-PLA-80 and PLA-65  
 City of Rocklin General Plan DEIR  
 SCH # 2008072115

Laura Webster  
 Planning and Housing Services Manager  
 City of Rocklin  
 3970 Rocklin Road  
 Rocklin, CA 95677

Dear Ms. Webster:

Thank you for the opportunity to review and comment on the City of Rocklin's General Plan Draft Environmental Impact Report. Caltrans has the following comments:

Our focus for this document as it moves forward will be directed towards Mitigation Measures and Impacts to State/Interstate Highway Segments. It is important that the upcoming Final Environmental Impact Report adequately address all potentially significant impacts that the General Plan will have on the State Highway System.

15-1

Page 4.4-85, Impact 4.4.2, Mitigation Measures: In reference to "since mitigation of this impact is outside of the City's control, the impact is considered to be significant and unavoidable," Caltrans disagrees with this statement. It should be noted it is the City's responsibility as Lead Agency for the project under California Environmental Quality Act, not Caltrans, to identify and require feasible mitigation measures for significant impacts to reduce traffic impacts caused from the project to a less than significant level.

15-2

A planned Regional Transportation Plan project also identified in Caltrans I-80 *Corridor System Management Plan* recommends extending HOV lanes on I-80 from SR 65 to SR 49 in the City of Auburn. We suggest that the City consider updating its Traffic Impact Mitigation Fee program to include contributing a "fair share" portion to the aforementioned project or support adding this HOV lane project into the South Placer Regional Transportation Agency list of projects.

15-3

Page 4.4-88, Impact 4.4.3, Mitigation Measures: In reference to "since mitigation of this impact is outside of the City's control, the impact is considered to be significant and unavoidable," Caltrans disagrees with this statement. The City should consider amending its Capital Improvement Program and Traffic Impact Fee program to include "fair-share" funding of improvements to the Rocklin Road / I-80 Interchange ramps and the Blue Oaks Boulevard / SR 65 Interchange Northbound off-ramp.


15-4

Ms. Laura Webster  
Planning and Housing Services Manager  
November 2, 2011  
Page 2

Please provide our office with copies of any further action(s) related to this project.

If you have any questions regarding these comments, please contact the Placer County Intergovernmental Review Coordinator, Dianira Soto, by email at [dianira\\_soto@dot.ca.gov](mailto:dianira_soto@dot.ca.gov) or by phone at (530) 740-4905.

Sincerely,



RICHARD HELMAN, Chief  
Office of Transportation Planning—North

15-5

## **2.4 RESPONSES TO INDIVIDUAL COMMENT LETTERS**

### **1. NATIVE AMERICAN HERITAGE COMMISSION (NAHC), KATY SANCHEZ**

#### **SUMMARY OF COMMENT LETTER:**

The NAHC letter provided four categories of recommendations for determining impacts to cultural resources, as summarized below.

1. NAHC recommended that the appropriate Information Center be contacted for a records search to determine whether or not the project area has been surveyed and whether or not recorded archaeological sites are located within or adjacent to the project area.
2. NAHC recommended that if the project area had not been previously surveyed, then a professional archaeologist should prepare a confidential survey report to be submitted to the Information Center.
3. NAHC recommended that it be contacted to perform a sacred lands file check and for a list of Native American community members who may have comments about the project.
4. NAHC recommended that the lead agency include, as part of its mitigation plan, provisions for unanticipated discovery and monitoring of sensitive areas by an archaeologist and tribal monitor.

#### **RESPONSES**

1-1. A records search for the Draft EIR focusing on the entire City was conducted with the North Central Information Center (NCIC) at California State University, Sacramento on October 15, 2008. The records search results indicated that 72 archaeological sites and 22 points of historic interest have been recorded within the project area.

1-2. As noted above, a records search was conducted for the entire City. Further efforts to survey the project area are considered unnecessary at this time because the General Plan Update Draft EIR does not propose any specific development or ground disturbance and is considered to be a program level EIR (an EIR which is prepared on a series of actions that can be characterized as one large project). Consistent with CEQA Guidelines Section 15168 (Program EIR), subsequent activities in the program must be examined in light of the program EIR to determine whether an additional environmental document must be prepared. Consistent with that direction, the City will utilize the records search results and other criteria to determine when and if additional cultural resource studies are necessary as subsequent development activities within the City are proposed.

1-3. As a part of the October 15, 2008 NCIC records search noted above, a sacred lands search and a list of Native American contacts was also requested from the NAHC. The results of the sacred lands search were received on October 16, 2008 and they did not identify any sacred lands within the City of Rocklin Planning Area. The NAHC provided a list of tribal representation groups and those groups were contacted through written correspondence, but to date, no comments regarding the updated General Plan or EIR have been received.

1-4. The General Plan Update Draft EIR references policy OCR-65 as a General Plan policy that would assist in avoiding or minimizing potential destruction or damage to prehistoric resources, including human remains. Policy OCR-65 states “Preserve significant archaeological resources (including Native American remains) and paleontological resources in place if feasible, or provide mitigation (avoidance, excavation, documentation, curation, data recovery, or other appropriate measures) prior to further disturbance.”

In addition to the policy above, it should also be noted that the City has the following standard condition that is applied to development projects – “If evidence of an archaeological or paleontological site is uncovered during grading or other construction activities, work shall be halted within 100 feet of the find and the City of Rocklin Community Development Department shall be immediately notified. A qualified archaeologist or paleontologist shall be retained at the expense of the developer to conduct an on-site evaluation and provide recommendations for removal and/or preservation. Work on the project site shall not resume until the archaeologist or paleontologist has had a reasonable time to conduct an examination and implement mitigation measures deemed appropriate and necessary by the Community Development Department to reduce impacts to a less than significant level.”

In summary, the assessment of cultural resource impacts included in the Draft EIR was conducted consistent with the above-noted requirements identified by the commenter. For more information regarding the cultural resources evaluation conducted for the Draft EIR, the commenter is referred to Section 4.8, Cultural and Paleontological Resources.

## **2. SOUTH PLACER MUNICIPAL UTILITY DISTRICT (SPMUD), RICHARD STEIN**

### **SUMMARY OF COMMENT LETTER**

SPMUD provided comments that were general in nature on the subject area of utilities and service systems regarding wastewater. The specific comments consisted of the following: 1) the provision of wastewater service by SPMUD and necessary compliance with SPMUD requirements for such provisions; 2) the requirement that as development under the City’s General Plan Update occurs, the design and construction of all sewer

facilities will be the responsibility of the respective developers/owners and all work will shall conform to SPMUD Standard Specifications, 3) regional wastewater treatment service is provided through a series of regional agreements between the South Placer Wastewater Authority, SPMUD, the City of Roseville and Placer County, and such agreements provide that capacity at the regional plant is available on a first come first serve basis, and 4) SPMUD may be rendered unable to provide service due to specific circumstances and prohibitions and/or restrictions may be imposed at the regional water treatment plant.

#### RESPONSE

2-1 The comments, which do not affect the analysis or conclusions of the Draft EIR, are considered to be noted; additional response as a part of the Environmental Impact Report (EIR) process is not necessary.

### **3. FRIENDS OF ROCKLIN OPEN SPACE, FRANK GEREMIA**

#### SUMMARY OF COMMENT LETTER

Friends of Rocklin Open Space provided comments related to a concern that the proposed General Plan Update includes modifications to goal and policy language for the protection of open space that would diminish and degrade the protection of open space lands currently afforded by existing General Plan goals and policies. The comments include reasoning for the support of the current General Plan goal and policy language regarding protection of open space, the identification of a 500 signature petition objecting to the proposed revised goals and policies which protect open space, and specific suggestions for deletions and additions to the General Plan goals and policies related to the protection of open space.

#### RESPONSE

3-1 The comments, which do not affect the analysis or conclusions of the Draft EIR, are considered to be noted. The Rocklin Planning Commission, and ultimately the Rocklin City Council, will consider and determine if they support the proposed goals and policies that are a part of the General Plan Update, or if they wish to consider the suggested edits made by the commenter. The comments will be forwarded to the decision-makers for their consideration, and additional response as a part of the Environmental Impact Report (EIR) process is not necessary.

#### **4. PLACER COUNTY ASSOCIATION OF REALTORS, DEAN ANDERSON**

##### **SUMMARY OF COMMENT LETTER**

The Placer County Association of Realtors provided comments related to the draft Climate Action Plan (CAP). The comments expressed concerns regarding a proposal in the CAP for a mandatory point of sale energy efficiency upgrade requirement, also known as an energy conservation ordinance, and how such a requirement does not work in the current economy. The comments also requested that the City conduct discussions of the proposal with affected property owners and interest groups and consider alternative and less onerous measures, and to notify them of future meetings regarding the subject.

##### **RESPONSES**

4-1 Please refer to the Master Response for Climate Action Plan (CAP) Comments at the beginning of this chapter regarding the City's decision to temporarily suspend the CAP and for additional discussion regarding an energy conservation ordinance.

4-2 The commenter has been added to the City's mailing list for the General Plan Update project and will receive future notices regarding the project as requested

#### **5. CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD, GENEVIEVE SPARKS**

##### **SUMMARY OF COMMENT LETTER**

The California Regional Water Quality Control Board (CRWQCB) provided comments related to their responsibility of protecting the quality of surface water and groundwaters of the state. The comments provided general information related to the various permits administered by the CRWQCB, including a description of the purpose of the permits, how/when the permits are required and where to find additional information regarding the permits.

##### **RESPONSES**

5-1 The introductory comment, which does not affect the analysis or conclusions of the Draft EIR, is considered to be noted; additional response as a part of the Environmental Impact Report (EIR) process is not necessary.

5-2 A general discussion of the Construction General Permit (Order No. 2009-009-DWQ) is provided in the Hydrology and Water Quality section of the Draft EIR on pages 4.9-14, 4.9-15, 4.9-18 and 4.9-19. More specific discussion of the Construction General Permit is included in Draft EIR within Impact 4.9.1 (Surface Water Quality Impacts) on pages 4.9-21 through 4.9-25, Impact 4.9.2 (Groundwater Quality Impacts) on pages 4.9-

25 and 4.9-26, and Impact 4.9-7 (Cumulative Water Quality Impacts) on pages 4.9-33 and 4.9-34.

The comment, which does not affect the analysis or conclusions of the Draft EIR, is considered to be noted; additional response as a part of the Environmental Impact Report (EIR) process is not necessary. For more information regarding the hydrology and water quality evaluation conducted for the Draft EIR, the commenter is referred to section 4.9, Hydrology and Water Quality.

5-3 A general discussion of the Phase I and II Municipal Separate Storm Sewer System (MS4) Permits is provided in the Hydrology and Water Quality section of the Draft EIR on pages 4.9-14, 4.9-15, 4.9-18 and 4.9-19. More specific discussion of the MS4 Permits is included in Draft EIR within Impact 4.9.1 (Surface Water Quality Impacts) on pages 4.9-21 through 4.9-25, Impact 4.9.2 (Groundwater Quality Impacts) on pages 4.9-25 and 4.9-26, and Impact 4.9-7 (Cumulative Water Quality Impacts) on pages 4.9-33 and 4.9-34.

The comment, which does not affect the analysis or conclusions of the Draft EIR, is considered to be noted; additional response as a part of the Environmental Impact Report (EIR) process is not necessary. For more information regarding the hydrology and water quality evaluation conducted for the Draft EIR, the commenter is referred to section 4.9, Hydrology and Water Quality.

5-4 Discussion regarding the Industrial Storm Water General Permit was not included in the Draft EIR. As noted by the comment, the federal storm water regulations require a broad range of industrial facilities to be permitted, including manufacturing facilities, mining operations, disposal sites, recycling yards, transportation facilities, and others. The operators of such facilities are required by United States Environmental Protection Agency (U.S. EPA) regulations to obtain a storm water permit.

The comment, which does not affect the analysis or conclusions of the Draft EIR, is considered to be noted; additional response as a part of the Environmental Impact Report (EIR) process is not necessary. For more information regarding the hydrology and water quality evaluation conducted for the Draft EIR, the commenter is referred to section 4.9, Hydrology and Water Quality.

5-5. A general discussion of the Clean Water Act Section 404 Permit is provided in the Hydrology and Water Quality section of the Draft EIR on page 4.9-13 and in the Biological Resources section on pages 4.10-24, 4.10-36 and 4.10-44.

The comment, which does not affect the analysis or conclusions of the Draft EIR, is considered noted; additional response as a part of the Environmental Impact Report (EIR) process is not necessary. For more information regarding the hydrology and water quality and biological resources evaluations conducted for the Draft EIR, the commenter



is referred to section 4.9, Hydrology and Water Quality and section 4.10, Biological Resources, respectively.

5-6 A general discussion of the Clean Water Act Section 401 Permit – Water Quality Certification is provided in the Hydrology and Water Quality section of the Draft EIR on page 4.9-13.

The comment, which does not affect the analysis or conclusions of the Draft EIR, is noted; additional response as a part of the Environmental Impact Report (EIR) process is not necessary. For more information regarding the hydrology and water quality evaluation conducted for the Draft EIR, the commenter is referred to section 4.9, Hydrology and Water Quality.

5-7 A general discussion of the Waste Discharge Requirements and the Porter-Cologne Water Quality Control Act is provided in the Biological Resources section of the Draft EIR on page 4.10-26 and 4.10-27.

The comment does not affect the analysis or conclusions of the Draft EIR; additional response as a part of the Environmental Impact Report (EIR) process is not necessary. For more information regarding the hydrology and water quality evaluation conducted for the Draft EIR, the commenter is referred to section 4.9, Hydrology and Water Quality. For more information regarding Waste Discharge Requirements and the Porter-Cologne Water Quality Control Act, the commenter is referred to section 4.10, Biological Resources.

5-8 The City appreciates the availability of additional information on the Water Quality Certification and WDR processes on the Central Valley Water Board website and the opportunity to follow-up with the commenter regarding their comments.

The comment does not affect the analysis or conclusions of the Draft EIR; additional response as a part of the Environmental Impact Report (EIR) process is not necessary. For more information regarding the hydrology and water quality evaluation conducted for the Draft EIR, the commenter is referred to section 4.9, Hydrology and Water Quality.

## **6. ROCKLIN AREA CHAMBER OF COMMERCE, DAVE BUTLER**

### **SUMMARY OF COMMENT LETTER**

The Rocklin Area Chamber of Commerce provided comments related to the draft Climate Action Plan (CAP). The comments expressed concerns regarding a proposal in the CAP for a mandatory point of sale energy efficiency upgrade requirement, also known as an energy conservation ordinance, and the potential negative aspects of such a requirement. The comments also suggested alternatives to an energy conservation

ordinance, considerations that should be given if an energy conservation ordinance were to go forward, and a suggestion that the energy conservation ordinance proposal be eliminated from the CAP altogether.

## RESPONSES

6-1 Please refer to the Master Response for Climate Action Plan (CAP) Comments at the beginning of this chapter regarding the City's decision to temporarily suspend the CAP and for additional discussion regarding an energy conservation ordinance.

6-2 Please refer to the Master Response for Climate Action Plan (CAP) comments at the beginning of this chapter regarding the City's decision to temporarily suspend the CAP.

The draft CAP includes several efforts aimed towards promoting increased public awareness and education regarding greenhouse gas emissions reductions and voluntary measures that are available to help reduce greenhouse gas emissions. Specifically, there is a public outreach component as a part of the energy efficiency goal whereby the City would work with PG&E and other partners to promote residential and commercial energy efficiency and conservation through such efforts as bill inserts, public service announcements, recognition programs and other forms of public outreach. As another example, although the draft CAP does not include monetary incentives directly from the City, it does include measures for promoting renewable energy and infill development where the City has proposed the consideration of incentives such as permit streamlining and fee reductions and/or waivers.

6-3 Please refer to the Master Response for Climate Action Plan (CAP) Comments at the beginning of this chapter regarding the City's decision to temporarily suspend the CAP.

As discussed in the Master Response for Climate Action Plan (CAP) Comments, at such time that the City re-initiates its efforts towards the completion of the CAP, the City will take all of the comments related to the CAP that were made through the Draft EIR public review process, including the suggestion for a cost ceiling on CAP-related policy, and address them as necessary and appropriate.

As discussed in the Master Response for Climate Action Plan (CAP) Comments, the process for consideration of an energy conservation ordinance and other greenhouse gas emission reduction measures would include an evaluation of its economic impacts and consistency with actions taken by surrounding jurisdictions. If such an ordinance were to go forward, it will be discussed through the public hearing process required for ordinance adoption.

6-4 Please refer to the Master Response for Climate Action Plan (CAP) Comments at the beginning of this chapter regarding the City's decision to temporarily suspend the CAP and Responses to Comments 6-1 through 6-3 above.

## **7. CITY OF ROSEVILLE COMMUNITY DEVELOPMENT, MARK MORSE**

### **SUMMARY OF COMMENT LETTER**

The City of Roseville provided comments on the subject areas of transportation/circulation and wastewater. The transportation/circulation comments consisted of a request to re-analyze the intersections of Pleasant Grove Boulevard/Fairway Drive and Sierra College Boulevard/Secret Ravine Parkway due to updates to the Roseville 2025 CIP base model, and a suggested correction to one of the DRAFT EIR tables due to a completed roadway improvement project. The wastewater comments consisted of a request to include the 2005 South Placer Wastewater Authority Service Area Boundary as it relates to the General Plan Update boundaries, a suggested correction to discussion regarding the permitted capacity of wastewater treatment plants, a request for assurance that Rocklin's land use information contained in the General Plan Update is consistent with that which was analyzed in the Systems Evaluation Report, and a comment related to additional flow generated in the Dry Creek Wastewater Treatment Plant sewer shed area and the fact that the SPWA Partners plan to establish a project to evaluate all intensification and rezoning areas identified in the Systems Evaluation Report for the purpose of CEQA compliance.

### **RESPONSES**

7-1 The introductory comment, which does not affect the analysis or conclusions of the Draft EIR, is considered to be noted; additional response as a part of the Environmental Impact Report (EIR) process is not necessary.

7-2 As noted in the Introduction to the Environmental Analysis and Assumptions Used, section and specifically on page 4.0-4 of the Draft EIR, Approach to Cumulative Impact Analysis, CEQA Guidelines Section 15130 requires that EIRs include an analysis of the cumulative impacts of a project when the project's effect is considered cumulatively considerable. The analysis of cumulative impacts for each environmental factor can employ one of two methods to establish the effects of other past, current and probable future projects. A lead agency may select from a list of projects, including those outside the control of the agency, or alternatively, a summary of projects. These projects may be from an adopted general plan or related planning document, or from a prior environmental document that has been adopted or certified, and they may describe or evaluate regional or area-wide conditions contributing to the cumulative impact. The Draft EIR utilized both approaches for the cumulative impact analysis. The Introduction to the Environmental Analysis and Assumptions Used section also specifically identifies

the Creekview and Sierra Vista projects on page 4.0-6, as Large-Scale Development Projects in Unincorporated Western Placer County.

As noted under Development Assumptions: Cumulative (2030) Conditions on page 4.4-53 of the Draft EIR, the development assumptions for the cumulative traffic analysis scenarios are based on a collaborative effort between DKS Associates and City of Rocklin staff. The cumulative scenarios are based on a 2030 time horizon, and a number of major development plan areas (including Regional University, Placer Ranch, Riolo Vineyards, Creekview and Sierra Vista) are estimated to be 60 percent built out.

Although the comment requests that Rocklin re-analyze the intersections of Pleasant Grove Boulevard/Fairway Drive and Sierra College Boulevard/Secret Ravine Parkway using the most recent Roseville 2025 CIP base model which has been updated with the approval of the Sierra Vista project and is based on full City of Roseville buildout, Rocklin has no obligation to continually update its traffic study as a result of newly approved developments in the region. As noted above, the development assumptions of assuming 60% buildout of major development plan areas for the 2030 time horizon was coordinated between Rocklin staff and their General Plan EIR traffic consultant, DKS Associates, and such an assumption is still considered to be conservative and realistic.

It should be noted that for the intersections of Pleasant Grove Boulevard/Fairway Drive and Sierra College Boulevard/Secret Ravine Parkway, Table 4.4-32 identified the following:

Intersection	Cumulative Conditions with Buildout of Current General Plan		Cumulative Conditions with Buildout of Proposed General Plan	
	V/C	LOS	V/C	LOS
Pleasant Grove Boulevard/Fairway Drive	1.03	F	1.04	F
Sierra College Boulevard/Secret Ravine Parkway	0.91	E	0.92	E

\* Shaded intersections do not meet LOS standard

As can be seen by the table above, the proposed General Plan Update causes the Level of Service (LOS) for the two intersections in question to degrade by 0.01 V/C ratio, which is determined to be a less than significant impact. If in fact Rocklin were to re-run its traffic model using the most recent Roseville 2025 CIP base model as requested, similar results indicating that the proposed General Plan Update would have a less than significant impact on those intersections would be anticipated.

It should also be noted that per the Draft EIR cumulative (2025) traffic analysis that was performed for the Sierra Vista project, which included buildout of the Sierra Vista and Creekview projects, the projected LOS for the two intersections in question are significantly worse in the Rocklin General Plan Update Draft EIR as compared to the analysis that was done for the Sierra Vista project. The comparisons are presented in the table below:

Intersection	Sierra Vista 2025 Cumulative Plus Project		Rocklin 2030 No Project (Buildout of Current General Plan)		Rocklin 2030 Plus Project (Buildout of Proposed General Plan)		Percentage Volume Increase from Proposed Rocklin General Plan Update
	LOS	LOS	LOS	LOS	LOS	LOS	
Pleasant Grove Boulevard and Fairway Drive	D	0.86	F	1.03	F	1.04	0.7
Sierra College Boulevard and Secret Ravine Parkway	A	0.59	E	0.91	E	0.92	1.4

The primary reasons for the Rocklin General Plan Update showing significantly worse LOS for the two intersections is that the assumptions used for the Rocklin General Plan Update effort include higher levels of non-residential development (buildout) in Rocklin, as well higher levels of regional traffic (the Rocklin General Plan Update assumed background regional traffic levels at the year 2030 while the Sierra Vista project assumed background regional traffic levels at the year 2025). The assumed higher levels of non-residential development in Rocklin led to higher traffic volumes at the Pleasant Grove and Fairway Drive intersection, while the increase in background regional traffic led to higher traffic volumes on Sierra College Boulevard.

In conclusion, any relevant and “reasonably foreseeable” projects were identified and considered, as required by CEQA Guidelines section 15130, in the context of the cumulative impacts analysis (see DRAFT EIR Section 4.4 pp.4.4-53 to 4.4-56 (considering development assumptions for cumulative (2030) conditions). Furthermore, the City’s traffic model forecasts traffic volume out to the year 2030. The future 2030 analysis is based on traffic volumes which were generated based on the General Plan traffic model. The General Plan traffic model takes into account the anticipated traffic growth (based on new and proposed development) in the region (including Lincoln, Penryn, Loomis, Rocklin and unincorporated Placer County).

7-3 The commenter is correct in noting that Table 4.4-13 lists the intersection of Sunset Boulevard and State Route 65 as a signalized intersection and that an interchange has been constructed and opened to the public at this location. However,

Table 4.4-13 depicts existing conditions and existing conditions with buildout of the proposed General Plan Update and a correction to the table is not warranted.

According to CEQA Guidelines Section 15125, subdivision (a), a draft EIR “must include a description of the *physical environmental conditions* in the vicinity of the project, *as they exist* at the time the notice of preparation is published....This environmental setting will normally constitute the baseline physical conditions by which a lead agency determines whether or not an impact is significant.” (Emphasis added.) The Draft EIR acknowledges these requirements (See Draft EIR, p. 4.0-1), and the intersection of Sunset Boulevard and State Route 65 existed as a signalized intersection at the time that the Notice of Preparation was published (July 31, 2008).

The Draft EIR does recognize that a new interchange has been constructed in several locations, specifically on Page 4.4-15 and in Table 4.4-30 (PM Peak Hour LOS – State Highway Ramp Intersections, Cumulative Conditions with Buildout of Proposed General Plan) on page 4.4-86.

7-4 The introductory comment which identifies forthcoming additional comments does not affect the analysis or conclusions of the Draft EIR and is considered to be noted; additional response as a part of the Environmental Impact Report (EIR) process is not necessary.

7-5 The Draft EIR discusses the Systems Evaluation Report and the 2005 SPWA Service Area Boundary on page 4.13-2 and notes that “The evaluation documents wastewater facilities needed to serve the SPWA’s Service Area Boundary (SAB), which includes the City of Rocklin Planning Area.” Based on the comment, the following sentence has been added to the above discussion on page 4.13-2:

The proposed General Plan Update does not include any areas that are not within the boundaries of the 2005 SPWA Service Area Boundary.

Please refer to the Errata section of this Final EIR.

7-6 Based on the comment, the following sentence on page 4.13-2 has been modified:

Consequently, both plants are well within their permitted effluent discharge flow rates of 30 mgd ~~each~~ total.

Please refer to the Errata section of this Final EIR.

7-7 Please refer to Response to Comment 7-5 above.

7-8 The comment is acknowledging the discussion in the Draft EIR that notes that 0.25 MGD of additional flow will be generated in the Dry Creek Wastewater Treatment Plan sewer shed area as a result of intensified land uses within Rocklin and that such additional flow was examined in the Systems Evaluation Report and will not require future unplanned expansion of treatment facilities. The comment goes on to note that the incremental flow increase has not yet individually undergone CEQA analysis for impacts downstream of the treatment plant and that the SPWA Partners will approach the SPWA Board to establish a project that will evaluate all intensification and rezoning areas identified in the Systems Evaluation Report for the purpose of CEQA compliance.

The comment, which does not affect the analysis or conclusions of the Draft EIR, is considered to be noted; additional response as a part of the Environmental Impact Report (EIR) process is not necessary.

7-9 The closing comment, which does not affect the analysis or conclusions of the Draft EIR, is considered to be noted; additional response as a part of the Environmental Impact Report (EIR) process is not necessary.

## **8. KEN YORDE**

### **SUMMARY OF COMMENT LETTER**

Ken Yorde provided comments on the subject areas of transportation/circulation, biological resources, and hydrology/water quality. The transportation/circulation comments consisted of a suggestion to include the use of traffic circles and the need to provide secondary access to the Yankee Hill subdivision. The biological resources comment consisted of a suggestion to include a definite statement relating to setbacks from creeks, and the hydrology/water quality comment consisted of a suggestion to include a definite statement to require project review by the Placer County Flood Control and Water Conservation District to ensure a regional approach to flood protection.

### **RESPONSES**

8-1 As suggested by the commenter, the Circulation Element does include a policy related to the use of traffic circles (also known as roundabouts). Specifically, under the section titled Policies for City and Regional Street System, Policy C-22 notes the following: "Interconnect traffic signals and/or consider the use of roundabouts where financially feasible and warranted to provide flexibility in controlling traffic movements at intersections."

8-2 A permanent, full-time secondary point of access to the Yankee Hill subdivision has recently been provided through the establishment and development of Del Rio Court, which connects the Yankee Hill subdivision easterly to Del Mar Avenue. However,

under the circumstances noted by the commenter (Independence Place crosses a creek, which in time of flooding or washout or other closure could preclude citizen egress from the subdivision), the Del Rio Court secondary point of access would only provide relief to those residents that lived east of the Independence Place creek crossing. Under the circumstance of the Independence Place creek crossing becoming not passable, the Yankee Hill subdivision is still afforded the ability to exit through the emergency only access point adjacent to Gayaldo Park that provides an at-grade crossing of the railroad and access to Lemon Hill Drive to the west of the Yankee Hill subdivision.

8-3 While the General Plan's *Policies for the Conservation, Development and Utilization of Natural Resources* themselves do not include a specific reference to a creek setback, Chapter II, Summary of Goals and Policies and Action Plans, includes the Open Space, Conservation and Recreation Element Action Plan which does include reference to a 50 feet creek setback. The Action Plan consists of individual action steps to implement the policies of the General Plan. Action Step OCRA-11 on page 2-43 includes the following language: "Apply open space easements to all lands located within 50 feet from the edge of the bank of all perennial and intermittent streams and creeks providing natural drainage. The easement will also extend to include associated riparian habitat. In addition, the City may designate an easement greater than 50 feet for perennial streams when it is determined such a buffer is necessary to adequately protect drainage and habitat areas. In designating these areas as open space, the City is preserving natural resources and protecting these areas from development. However, features which may be considered acceptable within the 50 foot setback, buffer area and/or open space easements include, but are not limited to, roads, bridges, trails, drainage facilities, utilities, and fencing intended to delineate or protect a specific resource. Installation and maintenance of those features shall minimize impacts to resources to the extent feasible. The above setbacks and buffers shall apply to residential and non-residential development unless the land owner can demonstrate, "that literal application of this Action Plan item would preclude all economically viable use of the land under existing zoning."

8-4 The General Plan's Flooding Policy S-7 speaks to coordination with the Placer County Flood Control and Water Conservation District as follows: "Consult with the Placer County Flood Control and Water Conservation District and other appropriate entities regarding regional approaches for the planning, construction, operation and maintenance of drainage and flood control facilities." While Flooding Policy S-7 and the other "Flooding Policies" noted on pages 4D-8 and 4D-9 of the General Plan document themselves do not include a definite statement requiring project review by the Placer County Flood Control and Water Conservation District, Chapter II of the General Plan, Summary of Goals and Policies and Action Plans, includes the Community Safety Element Action Plan which does include reference to project review by the Placer County Flood Control and Water Conservation District. The Action Plan consists of individual action steps to implement the policies of the General Plan. Action Step SA-5 on page 2-62 includes the following language: "Consult with the Placer County Flood



Control and Water Conservation District as well as upstream and downstream jurisdictions regarding regional approaches for the planning, construction, operation and maintenance of drainage and flood control facilities. Include these entities in the referral of project applications as appropriate.”

## **9. YANKEE HILL HOMEOWNERS ASSOCIATION, FRANKLIN BURRIS**

### **SUMMARY OF COMMENT LETTER**

The Yankee Hill Homeowners Association provided comments on the subject areas of transportation/circulation and noise and included attachments regarding railroad horns, operations and crossings. The transportation/circulation comments consisted of concerns expressed regarding access to the Yankee Hill subdivision as a result of railroad operations, and the noise comments consisted of concerns regarding railroad noise and vibration and how the Draft EIR analyzed such, as well as a suggestion to include the use of “quiet zones” as mitigation for the sounding of locomotive horns at railroad grade crossings.

### **RESPONSES**

9-1 The introductory comment which identifies forthcoming additional comments does not affect the analysis or conclusions of the Draft; additional response as a part of the Environmental Impact Report (EIR) process is not necessary.

9-2 The introductory comment is not a direct comment on the analysis or conclusions of the Draft EIR; additional response as a part of the Environmental Impact Report (EIR) process is not necessary.

9-3 Please refer to Response to Comment 8-2 above regarding additional points of access for the Yankee Hill subdivision.

9-4 The comment re-states discussion from the Draft EIR, identifies resident’s experiences with railroad noise and expresses concern about the potential for and increased frequency and length of trains. The comment is not a direct comment on the analysis or conclusions of the Draft EIR and is considered to be noted; additional response as a part of the Environmental Impact Report (EIR) process is not necessary.

9-5 Although the existing Federal Railroad Administration discussion contained in the DEIR identifies instances where locomotive horns do not have to be sounded, including where safety measures can be installed to fully compensate for the absence of the warning provided by the horn, the comment is correct in noting that the Regulatory Framework, Federal Railroad Administration makes no reference to the final federal train horn rule. Based on the comment, the following has been added to the discussion

of the Federal Railroad Administration under section 4.5.3 Regulatory Framework on page 4.5-25:

On April 27, 2005, the Federal Railroad Administration published the *Final Rule on the Use of Locomotive Horns at Highway-Rail Crossings*. In addition to requiring that train horns must be sounded, the Rule also established a nationally consistent methodology for establishing, maintaining, and enforcing “quiet zones”. Quiet zones are segments of railroad lines where train crews are exempt from sounding the horn at grade crossings provided that certain improvements are installed.

Please refer to the Errata section of this Final EIR.

9-6 In response to the questions and criticisms of the noise measurement surveys that were made by the commenter, it is important to note that the General Plan Update Draft EIR is a program-level EIR. As such, the Draft EIR is intended to be used to evaluate the direct and indirect environmental effects of *subsequent* (emphasis added) development under the General Plan. When individual projects or activities under the General Plan are proposed, such projects or activities would be examined to determine whether their effects were adequately analyzed in the program-level General Plan Update Draft EIR. The General Plan Update Draft EIR does not serve the purpose of retroactively evaluating existing projects. It is also important to note that the intent of noise section of the Draft EIR is not to establish site-specific noise levels for the entire City, but rather to help determine potential land use conflicts that may require further examination as part of the future development of the City.

The Yankee Hill Estates Draft EIR (September 1989), a project specific environmental document (as compared to a program-level environmental document such as the General Plan Update Draft EIR), assessed railroad noise level impacts on the Yankee Hill subdivision and identified mitigation measures for those impacts based on the standards applicable at the time and those mitigation measures were incorporated into the project design.

The General Plan Update Draft EIR includes noise measurement data from 2001/2002 that was included in Appendix E; such data was provided as information only since the City had the data, and they were not intended to be used for the purpose of comparison with the 2008/2009 noise measurement data. As noted on page 4.5-19 of the Draft EIR, the 2001/2002 noise surveys were conducted at that time to support the draft General Plan Noise Element. Because the traffic modeling that was conducted for the Draft EIR was updated since 2002 (predictions for roadway noise levels are based in part on traffic modeling results) and because the City’s Notice of Preparation was published on July 31, 2008, a decision was made to update the noise measurement data. This decision is consistent with CEQA Guidelines Section 15125, subdivision (a), which states that a draft EIR “must include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published....This

environmental setting will normally constitute the baseline physical conditions by which a lead agency determines whether or not an impact is significant.”

The 2001/2002 (Bollard and Brennan) and 2008/2009 (Ambient) noise measurements were conducted by two different noise consultants and the 2008/2009 noise measurements included different sites and different measurement time periods (when compared to 2001/2002 noise measurements) as noted by the comment. However, as discussed above, because the General Plan Update is a program-level EIR, the noise measurements were taken to help determine potential land use conflicts that may require further examination as part of the future development of the City. The 2008/2009 noise measurement locations (which included 23 sites compared with 21 sites in 2001/2002) and measurement time periods adequately reflect the general noise environment for the entire City for purposes of a program-level EIR.

Twenty-four (24) hour noise measurements were conducted at SR65 and I-80 because of the fluctuation of traffic levels and corresponding noise levels over a 24-hour period. Although as noted on page 4.5-15 of the Draft EIR, actual train noise levels will vary depending on various factors, such as train speed, the number of engines used, track conditions (welded vs. jointed), and the condition of the train wheels, these contributing noise factors are dominated by the sounding of warning horns at railroad crossings. 24-hour noise measurements along the railroad were not necessary because unlike freeway noise levels, railroad noise levels that include the sounding of the warning horns are fairly consistent in terms of the actual maximum noise level measured (federal regulations require the maximum volume level for the train horn at 110 decibels with the minimum sound level at 96 decibels). While the number and length of trains can be a factor when evaluating noise levels of trains without the horns sounding, those factors have no influence on the measurement of the maximum noise levels of the trains with their horns sounding. Table 4.5-1 in the Draft EIR reflects maximum noise levels of 101.4 and 105.7 dBA based on two separate short-term noise measurements taken 40 feet from the centerline of the railroad tracks. 24-hour noise measurements of the railroad noise levels would be expected to produce similar results of maximum noise levels. As noted on page 4.5-15 of the Draft EIR, the predicted railroad noise contours are not considered site-specific but they are useful for determining potential land use conflicts. Noise measurements for the Draft EIR were taken on weekdays because they represent worst-case in terms of transportation noise sources and are considered to be more conservative than weekend noise measurements.

9-7 The discussion of railroad operations and resultant noise levels on page 4.5-39 of the Draft EIR acknowledges that based on conversations between the City’s noise consultant (Ambient) and UPRR, future train volumes would not be considered to increase substantially in comparison to existing conditions. It is also noted however, as congestion on area roadways increases, it is conceivable that reliance on freight and Amtrak service could increase. Even though the number and length of trains could increase in the future, railroad noise levels that include the sounding of the warning

horns are consistent in terms of the actual maximum noise level measured, regardless of the number and length of trains. Although the maximum noise level would be consistent, an increased frequency of trains would translate into an increased frequency in the sounding of warning horns and a higher potential for annoyance.

Figure 4.5-2 notes sources as Placer County and Ambient; Ambient is the noise consultant that conducted the noise measurements. While a specific report was not generated, the noise consultant assisted in the preparation of the noise section of the Draft EIR and the noise modeling output files that were developed by the noise consultant are included in Appendix D, Volume 2 of the Draft EIR.

9-8 The discussion of railroad operations and noise levels on pages 4.5-15 and 4.5-16 of the Draft EIR provides information on the frequency and length of trains for both passenger and freight trains based on direct contact with Amtrak and UPRR, respectively. It is the speed of trains that was based on site reconnaissance surveys, which were performed by the City's noise consultant, Ambient. The intent of discussing the frequency and the length of both passenger and freight trains was to give the Draft EIR reader an understanding of the existing setting (see discussion in Response to Comment 9-6 above regarding the existing setting being established at the time the NOP is published); the Draft EIR does not attempt to compare freight trains to passenger trains.

9-9 The predicted noise levels shown in Table 4.5-3 (and the resultant noise contour diagrams of Figures 4.5-3 and 4.5-4) were calculated through a noise modeling effort using methodology obtained from the Federal Transit Administration's (FTA) *Transit Noise and Vibration Impact Assessment Guidelines* (FTA 2006), which assumes a maximum noise level of 110 dB for the sounding of locomotive horns. Site specific data such as the number of trains and their time of occurrence were provided as input into the model. In addition, the short-term noise level measurements that were performed by the noise consultant for railroad operations were also considered as part of the modeling effort. In accordance with federal regulations, the maximum volume level for the train horn has been set at 110 decibels with the minimum sound level set at 96 decibels. Data obtained during the noise-measurement surveys are consistent with this range, but do not account for all trains that could potentially travel along this corridor, particularly those in future years.

9-10 The railroad noise contours shown in Figures 4.5-3 and 4.5-4 do reflect the maximum railroad noise levels (with warning horns sounding at crossings). In accordance with federal regulations, the sounding of train horns is required within ¼ mile of a crossing, but can also occur at greater distances from a crossing depending on other factors, such as perceived safety conditions. Due to the federal requirement of sounding train horns coupled with the fact that the at-grade railroad crossings in Rocklin are not spaced far apart, the railroad noise contours on Figures 4.5-3 and 4.5-4 reflect the conservative worst-case condition with the horns sounding and thus the contours

are linear and do not “bulb out” at the crossing locations. It is important to note that the noise contours identified in the General Plan are for land use planning purposes (in support of the General Plan) to better identify future development that could be potentially impacted by train noise, in comparison to the City’s land use compatibility standards. Actual noise levels may vary depending on site-specific conditions and, therefore, the contours should not be interpreted as absolute lines of demarcation. Site-specific noise studies that take into account topography and other factors would be conducted to further evaluate potential noise impacts, as development occurs and in accordance with CEQA requirements.

9-11 Beyond the Yankee Hill subdivision, there are numerous locations throughout the City that are impacted by the overlapping contours depicted in Figures 4.5-3 and 4.5-4. However, as discussed above in Response to Comment 9-6, the intent of noise section of the Draft EIR is not to establish site-specific noise levels for the entire City, but rather to help determine potential land use conflicts that may require further examination as part of the future development of the City.

Impact 4.5-3 (Exposure to Surface Transportation Noise) identifies numerous General Plan Update policies that provide mitigation towards the identified noise impact. With regard to the establishment of “quiet zones” for mitigation, the General Plan Update does include Circulation Element Policy C-33 which states “Seek improvements to existing railroad crossings and construction of new grade separated crossings or undercrossings where appropriate and feasible.” The establishment of “quiet zones” would fall under that policy, but the policy should have been included in the discussion of Impact 4.5-3. Based on the comment, the following has been added to the discussion of the Proposed General Plan Update Policies That Provide Mitigation section on pages 4.5-39 and 4.5-40:

Policy C-33 Seek improvements to existing railroad crossings and construction of new grade separated crossings or undercrossings where appropriate and feasible.

Please refer to the Errata section of this Final EIR.

Leq and CNEL noise measurements for locations # 22 and 23 along the railroad would actually result in lower measured noise levels as compared to the Lmax noise levels presented in Table 4.5-2. To determine Leq and CNEL noise level measurements, noise levels are averaged over a particular time period; if such noise level measurements were taken for railroad noise levels it would result in a “dilution” of the noise levels because of the sporadic nature of railroad events. As noted in Response to Comment 9-6 above, railroad noise levels that include the sounding of the warning horns are fairly consistent in terms of the actual maximum noise level measured due to federal regulations which require the maximum volume level for the train horn at 110 decibels with the minimum sound level at 96 decibels. 24-hour noise measurements of the railroad noise levels would be expected to produce similar results of maximum noise levels.

Figure 4.5-1 is consistent with standardized exhibits used by noise consultants to depict typical noise levels. The inclusion of train horn noise into the exhibit is not necessary for the analysis or conclusions of the noise section of the Draft EIR.

9-12 The discussion of railroad operations and resultant noise levels within Impact 4.5-3 (Exposure to Surface Transportation Noise) on page 4.5-39 of the Draft EIR acknowledges that based on conversations between the City's noise consultant (Ambient) and UPRR, future train volumes would not be considered to increase substantially in comparison to existing conditions. It is also noted however, as congestion on area roadways increases, it is conceivable that reliance on freight and Amtrak service could increase. Even though the number and length of trains could increase in the future, railroad noise levels that include the sounding of the warning horns are at a consistent noise level in terms of the actual maximum noise level measured, regardless of the number and length of trains. In other words, the maximum noise level range produced by a locomotive with sounding horns is between 96 and 110 decibels and this maximum noise level range will not vary with regard to the length of the train (the sounding horn is from the locomotive at the front of the train) nor will it vary with regard to the number of trains (the sounding horn maximum noise level range is the same from train to train and is not a cumulative number based on the number of trains). Although the maximum noise level would be consistent, an increased frequency of trains would translate into an increased frequency in the sounding of warning horns and a higher potential for annoyance.

9-13 A cumulative impact occurs from the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable future projects. Impact 4.5-6 (Cumulative Transportation Noise Impacts Within the Planning Area) focuses on roadway noise levels because the buildout of the Rocklin General Plan and development in surrounding communities will contribute directly to increased traffic noise levels. The buildout of the General Plan Update and development in surrounding communities will not have a direct impact in regards to cumulative railroad noise levels. Although it could be argued that the growth of Rocklin and surrounding communities could have an indirect impact in regards to an increased frequency and size (length) of railroad operations, it is unknown at this time the degree of influence such cumulative growth would have on railroad operations; such forecasting or speculation is not required to be evaluated in the Draft EIR. Impact 4.5-3 (Exposure to Surface Transportation Noise) acknowledges that future development under the buildout of the General Plan Update could lead to exposure of noise sensitive land uses to railroad noise levels in excess of the City's noise standards and that such an impact would be Significant and Unavoidable.

9-14 Goal 5 of the Noise Element of the Rocklin General Plan Update is "To prevent noise-sensitive land uses from being adversely affected by transportation noise sources." For purposes of the Noise Element, transportation noise sources are defined

as traffic on public roadways and railroad line operations. Policy N-7 of the Noise Element states “Restrict development of noise sensitive land uses in areas exposed to existing or projected levels of noise from transportation noise sources that exceed the noise level standards contained within the Noise Element, unless the project design includes effective mitigation that results in noise exposure which meets the standards.” Policy N-7 is referenced in Impact 4.5-3 (Exposure to Surface Transportation Noise) as a proposed General Plan Update policy that provides mitigation, and as noted above in Response to Comment 9-11, Policy C-33 which states, “Seek improvements to existing railroad crossings and construction of new grade separated crossings or undercrossings where appropriate and feasible” will be added to the impact discussion through the Final EIR. The establishment of “quiet zones” would fall under that policy. Despite the application of these policies as mitigation measures, Impact 4.5-3 notes that it may not be possible to fully mitigate traffic and/or railroad noise in all areas, and thus the impact was identified as significant and unavoidable.

9-15 The establishment of a train horn quiet zone as suggested in the comment is an option that the City could use to address railroad noise levels. However, the establishment of such zones are fairly expensive undertakings (typical improvements cost \$200,000.00-300,000.00 as noted in the RTD Fastracks Fact Sheet submitted by the commenter, not to mention administration, design and processing costs. The City currently does not have funding set aside for such efforts. However, there is nothing to preclude the establishment of quiet zones in the future should funding become available.

9-16 The Draft EIR’s discussion of UPRR groundborne vibrations includes a reference to Caltrans vibration measurement data because the City did not have their own data and the City’s noise consultant’s scope of work did not include an assessment of railroad vibrations. As noted in the discussion, the Caltrans study included the preparation of a “drop-off curve” used to estimate maximum train vibration levels at various distances from the track centerline. The curve represents maximum expected vibration levels from trains and is thus considered by Caltrans to be very conservative. The Caltrans study is referenced in the Draft EIR but was not included directly in the document. The Caltrans study was not peer-reviewed by the City’s noise consultant but there is no reason for the City to doubt the efforts of Caltrans. The discussion does note that site and geologic conditions can influence how vibrations propagate at increasing distances from the track, but it does not use the modifier “greatly” as purported by the comment. Although the comment is correct in noting that the geology of Rocklin is unique, such geologic conditions are not anticipated to alter the less than significant impact conclusion reached in the Draft EIR regarding groundborne vibration impacts from railroad operations. This is due to the conservative nature of the Caltrans data and the facts that the predicted maximum groundborne vibration levels would not exceed the Caltrans standard of 0.20 in./sec. ppv beyond approximately 7.5 feet from the track centerline (the level above which architectural damage for typical building construction or increased levels of annoyance for individuals in buildings may occur), and the

proposed General Plan Update does not include new land uses within that 7.5 foot distance.

9-17 The comments, which do not affect the analysis or conclusions of the Draft EIR, are considered to be noted. The Rocklin Planning Commission, and ultimately the Rocklin City Council, will consider and determine if they support the proposed elimination of the Argonaut overcrossing as a part of the General Plan Update. The comments will be forwarded to the decision-makers for their consideration, and additional response as a part of the Environmental Impact Report (EIR) process is not necessary.

9-18 The concluding comment does not affect the analysis or conclusions of the Draft EIR and is considered to be noted; additional response as a part of the Environmental Impact Report (EIR) process is not necessary.

## **10. WESTERN PLACER WASTE MANAGEMENT AUTHORITY, CHRIS HANSON**

### **SUMMARY OF COMMENT LETTER**

The Western Placer Waste Management Authority provided comments on the subject area of utilities and service systems regarding solid waste. The comments consisted of points of clarification and suggested edits to the Draft EIR document.

### **RESPONSES**

10-1 The introductory comment, which does not affect the analysis or conclusions of the Draft EIR, is considered to be noted; additional response as a part of the Environmental Impact Report (EIR) process is not necessary.

10-2 Based on the comment, the following sentence on page 4.13-16 has been modified:

The WPWMA's primary ~~only~~ source of funding, with the exception of approximately \$80,000 per year in used oil grant monies from the State and other minor sources of revenue, is tipping fees charged at WPWMA facilities (Oddo 2008, Hanson 2011).

Please refer to the Errata section of this Final EIR.

10-3 Based on the comment, the following sentence on page 4.13-16 has been modified:

Currently, the MRF typically diverts approximately ~~50~~ 30 percent from the MRF processing lines; combined with the additional recyclables received and diverted via the facility's buy-back center, drop-off center, compost facility, and landfill diversion (inert



waste and construction/demolition waste). Facility-wide, the overall diversion achieved is nearly 50 percent. ~~of the material received from going to the landfill~~ (Oddo 2009, Hanson 2011).

Please refer to the Errata section of this Final EIR.

10-4 Based on the comment, the following sentence on page 4.13-17 has been modified:

To continue meeting diversion goals as mandated by AB 939, the MRF recently completed an expansion process in 2007.~~that began in 2006.~~

Please refer to the Errata section of this Final EIR.

10-5 Based on the comment, the following sentence on page 4.13-17 has been modified:

This expansion, which included modernized equipment and eight additional sorting lines, doubled processing capacity to over 2,000 tons of garbage per day ~~and increased the amount of recyclable materials recovered from the waste stream by approximately 20 percent~~ because the recovery rates at the MRF are not solely due to the expansion of added technology; actual recovery rates are highly affected by other factors, including commodity markets.

Please refer to the Errata section of this Final EIR.

10-6 Based on the comment, the following sentence on page 4.13-17 has been modified:

The WPWMA operates the ~~320,281~~-acre Western Regional Sanitary Landfill (WRSL), located near State Route 65 between Roseville and Lincoln.

Please refer to the Errata section of this Final EIR.

10-7 Based on the comment, the following sentences on page 4.13-17 have been modified:

The Western Regional Sanitary Landfill has a total permitted design capacity of 36,350,000 cubic yards, and the maximum permitted disposal at the landfill is 1,900 tons per day. The landfill has a total capacity of approximately 38 million cubic yards, and a remaining capacity of approximately ~~27 million~~ 25,094,157 cubic yards.

Please refer to the Errata section of this Final EIR.

10-8 Impact 4.13.2.1 (Increased Demand for Solid Waste Services) includes discussion of the MRF and acknowledges that the future expansion of the MRF or a new MRF would be required to serve buildout of the proposed General Plan Update as well as regional growth expected in western Placer County. Based on the comment, the following sentence on page 4.13-16 has been modified:

The MRF is currently permitted to accept 1,750 tons per day and 1,014 vehicles per day, but is designed to accommodate approximately 2,200 tons per day. For the period of July 1, 2009 to June 30, 2010, the average weekday tonnage received at the MRF was 815 tons and the average weekday vehicle count at the MRF was 532; these figures are within the MRF's currently permitted capacities.

Please refer to the Errata section of this Final EIR.

10-9 Based on the comment, the following sentence on page 4.13-17 has been modified:

An additional 465 acres of land for landfill expansion is located to the west of the current landfill site, although it is not yet permitted for landfill use. In addition to the 465 acres of land to the west, WPWMA also owns 158 acres to the east, although there is no defined use for that property as of yet and it currently serves as a land use buffer.

Please refer to the Errata section of this Final EIR.

10-10 Based on the comment, the following sentence on page 4.13-17 has been modified:

In addition, the WPWMA has contracted with Energy 2001 to use methane gas produced by decomposing waste at the landfill to generate electricity, which is eventually sold to Roseville Power PG&E (WPWMA 2008b Hanson 2011).

Please refer to the Errata section of this Final EIR.

10-11 As noted by the commenter, Table 4.13.2-1 lists the history of the City's diversion rates through 2006. While data for more recent years (2007-2010) has been submitted by the City to CalRecycle and their staff has reviewed the data, the reports have not yet been formally presented to, or approved by CalRecycle. As such, Table 4.13.2-1 cannot reflect more recent diversion rates as suggested by the comment. However, based on the comment, the following has been added to the discussion of the California Integrated Waste Management Act under Section 4.13.2.2 Regulatory Framework on page 4.13-18:

Senate Bill 1016 passed in 2008 moves the existing solid waste diversion accounting system to a per capital disposal based system. The bill also revised the reporting and

review process so that jurisdictions determined to be in compliance with the 50 percent diversion requirement would be subject to a review every four years, while those not in compliance would continue to be reviewed every two years.

Please refer to the Errata section of this Final EIR.

10-12 Based on the comment, the following sentence on page 4.13-18 has been modified:

The California Integrated Waste Management Act of 1989 (AB 939) requires all California cities and counties to ~~reduce the volume of waste deposited in landfills by~~ divert 50 percent of waste generated by the year 2000 and continue to remain at 50 percent or higher for each subsequent year.

Please refer to the Errata section of this Final EIR.

10-13 Based on the comment, the following has been added to the discussion of Impact 4.13.2.1 (Increased Demand for Solid Waste Services) on page 4.13-20:

Therefore, waste generated at buildout of the General Plan Update would not exceed the landfill's maximum permitted disposal of 1,900 tons per day, nor would it exceed the MRF's processing capacity of 2,200 tons per day. In addition, the waste generated at buildout of the General Plan Update would not exceed the landfill's current (2010) average of 607 tons per weekday.

Please refer to the Errata section of this Final EIR.

10-14 Based on the comment, the following text and table has been added to the discussion of Impact 4.13.2.1 (Increased Demand for Solid Waste Services) on page 4.13-20:

Based on solid waste generation rates provided by the Western Placer Waste Management Authority (**Table 4.13.2-2 and Table 4.13.2-2A**), total solid waste generation at buildout of the General Plan Update would be approximately 1,003,782.8 pounds per day, or 502 tons per day (1,003,782.8 pounds per day/2,000 pounds). For comparison purposes, total solid waste generation at buildout of the existing General Plan would be approximately 967,951.6 pounds per day, or 484 tons per day (967,951.6 pounds per day/2,000 pounds).

TABLE 4.13.2-2A  
SOLID WASTE GENERATION RATE EXISTING GENERAL PLAN BUILDOUT

Land Use	Existing General Plan Buildout	Generation Rate	Solid Waste Generated at Existing General Plan Buildout
Residential	72,475 persons	7 lbs./person/day	507,325 lbs. per day
Commercial	15,501,000 sq. ft.	2.5 lbs./100 square feet/day	387,525 lbs. per day
Industrial	5,148,000 sq. ft.	1.42 lbs./100 square feet/day	73,101.6 lbs. per day
Total Solid Waste Generated at Buildout			967,951.6 lbs. per day

Please refer to the Errata section of this Final EIR.

10-15 Based on the comment, the following sentences on page 4.13-20 have been modified:

The MRF is located at the same site as the landfill and although there is substantial land available for expansion of the MRF, because of the current configuration of the MRF and landfill it would be difficult to expand the current facility. Any future increases in capacity needs would require construction of a new facility (Hanson 2010). THE WPWMA operates both facilities. ~~Any expansion of the MRF, or the~~ The construction of a new MRF-would be subject to CEQA review.

Please refer to the Errata section of this Final EIR.

10-16 With respect to the potential for certain infrastructure impacts at the MRF, the DRAFT EIR acknowledges under Impact 4.13.2.1 (Increased Demand for Solid Waste Services) on page 4.13-20 that the MRF is only expected to accommodate Placer County’s projected population growth for the next 10 to 15 years, and that future expansion of the MRF or a new MRF would be required to serve buildout of the proposed General Plan Update as well as regional growth expected in western Placer County. With respect to the potential for certain infrastructure impacts on the lifespan of the landfill, the Draft EIR acknowledges under Impact 4.13.2.1 (Increased Demand for Solid Waste Services) on pages 4.13-20 and 4.13-21 that waste generated at buildout of the General Plan Update would not exceed the landfill’s capacity since based on communications with the Western Placer Waste Management Authority, the landfill has adequate capacity to accept waste from the entirety of its service area, including the City of Rocklin, until 2042. It should be noted that the General Plan Update and associated Draft EIR utilize a “horizon” timeframe year of 2030, 12 years sooner than the anticipated end of the current landfill capacity, which allows for the less than significant impact conclusion for increased demand for solid waste services. The City’s next General Plan Update and associated Draft EIR will have to address the provision of

additional landfill capacity should the circumstances discussed above regarding adequate landfill capacity until 2042 not change prior to initiation of the General Plan update efforts. As a partner agency to the WPWMA, the City of Rocklin is committed to ensuring the ability to provide recycling and solid waste disposal for the City of Rocklin and the region into the future.

Please refer to Response to Comment 10-14 above regarding the incremental contribution of solid waste generation as a result of the land use changes being proposed as part of the General Plan Update

10-17 Although the sentence following the listing of the Proposed General Plan Update Policies That Provide Mitigation acknowledges that the policies encourage public participation in recycling efforts, the actual policies that require such were inadvertently not listed. Based on the comment, the following has been added to the discussion of the Proposed General Plan Update Policies That Provide Mitigation section on page 4.13-21:

Policy PF-30 Support public education programs in order to reduce, recycle, and reuse solid waste and other materials such as oil, paint, and antifreeze in order to reduce landfill disposal.

Policy PF-31 Encourage new commercial and industrial development to incorporate recycling programs into their construction and operations.

Please refer to the Errata section of this Final EIR.

10-18 While it is acknowledged that impacts on the lifespan of the landfill can be reduced with each project, there also needs to be recognition that the General Plan Update's "horizon" timeframe year of 2030 is well before the anticipated 2042 exhaustion of landfill capacity. Please refer to Response to Comment 10-14 above regarding the incremental contribution of solid waste generation as a result of the land use changes being proposed as part of the General Plan Update

## **11. PLACER COUNTY ASSOCIATION OF REALTORS, DAVE JOHNSON**

### **SUMMARY OF COMMENT LETTER**

The Placer County Association of Realtors provided comments on the subject area of the Climate Action Plan and in particular on the proposed energy conservation point of sale ordinance. Also included was an attachment prepared by an air quality consultant that provided additional comments regarding the Climate Action Plan and the DRAFT EIR air quality impact analysis.

## RESPONSES

11-1 The introductory comment, which does not affect the analysis or conclusions of the Draft EIR, is considered to be noted; additional response as a part of the Environmental Impact Report (EIR) process is not necessary.

11-2 Please refer to the Master Response for Climate Action Plan (CAP) Comments at the beginning of this chapter regarding the City's decision to temporarily suspend the CAP and for additional discussion regarding an energy conservation ordinance.

11-3 Please refer to the Master Response for Climate Action Plan (CAP) Comments at the beginning of this chapter regarding the City's decision to temporarily suspend the CAP and for additional discussion regarding an energy conservation ordinance.

11-4 The comment, which does not affect the analysis or conclusions of the Draft EIR, is considered to be noted. The Rocklin Planning Commission, and ultimately the Rocklin City Council, will consider and determine if they support an energy conservation ordinance at such time that City re-initiates its efforts towards completion of the CAP. The comments will be forwarded to the decision-makers for their consideration, and additional response as a part of the Environmental Impact Report (EIR) process is not necessary.

Please refer to the Master Response for Climate Action Plan (CAP) Comments at the beginning of this chapter regarding the City's decision to temporarily suspend the CAP and for additional discussion regarding an energy conservation ordinance.

11-5 The introductory comment, which does not affect the analysis or conclusions of the Draft EIR, is considered to be noted; additional response as a part of the Environmental Impact Report (EIR) process is not necessary.

11-6 Please refer to the Master Response for Climate Action Plan (CAP) Comments at the beginning of this chapter regarding the City's decision to temporarily suspend the CAP and for additional discussion regarding an energy conservation ordinance.

As noted in the CAP Master Response, at such time that the City re-initiates its efforts towards the completion of the CAP, the City will take all of the comments related to the CAP that were made through the Draft EIR public review process and address them as necessary and appropriate.

11-7 Please refer to the Master Response for Climate Action Plan (CAP) Comments at the beginning of this chapter regarding the City's decision to temporarily suspend the CAP and for additional discussion regarding an energy conservation ordinance.

As noted in the CAP Master Response, at such time that the City re-initiates its efforts towards the completion of the CAP, the City will take all of the comments related to the CAP that were made through the Draft EIR public review process and address them as necessary and appropriate.

11-8 Please refer to the Master Response for Climate Action Plan (CAP) Comments at the beginning of this chapter regarding the City's decision to temporarily suspend the CAP and for additional discussion regarding an energy conservation ordinance.

As noted in the Master Response for Climate Action Plan (CAP) Comments, at such time that the City re-initiates its efforts towards the completion of the CAP, the City will take all of the comments related to the CAP that were made through the Draft EIR public review process and address them as necessary and appropriate.

11-9 The commenter is correct in noting that AB 32 does not require the City of Rocklin to implement a Climate Action Plan. The intent of the introductory language was to provide a background regarding AB 32 and its affect on jurisdictions such as the City of Rocklin; it was not to imply that AB 32 requires a Climate Action Plan or any of its measures. The comment is considered to be noted; additional response as a part of the Environmental Impact Report (EIR) process is not necessary.

11-10 Please refer to Response to Comment 11-9 above regarding AB 32 and the City of Rocklin's draft CAP. As noted on page 4.15-12 of the Draft EIR, the City of Rocklin chose to develop a citywide greenhouse gas emissions (GHG) inventory and CAP as a component of the City of Rocklin General Plan Update process. The comment is considered to be noted; additional response as a part of the Environmental Impact Report (EIR) process is not necessary.

11-11 The discussion of an energy conservation ordinance in the CAP identifies the broad parameters of what such an ordinance is likely to contain; the specifics of an energy conservation ordinance such as those noted in the comment will be identified at such time if and when the development of an energy conservation ordinance moves forward.

Please refer to the Master Response for Climate Action Plan (CAP) Comments at the beginning of this chapter regarding the City's decision to temporarily suspend the CAP and for additional discussion regarding an energy conservation ordinance.

11-12 The "Cost Savings to the City" and the "Cost to the City" monetary estimates and other information provided on the first page of each of the overall goals of the CAP were intended to provide the public and decision-makers with information relative to the effectiveness and cost of the various goals. As noted in the Master Response for Climate Action Plan (CAP) Comments, the available emission reduction measures, including an energy conservation ordinance, will be evaluated for their economic impacts and

consistency with actions taken by surrounding jurisdictions, and they will be discussed through the public hearing process required for ordinance adoption.

Please refer to the Master Response for Climate Action Plan (CAP) Comments at the beginning of this chapter regarding the City's decision to temporarily suspend the CAP and for additional discussion regarding an energy conservation ordinance.

11-13 Please refer to Response to Comment 11-12 regarding the financial aspects of an energy conservation ordinance.

11-14 The comment is considered to be noted; additional response as a part of the Environmental Impact Report (EIR) process is not necessary.

Please refer to the Master Response for Climate Action Plan (CAP) Comments at the beginning of this chapter regarding the City's decision to temporarily suspend the CAP and for additional discussion regarding an energy conservation ordinance.

11-15 Please refer to Response to Comment 11-12 regarding the financial aspects of an energy conservation ordinance.

11-16 Please refer to the Master Response for Climate Action Plan (CAP) Comments at the beginning of this chapter regarding the City's decision to temporarily suspend the CAP and for additional discussion regarding an energy conservation ordinance.

11-17 Please refer to the Master Response for Climate Action Plan (CAP) Comments at the beginning of this chapter regarding the City's decision to temporarily suspend the CAP and for additional discussion regarding an energy conservation ordinance.

11-18 Please refer to the Master Response for Climate Action Plan (CAP) Comments at the beginning of this chapter regarding the City's decision to temporarily suspend the CAP and for additional discussion regarding an energy conservation ordinance.

11-19 Please refer to the Master Response for Climate Action Plan (CAP) Comments at the beginning of this chapter regarding the City's decision to temporarily suspend the CAP and for additional discussion regarding an energy conservation ordinance.

11-20 Please refer to Response to Comment 11-12 above regarding the financial aspects of an energy conservation ordinance.

11-21 Please refer to Response to Comment 11-12 above regarding the financial aspects of an energy conservation ordinance.



11-22 Please refer to the Master Response for Climate Action Plan (CAP) Comments at the beginning of this chapter regarding the City’s decision to temporarily suspend the CAP and for additional discussion regarding an energy conservation ordinance.

11-23 As noted in the Master Response for Climate Action Plan (CAP) Comments, in absence of an adopted CAP, the City will continue to address the reduction of greenhouse gas emissions through a multitude of City-wide programs, through the application of General Plan goals and policies and with project-level assessments for greenhouse gas emission impacts as a part of the California Environmental Quality Act (CEQA) process.

Please refer to the Master Response for Climate Action Plan (CAP) Comments at the beginning of this chapter regarding the City’s decision to temporarily suspend the CAP and for additional discussion regarding an energy conservation ordinance.

11-24 Please refer to Response to Comment 11-23 regarding the City’s planned efforts to address greenhouse gas emission impacts as a part of the CEQA process.

11-25 Please refer to Response to Comment 11-23 regarding the City’s planned efforts to address greenhouse gas emission impacts as a part of the CEQA process.

## **12. REDISCOVER ROCKLIN, DAN GAYALDO**

### **SUMMARY OF COMMENT LETTER**

Rediscover Rocklin provided comments on the subject areas of land use and noise, and also expressed overall support for the General Plan Update and encouraged additional outreach efforts. The land use comments consisted of support of particular goals and policies and concern over one particular policy, and the noise comment consisted of a suggestion to include the use of “quiet zones” as mitigation for the sounding of locomotive horns at railroad grade crossings

### **RESPONSES**

12-1 The comment expresses support of the General Plan Update. The comments will be forwarded to the decision-makers for their consideration, and additional response as a part of the Environmental Impact Report (EIR) process is not necessary.

12-2 The comment expresses support for Land Use policies 3, 9 and 10, but expresses concern for Land Use policy 11 (LU-11 - Encourage infill residential development that is in keeping with the character and scale of the surrounding neighborhood, while providing a variety of densities and housing types as reflected by the zoning and land use designation of the infill property) because such a policy may be inconsistent with the mixed-use overlay for Downtown. Staff does not share such a concern for the

following reasons: It should be noted that Land Use policy 11 falls under the heading “Policies for Existing Residential Land Use” and is intended to address small-scale infill residential development. Under the heading “Policies for New Residential Land Use” policy Land Use policy 13 (LU-13 - Review proposals for new residential development for compatibility with the character and scale of nearby neighborhoods, while providing a variety of densities and housing types as reflected by the zoning and land use designation of the infill property) strives for compatibility with the variety of densities and housing types as reflected by the zoning and land use designation of the infill property, similar to policy LU-11. But in instances where the mixed-use Downtown overlay is applied, the zoning and land use designations to allow for a more dense development would be in place. Policy LU-13 would be more applicable to the mixed use overlay for Downtown (as well as the goal for mixed land uses and the policies listed in support of that goal).

12-3 Please refer to Response to Comments 9-11, 9-14, and 9-15 above regarding the establishment of “quiet zones” for noise associated with the sounding of locomotive horns at railroad at grade crossings.

12-4 The comment expresses support for continuing outreach efforts associated with the Downtown overlay. The comment will be forwarded to the decision-makers for their consideration, and additional response as a part of the Environmental Impact Report (EIR) process is not necessary.

### **13. PLACER COUNTY AIR POLLUTION CONTROL DISTRICT, ANGEL GREEN**

#### **SUMMARY OF COMMENT LETTER**

The Placer County Air Pollution Control District (PCAPCD) provided comments on the subject areas of air quality and the Climate Action Plan, and also expressed overall support for the General Plan Update and the Climate Action Plan. Both the air quality and Climate Action Plan comments consisted of suggestions for edits and clarifications related to the specific analyses and conclusions that were reached in the Draft EIR.

#### **RESPONSES**

13-1 The comment expresses support of the General Plan Update and the Climate Action Plan. The comments will be forwarded to the decision-makers for their consideration, and additional response as a part of the Environmental Impact Report (EIR) process is not necessary.

Please refer to the Master Response for Climate Action Plan (CAP) comments at the beginning of this chapter regarding the City’s decision to temporarily suspend the CAP.

13-2 The introductory comment, which does not affect the analysis or conclusions of the Draft EIR, is considered to be noted; additional response as a part of the Environmental Impact Report (EIR) process is not necessary.

13-3 The comment, which does not affect the analysis or conclusions of the Draft EIR, is considered to be noted; additional response as a part of the Environmental Impact Report (EIR) process is not necessary.

Please refer to the Master Response for Climate Action Plan (CAP) comments at the beginning of this chapter regarding the City's decision to temporarily suspend the CAP.

13-4 The comment, which does not affect the analysis or conclusions of the Draft EIR, is considered to be noted; additional response as a part of the Environmental Impact Report (EIR) process is not necessary.

Please refer to the Master Response for Climate Action Plan (CAP) comments at the beginning of this chapter regarding the City's decision to temporarily suspend the CAP.

13-5 Please refer to the Master Response for Climate Action Plan (CAP) comments at the beginning of this chapter regarding the City's decision to temporarily suspend the CAP.

13-6 Section 15064.7 of the CEQA Guidelines allows the City to determine its own thresholds of significance for the determination of the significance of environmental impacts. For Impact 4.2.1 (Conflict with Air Quality Plan), the City chose to employ consistency with population growth projections as the applicable threshold. This was considered to be a conservative approach because the analysis in the Draft EIR assumes buildout population growth by 2030, which is unlikely to happen based on historic growth patterns of the City and the current economic conditions. The Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan adopted in 2009 took into account Rocklin's General Plan Update and shows that the region would reach attainment target dates. The Vehicle Miles Traveled (VMT) data that was used to help project future year emissions as part of the Attainment and Reasonable Further Progress Plan was developed by the Sacramento Area Council of Governments (SACOG) using growth projection input from local jurisdictions, including Rocklin. There have been no significant changes to Rocklin's land use pattern or growth projections since the analysis was done for the Attainment and Reasonable Further Progress Plan and therefore it is not necessary to conduct the analysis at a level that is being suggested by the comment nor is it necessary to repeat analysis that has already been conducted by SACOG.

13-7 Based on the comment, the following sentence on page 4.2-21 has been modified:

This area is required to attain the ozone standard by ~~2019~~ 2018.

Please refer to the Errata section of this Final EIR.

13-8 The comment is correct in noting that the sentence should state Sacramento Regional 8-Hour Ozone Standard. However, a correction will not be made to the sentence because the text in the entire paragraph is being deleted due to its association with the Climate Action Plan.

Please refer to the Master Response for Climate Action Plan (CAP) comments at the beginning of this chapter regarding the City's decision to temporarily suspend the CAP.

13-9 As noted in the impact discussion of Impact 4.2.2 (Violate Air Quality Standard: Short-Term Emissions from Construction Projects), the City's rationale for arriving at a less than significant conclusion was that if after the application of feasible mitigation measures the District's thresholds were still being exceeded, then the City could limit the size of the area being graded/constructed or the pieces of equipment that were being used for grading/construction. Upon further consideration, the City recognizes that such limitations are not practical for economic reasons on the developer's side and for enforcement reasons on the City's side. For these reasons, the conclusion of the impact is being changed to Significant and Unavoidable.

Based on the comment, the following sentences in the statement of impact for Impact 4.2.2 (Violate Air Quality Standard: Short-Term Emissions from Construction Projects) are being modified:

~~However, Although~~ the proposed General Plan Update has mitigating policies and their associated action steps, along with the City, District, State and Federal Rule-Based Requirements discussed below, ~~ensure the impact will be less than significant these efforts will not reduce the impact to a less than significant level.~~ Therefore, this impact is considered **potentially less than significant**.

Please refer to the Errata section of this Final EIR.

Based on the comment, the following sentences on page 4.2-27 have been modified:

~~Due to~~ Despite the temporary nature of construction-related impacts and ~~because the requirement that~~ projects must be in compliance with General Plan Policy OCR-58 as implemented through the mitigations stated in the City's "Mitigation for Air Quality Impacts" form, as well as PCAPCD, state, and federal rules and regulations, these impacts ~~will not~~ may result in a violation of an air quality standard or in a substantial

contribution to an existing or projected air quality violation. ~~If it is determined that the PCAPCD daily emission thresholds will still be exceeded after application of mitigation measures, there remains the ability to scale back the grading and/or construction operations by reducing the amount of work being done by limiting the area of grading and/or construction or by limiting the amount and type of construction equipment.~~ Thus, this impact is considered to be **less than significant and unavoidable**.

Please refer to the Errata section of this Final EIR.

As noted in the Project Description (Section 3.0) and the Introduction to the Analysis and Assumptions Used (Section 4.0), although the City's growth projections indicate that non-residential development would not be fully built out at the General Plan horizon year of 2030, the Draft EIR assumes that non-residential development (and residential development) would reach buildout by 2030 to provide a conservative analysis. Therefore, the analysis for construction-related impacts is consistent with the analysis for operational emissions as suggested by the comment.

Although the conclusion of the impact will be changed from less than significant to significant and unavoidable, the mitigation approach for the impact will continue to include the use of the City's "Mitigation for Air Quality Impacts" form and submittal of the "PCAPCD Construction Emission/Dust Control Plan" as suggested by the comment.

With regard to the Master Mitigation List (Appendix B-4), the mitigation measure discussion for Impact 4.2.2 (Violate Air Quality Standard: Short-Term Emissions from Construction Projects) has been modified as shown below to acknowledge that a menu list of mitigation measures will be utilized by the City and applied on a case-by-case during the environmental review process. Based on the comment, the following sentence on page 4.2-28 has been modified:

#### Mitigation Measures

~~None required~~ No additional mitigation measures are feasible beyond the policies, associated action steps, District, State, and Federal Rule-Based Requirements, and the selection of applicable air quality mitigation measures from a menu list as discussed above.

Please refer to the Errata section of this Final EIR.

13-10 With the exception of the first sentence, the recommended mitigation measure, which is based on PCAPCD Rule 225, is already incorporated as mitigation in the Draft EIR via Appendix B-3. As noted under Impact 4.2.3 (Increase in Criteria Pollutants: Operational Air Pollutants), a copy of the District, State, and Federal Rule-Based Requirements provided to the City by the PCAPCD (including Rule 225) is included in Appendix B-3 of the Draft EIR, and per the impact discussion, the City plans to attach

such a list to every grading permit, approval of improvement plans and building permits issued by the City.

In addition to the application of Rule 225, it should be noted that there are already wood-burning appliance restrictions in place for the majority of undeveloped residential lands remaining in the City (Northwest Rocklin Annexation Area and Clover Valley). Specifically, the Northwest Rocklin General Development Plan includes the following conditions of approval related to restrictions on wood-burning appliances:

- The City shall not approve building permits for fireplaces in homes that do not have a primary heating source other than a fireplace. All fireplaces shall be plumbed for natural gas.
- In any development served with natural gas, fireplaces within multi-family residential development projects shall be plumbed for natural gas, and wood-burning fireplaces shall be prohibited within those units.
- All wood-burning stoves installed in single-family or multi-family units must be EPA certified.

Specifically, the Clover Valley Draft EIR includes the following mitigation measure related to restrictions on wood-burning appliances:

- 4.5 MM-2(e): The General Development Plan and CC&Rs shall indicate the following mitigation measure: Only natural gas or propane-fired fireplace appliances shall be permitted. Masonry fireplaces shall have installed UL-listed decorative natural gas fireboxes. Any outdoor burn pits shall be plumbed with natural gas.

13-11 The URBEMIS output data provided in Appendix B was an outdated version and was incorrect. The correct version of the URBEMIS output data, which was used for the impact analysis, is being provided as Appendix B in the Final EIR. This correct version is consistent with the data provided in Tables 4.2-6 and 4.2-7, and the number of units for land use types is consistent with the numbers provided in Section 3.0 (Project Description). Please refer to Appendix B of this Final EIR.

With regard to discrepancies between CAP VMT and URBEMIS VMT, the VMT number presented in the CAP represents a modified and lower VMT number than shown in the URBEMIS model run. The CAP VMT number was developed subsequent to the URBEMIS model run and as a part of the CAP efforts, there were modifications made to the traffic analysis that resulted in a lower VMT number than was previously used in the air quality analysis. Given that the air quality analysis was based on a higher VMT number, the air quality analysis is considered to be conservative and likely overstates the emissions. However, the decision was made not to re-run the URBEMIS model for the Draft EIR because the Draft EIR conclusion of significant and unavoidable would not change with respect to the projected increase in operational air pollutants (Impact 4.2.3).

13-12 The Draft EIR’s discussion of stationary source Toxic Air Contaminants (TACs) on page 4.2-35 states “The issuance of air quality permits and compliance with all district, state and federal regulations regarding stationary TACs reduce potential sources of toxic air emissions such that sensitive receptors would not be exposed to substantial pollutant concentrations such as toxic air contaminants. Therefore, the proposed General Plan Update potential stationary TAC impacts are considered **less than significant.**”

Because stationary source TACs impacts were determined to be less than significant, there is no further mitigation required to address the impact. However, based on the comment and in the interest of providing more clarity to the impact discussion and the air quality permitting process per the comment, the following paragraph on page 4.2-35 has been modified:

For projects which may include stationary sources (i.e. gasoline dispensing facility, auto painting, dry cleaning, large HVAC units, etc.), project applicants are required to obtain an Authority to Construct (ATC) permit from the Placer County Air Pollution Control District, and a third party detailed Health Risk Assessment may be required as part of the permitting process. The issuance of air quality permits, such as an ATC permit and compliance with all district, state and federal regulations regarding stationary TACs, reduce potential sources of toxic air emissions such that sensitive receptors would not be exposed to substantial pollutant concentrations such as toxic air contaminants. Therefore, the proposed General Plan Update potential stationary TAC impacts are considered **less than significant.**

Please refer to the Errata section of this Final EIR.

13-13 Impact 4.2.3 (Increase in Criteria Air Pollutants: Operational Air Pollutants) addresses operational air pollutants and as a part of that impact discussion, there is recognition on page 4.2-32 that “...in addition to the District, State, and Federal-Rule based requirements, the City has developed a “menu” of various mitigation measures based on recommendations from the PCAPCD to mitigate project-related air quality impacts. This menu list of mitigation measures will be utilized by the City and applied on a case-by-case basis during the environmental review process. Generally speaking, the larger and more complex a project is, the greater the requirement for the application of additional air quality mitigation measures. A copy of the menu list of mitigation measures is included in Appendix B-4 to this Draft EIR.”

Appendix B-4 to the Draft EIR contains the same mitigation measure language as is being suggested in the comment, and as such no changes to the Draft EIR are necessary.

13-14 through 13-26 Please refer to the Master Response for Climate Action Plan (CAP) comments at the beginning of this chapter.

13-27 Section 2.3 (Data Sources) within the City of Rocklin 2008 Community-Wide Baseline Greenhouse Gas Emissions Inventory document (Appendix C of this Final EIR) notes that the data used to complete the emissions inventory came from several sources. Those sources are summarized in Table 1 (Inventory Data Sources) and further explained in the sector-specific discussions of the document. Table 2 (Emission Coefficient Sources) within the same document summarizes the sources of data and the emission coefficients included in the City's inventory. For the transportation sector, VMT was calculated as a part of the General Plan EIR traffic analysis and the emission coefficient source was California Air Resources Board EMFAC 2007 model. For the energy sector, natural gas and electricity consumption data for was collected by Pacific Gas and Electric (PG&E), the emission coefficient source for electricity consumption was also provided by PG&E, and the emission coefficient source for natural gas consumption was obtained from the California Air Resources Board (CARB) Local Government Operations Protocol V1.0 (Sept 2008). For the waste sector, waste generation data sources included the 2008 Municipal Solid Waste (MSW) and Alternative Daily Cover (ADC) tonnage by the California Integrated Waste Management Board (CIWMB) Waste Flow by Jurisdiction, and waste characterization by the CalRecycle 2004 Waste Characterization Report (the most recent study determining average waste composition in California), and the emission coefficient source for waste generation was obtained from the U.S. Environmental Protection Agency Waste Reduction Model (WARM). Employment figures were determined using retail, office and industrial square footages as established with the growth projections in the General Plan Update, and then multiplied by employee to square footage ratios provided by SACOG in its I-PLACE<sub>3</sub>S software.

Based on the portion of the comment regarding the projection of growth for the year 2020, the following has been added to methodology discussion on page 4.15-17:

The prediction of emissions into the future is accomplished by creating forecast years whereby a snapshot in time is taken under various scenarios. Forecasting is completed by adjusting baseline levels of emissions consistent with population, residential and non-residential, and transportation growth. The basis for all growth scenarios is the business-as-usual projection, which predicts how greenhouse gas emissions will increase if behaviors and efficiencies do not change from 2008 levels, yet population, residential and non-residential, and transportation growth (vehicle miles traveled) continue to increase. The business-as-usual scenario for Rocklin used analysis and assumptions included in the General Plan Update and the General Plan Update for the 2030 buildout scenario. Buildout is a worst-case scenario, or the maximum amount of development and population growth that the City could expect. While complete buildout of the City of Rocklin is very unlikely within the timeframe of this DEIR (2030), the projections in the General Plan Update buildout analysis were conservatively used to be consistent with the rest of the DEIR analysis. To calculate emission projections for the year 2020,



the 2030 emission projection data was interpolated using a compound annual growth rate.

Please refer to the Errata section of this Final EIR.

In response to the portion of the comment suggesting vehicle related GHG emissions should be presented by each vehicle class, the City's inventory efforts did not delve into that level of detail, nor does the City believe that such level of detail is necessary for purposes of establishing an emissions inventory.

13-28 Based on the comment and consistent with CEQA Guidelines Section 15064.4 which allows lead agencies to choose the model or methodology to quantify greenhouse gas emissions provided that the limitations of the particular model or methodology are explained, the following has been added to the methodology discussion on pages 4.15-15 and 4.15-16:

Due in part to the emissions inventory being conducted in 2008, there were some limitations on the data required to develop a "complete" emissions inventory, as discussed below. The 2008 community-wide inventory of emissions captured the major sources of greenhouse gases caused by activities within the City per standard industry practice in place at the time. However, it is important to note that some likely emission sources were not included in the inventory because of privacy laws, lack of data, or a lack of reasonable methodology for calculating emissions. It is estimated that these sources not included in the inventory comprise less than 5% of total emissions in the City. While an official protocol for conducting community-wide emissions inventories was not available from the State in 2008, the inventory conducted for the City was consistent with the current best practices for greenhouse gas emission inventories. Inventories are commonly restricted to energy, transportation, and waste analysis due to lack of methodology or lack of reliable data to quantify other sources of emissions. This results in the exclusion of construction-related emissions, off-road vehicle emissions, propane emissions, refrigerant emissions, aircraft emissions, and sewage treatment emissions.

Lack of available data prevented the calculation of emission from wastewater (sewage) created in the City. Municipalities, special services districts, and private entities that collect, treat, and dispose of wastewater differ with regard to treatment and disposal methods, water efficiency requirements, impervious surface allowances, landscape irrigation efficiency standards, type of building stock, and data collection and reporting. As a result, it is unclear what portion of the sewage treated at each wastewater treatment facility originates from Rocklin businesses and residents. For this reason, estimates associated with the City's share of sewage could not be made at the time of the inventory effort. Full accounting of emissions from wastewater collection, treatment and disposal would have required extensive coordination with special services districts,

such as community services districts and sanitary districts, other municipalities, and private entities.

Similarly, protocol and methodological barriers prevented the inclusion of all emissions from the treatment and movement of water consumed by the community. Water in the City is provided by the Placer County Water Agency (PCWA) and there is one PCWA water treatment facility, the Sunset Water Treatment Plant, which is located within Rocklin. The emissions inventory did not include emissions directly associated with the water treatment process; however it did include emissions from all of the electricity and gas consumed by the Sunset Water Treatment Plant for water treatment and transport purposes, despite the fact that the Sunset Water Treatment Plant serves jurisdictions other than Rocklin.

Given these limitations, it is likely that the City's greenhouse gas emissions are slightly greater than presented in the emissions inventory. However, despite these limitations, the 2008 inventory is the best-available estimation of the City's greenhouse gas emissions. It is also important to note that because of the City's plan to address greenhouse gas emissions as development occurs on a project-by-project basis through the CEQA review process, the greenhouse gas emissions inventory limitations discussed above will not have a bearing on the City's future efforts of analyzing and mitigating greenhouse gas emissions.

Please refer to the Errata section of this Final EIR.

13-29 Based on the comment, the following sentence on page 6 of the City of Rocklin 2008 Community-Wide Baseline Greenhouse Gas Emissions Inventory document (Appendix C of the Final EIR) has been modified:

**Scope 2.** Indirect emissions that result because of ~~activates~~ activities within the jurisdictional boundary of the city, limited to electricity, district heating, steam and cooling consumption.

Please refer to the Errata section (Appendix C) of this Final EIR.

13-30 Based on the comment, Table 1 on page 7 of the City of Rocklin 2008 Community-Wide Baseline Greenhouse Gas Emissions Inventory document (Appendix C of the Final EIR) has been modified per the following:

Sector	Information	Unit of Measurement	Data Source
Residential	Electricity Consumption	<del>Therms</del> kWh	PG&E
	Natural Gas Consumption	<del>kWh</del> Therms	PG&E
Commercial/ Industrial	Electricity Consumption	<del>Therms</del> kWh	PG&E
	Natural Gas Consumption	<del>kWh</del> Therms	PG&E
Transportation	VMT from trips originating or terminating within the city	Annual average VMT	General Plan EIR Transportation & Circulation Chapter
Solid Waste	Solid waste tonnage sent to landfill from activities in the city	Short tons	CalRecycle

Please refer to the Errata section (Appendix C) of this Final EIR.

13-31 Based on the comment, the following sentence on page 12 of the City of Rocklin 2008 Community-Wide Baseline Greenhouse Gas Emissions Inventory document (Appendix C of this Final EIR) has been modified:

The largest portion of Scope 1 emissions ~~came~~ comes from the transportation section.

Please refer to the Errata section (Appendix C) of this Final EIR.

13-32 Based on the comment, Figure 6 on page 13 of the City of Rocklin 2008 Community-Wide Baseline Greenhouse Gas Emissions Inventory document (Appendix C of this Final EIR) has been modified to reflect the word “Transportation” on one line.

Please refer to the Errata section (Appendix C) of this Final EIR.

13-33 Please refer to Response to Comment 13-27 regarding the sources of data for Table 6.

13-34 The purpose of providing per capita emissions data was to demonstrate another way that the emissions data can be viewed and was for informational reasons. The associated discussion acknowledged the particular limitations of using such a metric.

13-35 Based on the comment, the following has been added to the methodology discussion on pages 4.15-16 and 4.15-17:

Service population is an efficiency-based measure used to estimate the development potential of a general or area plan. Service population is determined by adding the number of residents to the number of jobs estimated for a given point in time. Service population was calculated using the General Plan growth assumptions for residential and non-residential land uses and I-PLACE<sub>3</sub>S software which provides region-specific ratios of average employees per square footage of non-residential use as developed by the Sacramento Area Council of Governments (SACOG). The City of Rocklin’s service population is presented in the table below.

<u>Population and Jobs in the City of Rocklin</u>	<u>2008</u>	<u>2020</u>	<u>2030</u>
<u>Population</u>	<u>53,843</u>	<u>73,414</u>	<u>76,136</u>
<u>Jobs</u>	<u>14,488</u>	<u>20,744</u>	<u>27,659</u>
<u>Service Population (Population + Jobs)</u>	<u>68,331</u>	<u>94,158</u>	<u>103,795</u>

Presenting greenhouse gas emissions as a per service population metric most accurately depicts the City’s forecasted emissions and reductions potential. Linking emissions to service population estimates equalizes the impact of divergent growth rates between regions and establishes a balanced point of comparison with other jurisdictions. This approach is similar to the metric approach that the California Air Resources Board will use for implementation of SB 375. A per service population metric is simple, easily understood by the public, and consistent with metrics currently in use by many Metropolitan Planning Organizations, including SACOG.

The prediction of emissions into the future is accomplished by creating forecast years whereby a snapshot in time is taken under various scenarios. Forecasting is completed by adjusting baseline levels of emissions consistent with population, residential and non-residential, and transportation growth. The basis for all growth scenarios is the business-as-usual projection, which predicts how greenhouse gas emissions will increase if behaviors and efficiencies do not change from 2008 levels, yet population, residential and non-residential, and transportation growth (vehicle miles traveled) continue to increase. The business-as-usual scenario for Rocklin used analysis and assumptions included in the General Plan Update and the General Plan Update for the 2030 buildout scenario. Buildout is a worst-case scenario, or the maximum amount of development and population growth that the City could expect. While complete buildout of the City of Rocklin is very unlikely within the timeframe of this DEIR (2030), the projections in the General Plan Update buildout analysis were conservatively used to be consistent with the rest of the DEIR analysis. To calculate emission projections for the year 2020, the 2030 emission projection data was interpolated using a compound growth rate.

Please refer to the Errata section of this Final EIR.

13-36 Please refer to Response to Comment 13-27 regarding how forecast emissions for years 2020 and 2030 within Table 8 were developed.

13-37 Based on the comment, Table 9 on page 19 of the City of Rocklin 2008 Community-Wide Baseline Greenhouse Gas Emissions Inventory document (Appendix C of this Final EIR) has been modified:

Year	Population	Change	% Change	Annual % Change
1990 <sup>1</sup> <del>4</del>	19,033			
2000 <sup>1</sup> <del>4</del>	36,330	17,297	91%	9.0%
2008 <sup>2</sup> <del>2</del>	53,843	17,513	48%	6.0%
2015 Projected <sup>3</sup>	65,614	11,771	22%	3.1%
2020 Projected <sup>3</sup>	73,414	7,800	12%	2.4%
2030 Projected <sup>3</sup>	76,136	2,722	4%	0.5%

13-38 through 13-49 Please refer to the Master Response for Climate Action Plan (CAP) comments at the beginning of this chapter.

**14. GOVERNOR’S OFFICE OF PLANNING AND RESEARCH, STATE CLEARINGHOUSE AND PLANNING UNIT, SCOTT MORGAN**

**SUMMARY OF COMMENT LETTER**

The Governor’s Office of Planning and Research State Clearinghouse and Planning Unit provided comments acknowledging that the General Plan Update DRAFT EIR was sent to selected state agencies for their review. The comments also identified the closing date of the Draft EIR comment period and included enclosures from responding agencies (Native American Heritage Commission and California Regional Water Quality Control Board).

**RESPONSES**

14-1 The comments, which do not affect the analysis or conclusions of the Draft EIR, are considered to be noted and additional response as a part of the Environmental Impact Report (EIR) process is not necessary. Please refer to Responses to Comments 1-1 through 1-1 and Responses to Comments 5-1 through 5-8 for responses to the Native American Heritage Commission and the California Regional Water Quality Control Board’s comment letters, respectively.

**15. CALIFORNIA DEPARTMENT OF TRANSPORTATION, DISTRICT 3, RICHARD HELMAN**

**SUMMARY OF COMMENT LETTER**

The California Department of Transportation (Caltrans) provided comments on the subject area of transportation/circulation. The comments consisted of concerns related to the identified mitigation measures and impacts to the state/interstate highway segments.

**RESPONSES**

15-1 The introductory comment, which does not affect the analysis or conclusions of the Draft EIR, is considered to be noted; additional response as a part of the Environmental Impact Report (EIR) process is not necessary.

15-2 The comment is correct in noting that it is the City's responsibility as lead agency for the project under CEQA to identify and require feasible mitigation measures for significant impacts to reduce traffic impacts caused from the project to a less than significant level. The disagreement by Caltrans that "since mitigation of this impact is outside of the City's control, the impact is considered to be significant and unavoidable" is taken out of context. As noted on page 4.4-85 of the Draft EIR, the concluding portion of the mitigation measure discussion for Impact 4.4.2 (Impacts to State/Interstate Highway Segments) states "However, while the City has policies and traffic impact fees in place that are expected to help reduce impacts to highway segments, the City does not have the complete jurisdiction, authority, or capability to fund implementation of improvements to highway segments. Since mitigation of this impact is outside of the City's control, the impact is considered to be significant and unavoidable." The mitigation measure discussion acknowledges numerous past and continuing efforts by the City of Rocklin to require local development to contribute to highway facility improvements. Thus, the significant and unavoidable impact conclusion is made because the City does not have the authority to independently implement improvements to state highways, as opposed to the idea that the City has not attempted to identify ways to mitigate impacts to highway segments.

15-3 The comment, which does not affect the analysis or conclusions of the Draft EIR, is considered to be noted. The Rocklin Planning Commission, and ultimately the Rocklin City Council, will consider and determine if they support updating the City's Traffic Impact Mitigation fee program to include contributing a "fair-share" portion to the HOV lane extension project or support adding the HOV lane project into the South Placer Regional Transportation Agency list of projects. The comment will be forwarded to the decision-makers for their consideration, and additional response as a part of the Environmental Impact Report (EIR) process is not necessary.

15-4 Please refer to Response to Comment 15-1 regarding why a significant and unavoidable impact conclusion was made for Impact 4.4.3 (Impacts to State/Interstate Highway Intersections). It should be noted that the City's Capital Improvement Program and Traffic Impact Fee program currently includes the Rocklin Road/I-80 interchange ramps and that efforts between Caltrans and the City are now underway to develop a design solution for that location. The Rocklin Planning Commission, and ultimately the Rocklin City Council, will consider and determine if they support updating the City's Capital Improvement Program and Traffic Impact Mitigation fee program to include the Blue Oaks Boulevard/State Route 65 interchange northbound off-ramp. The comment will be forwarded to the decision-makers for their consideration, and additional response as a part of the Environmental Impact Report (EIR) process is not necessary.

15-5 The comment, which does not affect the analysis or conclusions of the Draft EIR, is considered to be noted; additional response as a part of the Environmental Impact Report (EIR) process is not necessary.

**16. VERBATIM ORAL COMMENTS FROM ROCKLIN CITY COUNCIL AND PLANNING COMMISSION SPECIAL JOINT MEETING HELD ON SEPTEMBER 6, 2011, FRANK GEREMIA**

COMMENT

Frank Geremia's Comments re: General Plan EIR -

"I'd like to comment on the....I know you are talking about the Environmental Impact Report. My comments would be more directed toward some of the policies in the proposed General Plan Update."

Peter Hill: "It would be really more appropriate to wait to do that at the Planning Commission, I'll give you a couple of minutes if you want, I think I know what you want, but since we've talked about it on the phone a number of times but if you want to sketch out quickly what your concerns are, and then you can come to the Planning Commission and spend a little more time."

Frank Geremia: "I'll just brief you on it again, you've heard the story before. A couple of concerns with the proposed General Plan Update and that is it doesn't contain some of the old protections for open space that the existing General Plan contains. The existing General Plan is very specific and very clear in protecting open space provisions such as, in the current General Plan there is a provision that says 'areas in the existing city area currently designated for open space, conservation and recreations will remain in those designations. There will be no reduction in present land use designations for these purposes and the city will protect them from conversion to urban uses.' So very clear policies and goals in the existing General Plan that protect open space. Our concerns are that the new General Plan Update doesn't contain strong language such as this, and it

actually goes in reverse and has adverse language. Language such as, the new goal being to designate, protect and conserve open space but in a manner that balances needs for economic, physical and social development in the city and then it goes on to say that 'this may lead to some modification of some existing open space during the development process. So where the existing General Plan says, hey we're going to protect this, we think open space is great it is what makes the city nice, those existing goals and policies aren't in the General Plan Update and now we've got these new ones that say we may need to convert some of that open space based on needs. We think that is detrimental to the future of the city. I think protecting and preserving open space is a key feature of Rocklin, preserving the nice rural character of our city is very important. That's what attracts people it's what makes the city a nice place to live in, the open space, the trees, the oak trees and whatnot, whereas if we end up cannibalizing the open space and say ok well we can develop a little here and little there, eventually we get overcrowded, overcongested, we take away the nice features from the city and the quality of our town goes downhill. What we would like to do is get some of those old protections that were very good, that protected open space very clearly and definitively and put those in the new plan, and take out those provisions that are equivocating on the issue and get the bad policies out and the old good policies back in."

**RESPONSE:**

16-1 Please refer to Response to Comment 3-1 above.