

6681 Apache Road  
Johnstown, CO 80534  
August 7, 2015

Board of County Commissioners  
P.O. Box 758  
Greeley, CO 80632

Re: Neighborhood Opposition report Case USR15-0027, Martin Marietta

Commissioners:

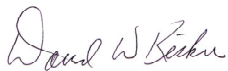
NOTE: Please excuse the need to re-submit this document. I inadvertently used an early draft of the traffic analysis. Because this is such a critical part of this case, it was necessary to revise and include. We sincerely apologize for the inconvenience. D.K.

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Attached to this letter is a report prepared by the Neighborhoods surrounding the proposed Martin Marietta Highway 34 project site. It covers a range of topics that we feel are relevant to the review of the application. Although we may cover some of this material at the BOCC hearing on 8/12/15, it should generally be considered to be supplemental, but critical, nonetheless.

We also wish to apologize for the late submission. We've been striving to complete the effort and get it submitted previously, but due to some of the new information that was presented at the Planning Commission hearing, it required more time. We do understand the additional burden that this will place on the Commissioners as they strive to review the entire case. However, as we know you understand, in an application of this magnitude and complexity, it's important to consider a wide range of issues.

Respectfully submitted,



David W. Kisker

On behalf of the CLR-34 Neighborhoods Assn.

CLR-34 Neighborhoods Assn.

# Neighborhoods Opposition Report

USR15=0027

CLR-34 Team  
8/5/2015

## **Table of Contents**

I.	Introduction	1
II.	Compatibility	5
III.	Assessment of the MMM Traffic Impact Study	25
IV.	Farm and Water	54
V.	Real Estate	69
VI.	Addendum A: Emissions Comment	75
VII.	Addendum B: Health Impacts of Particulates	85

CLR-34 Neighborhoods Assn.

# I. Introduction

USR-15-0027

Dave Kisker  
8/5/2015

## Introduction

The following report has been prepared by the members of CLR-34 Neighborhoods Assn. on behalf of the residents and businesses surrounding the proposed Martin Marietta Materials Highway 34 Project (USR15-0027).

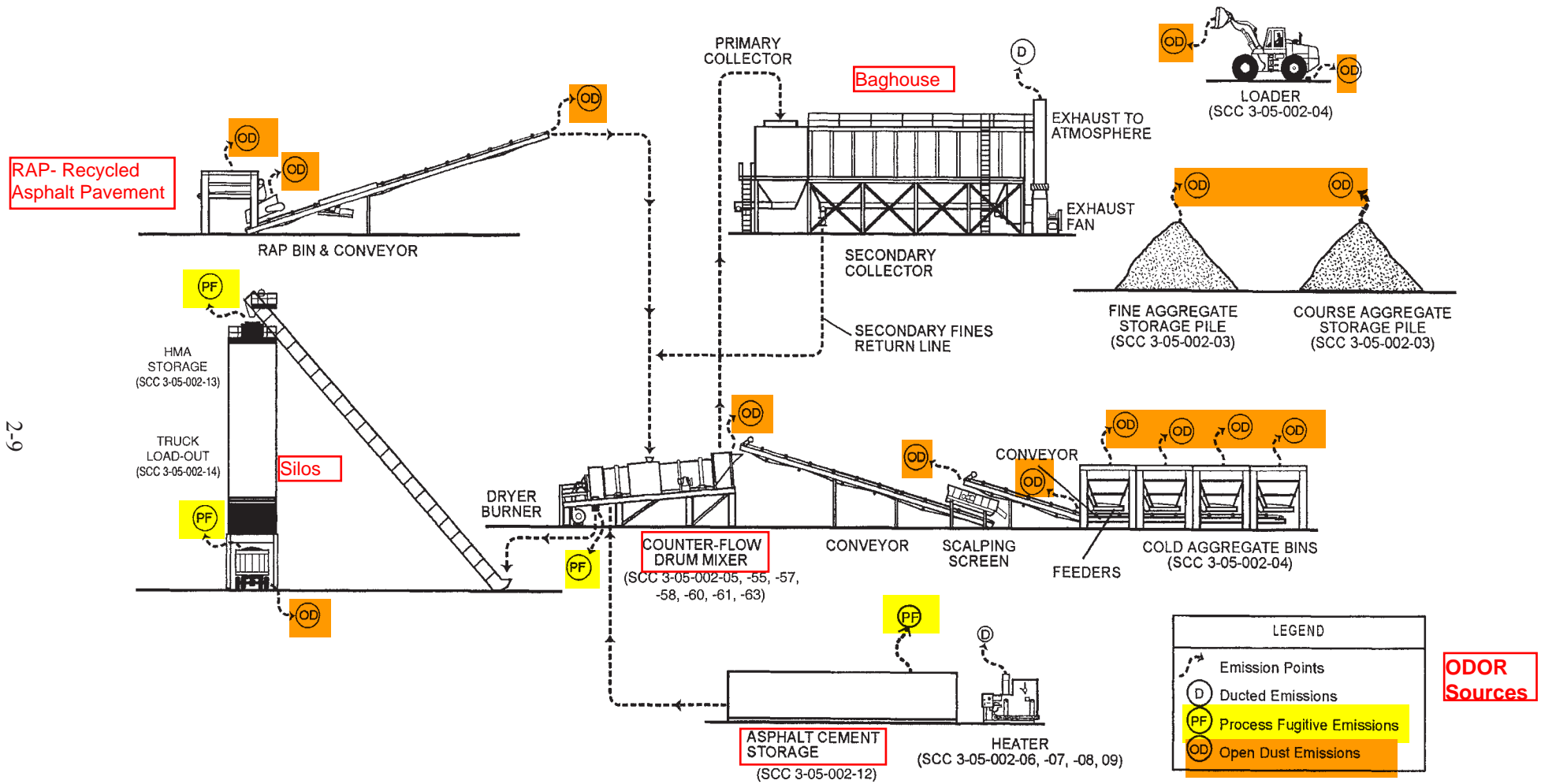
Although there are numerous issues that could be addressed in such a report, we have focused on the most important, especially Compatibility, Traffic impacts and Land and Water impacts. Other topics, such as the Health impacts and the issues related to Noise have been thoroughly covered in our presentation that was given at the Planning Commission meeting on July 21, 2015.

Our assessment of the Air Emissions report that was prepared by Stewart Environmental and included with the USR Application was supplied to the County on June 18<sup>th</sup>, and is not reproduced here. However, Stewart submitted a response to that analysis at the Planning Commission meeting that we feel misrepresented the factual situation in several respects. Because we do not intend to address this extensively at the BOCC meeting, we have added our response as an addendum to this report.

Finally, as a point of reference, we have included 2 figures from the EPA's AP-42 publication, which show schematics of a typical asphalt drum mix plant and a typical concrete batch plant.

At the Planning Commission hearing, it was apparent that there was some misunderstanding of certain elements, such as the role of the asphalt plant "baghouse" (No, it's NOT a vacuum cleaner that sucks up all fugitive dust from the aggregate piles. It applies ONLY to the emissions from the aggregate dryer and drum mix processes) and the proposed carbon filters (which will be applied to the asphalt cement tanks, but not the other sources of odor—the truck load-out and the silo filling). Hopefully, this will help to clarify some of that uncertainty.

Source: EPA Emission Factor Documentation for AP-42, Section 11.1, Hot Mix Asphalt Plants, Final Report  
Sources of Odors and Emissions from HMA Drum Mix Plant



2-9

Figure 2-3. General process flow diagram for counter-flow drum mix asphalt plants (source classification codes in parentheses).<sup>3</sup>

### Fugitive Emissions from Concrete Batch Plant Source: EPA AP-42 Document, Figure 11.12-1

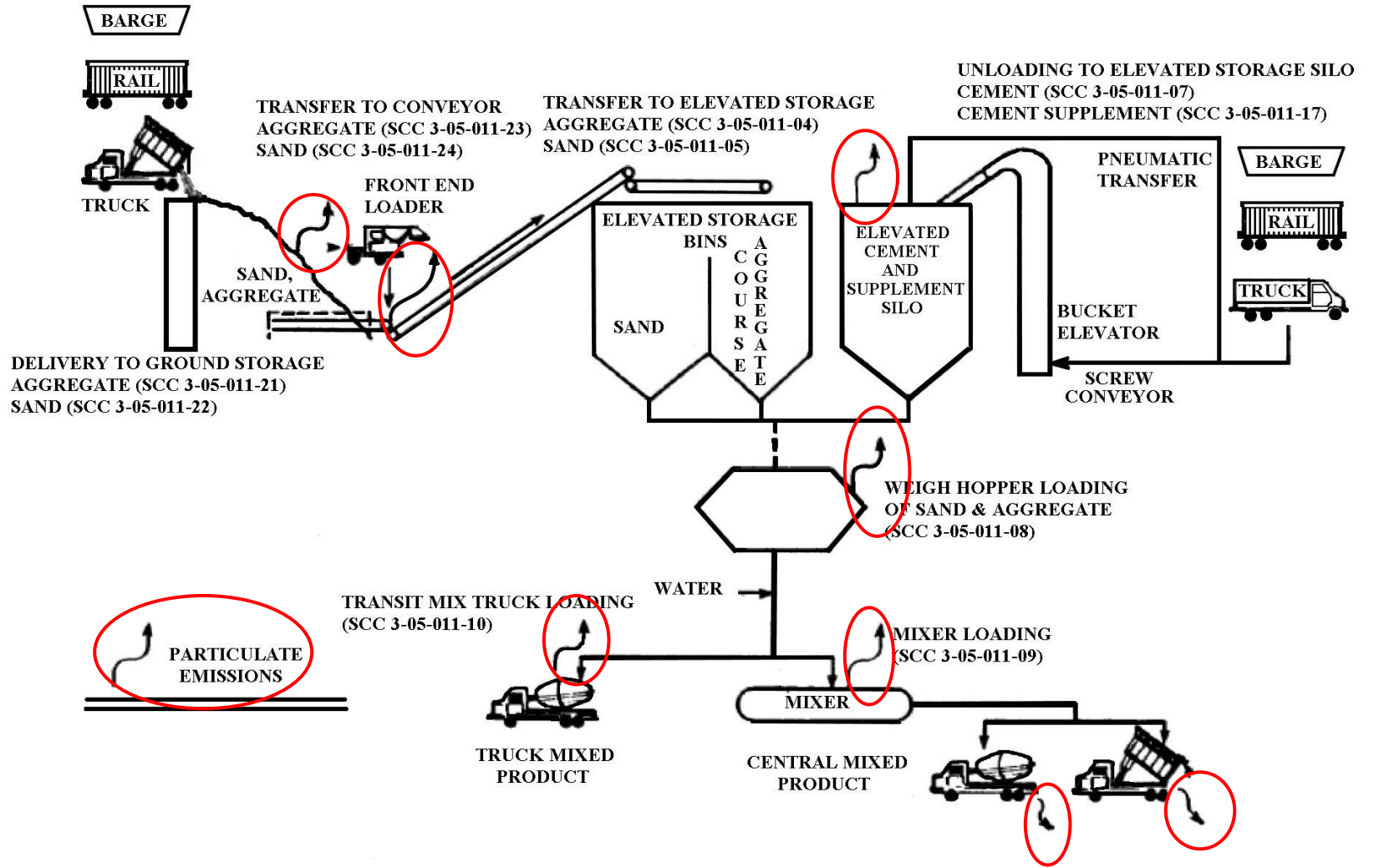


Figure 11.12-1. Typical Concrete Batching Process.

CLR-34 Neighborhoods Assn.

# II. Compatibility Analysis

USR15-0027

Dave Kisker  
8/5/2015



## Executive Summary

- The Martin Marietta Materials proposed Highway 34 Project (USR15-0027) fundamentally fails several of the compatibility-related aspects of the Weld County Code.
- The noise, dust, odors, and other impacts cannot be successfully mitigated making it incompatible with the existing and future neighborhood uses.
- Those impacts would require behavior changes by the nearby residents, resulting in their loss of the “quiet enjoyment” of their property.
- Since there are alternative sites available that are already industrial in nature, inserting this operation at this location constitutes poor planning and would certainly result in lost opportunity that might otherwise occur because of expected compatible alternatives, such as additional residential or light commercial/industrial uses.
- This proposed operation is incompatible with the visions of the surrounding communities, Windsor, Greeley and Johnstown. Although there are currently no applicable Cooperative Planning Agreements, or Intergovernmental Agreements between the County and these municipalities, there has been considerable groundwork laid to begin a systematic planning process that would, in fact, address this entrance to Weld County and Greeley. A decision to approve this project would effectively terminate that planning activity as well as undermine the attempts that the surrounding communities have made to undertake the process of developing this area by intention instead of by accident.
- Based on these and other reasons, this project does not satisfy the compatibility requirements contained in the Weld County Code.

# Weld County Code Requirements Chapter 23--Compatibility

## Division 4

### Uses by Special Review

#### Sec. 23-2-200. Intent and applicability.

A. Uses by Special Review are USES which have been determined to be more intense or to have a potentially greater impact than the Uses Allowed by Right in a particular zone district. Therefore, Uses by Special Review require additional consideration **to ensure that they are established and operated in a manner that is compatible with existing and planned land USES in the NEIGHBORHOOD.** The additional consideration or regulation of Uses by Special Review, and the application to a Use by Special Review of Performance, Design and Operations Standards listed both herein and for applicable USES from any zone district, **are designed to protect and promote the health, safety, convenience and general welfare of the present and future residents** of the COUNTY.

#### Definitions:

**NEIGHBORHOOD:** When used in this Chapter in reference to a particular LOT, the word *NEIGHBORHOOD* is intended to describe in a general way the land area which is in the vicinity of the LOT in question and which will be affected to a greater extent than other land areas in the COUNTY by USES which exist on the LOT or are proposed for it. A NEIGHBORHOOD always includes LOTS which are ADJACENT to the LOT under consideration and, depending upon the land USE in question, may include more remote areas as well.

**USE:** Any purpose for which a STRUCTURE or a tract of land may be designed, arranged, intended, maintained or occupied; also any activity, occupation, business or operation which is carried on in or on a STRUCTURE or on a tract of land.

**SCREENED:** Construction and maintenance of fences, earth berms or the USE of LANDSCAPING materials or other materials USED with the approval of the Department of Planning Services to lessen the noise, light, heat or visual impacts of a USE on surrounding uses. A SCREENING PLAN shall be submitted and approved by the Department of Planning Services.

## Section I. Overall Compatibility Considerations

**Martin Marietta Material Statement:** In their USR application (USR15-0027) Martin Marietta Materials (MMM) states that at their January 27, 2015 meeting they “listened” to concerns related to compatibility, and provide a list of what they deemed were the most important. They retained paid experts to declare that none of the nearby property owners’ concerns were valid and therefore their operation will be “compatible” according to some underfined standard.

Since the application was initially submitted, MMM has added additional documents to the case file in an attempt to support their argument for compatibility. Included are:

1. Compatibility Examples
2. Real Estate Diminution Study
3. Modifications to Application

**CLR-34 concerns:** When examined thoroughly, there are several issues with MMM’s claim of compatibility with the “existing and planned land USES in the NEIGHBORHOOD”.

The primary issue is in the definition of “compatibility”. Webster’s Dictionary provides this definition:

**Compatible:** able to exist together without trouble or conflict

Thus, any incompatibility may directly affect the property owners surrounding the potential application. The impact of noise, odors, air pollution, traffic, property value losses, and other effects of an industrial activity is likely to cause unacceptable conflicts which would require substantial behavior changes. Essentially, these neighbors would lose the “quiet enjoyment” of their own property.

Thus, a reasonable extension of Webster’s definition would be that a compatible operation would not require behavior changes from the neighbors. Thus, the neighbors would not suffer from offensive odors, showers of dust, any bombardment with industrial noise, any economic losses, nor any other loss of the quiet enjoyment of their property.

Furthermore, compatibility can and should be considered on a higher level as well. For example, in considering land use compatibility, the Town of Union, NY observes:

“seeking land use compatibility recognizes that conflicting land uses cause economic, physical, and social "drains" on the community where the conflicts occurs. Land use incompatibility can create barriers to new investment in the town and villages and discourage existing land owners from investing in their properties, thereby creating a drain on the vitality of the community as a whole.” [emphasis added] **Town of Union, Technical Background Report, Chapter 6.**

Although Weld County does not appear to have a similar statement, the same analysis can be found in numerous jurisdictions around the Country, and is generally an obvious consideration of sound Land Use Planning.


Many jurisdictions take a systematic approach to Land Use Planning, especially with regard to Land Use Compatibility by developing a Land Use Compatibility Matrix, such as the one in Figure 1, below (also from the Town of Union, NY).

Particularly notable is the complete incompatibility of Industrial Uses with both Low Density and Medium Density Residential areas. In the text, further details of this rating are included:

“Both light and heavy industrial forms are classified as undesirable neighbors of residential land uses, especially single-family development. This rating was derived through the recognition that the various characteristics of industrial development are generally not harmonious with the atmosphere sought in residential areas. Similarly, residential land use forms do not benefit industrial development by their proximity.” **Town of Union, Technical Background Report, Chapter 6.**




It must be emphasized the incompatibility classification between industrial and residential land uses is not unique to Union, NY. Similar matrices from jurisdictions around the Country draw the same conclusion—heavy industry and residential USES are not compatible and mitigation is generally not possible.

In the discussion below, we will explicitly document many of the fundamental, and therefore, unmitigated incompatibilities between the MMM development and the surrounding USES in the NEIGHBORHOOD. However, first, we return to the more general compatibility concern expressed above, regarding the drain on the community.

 **Figure 1 ~ Land Use Compatibility Matrix**

Future Land Use Compatibility Matrix	Low Density Residential	Medium Density Residential	High Density Residential	Professional Office	Neighborhood Commercial	Corridor Commercial	Mixed Use Residential/Office	Mixed Use Office/Commercial	Mixed Use Office/Research/Industrial	Government/Educational/Institutional	Recreational	Utilities	Rural Density Residential
Low Density Residential	✓												
Medium Density Residential	👉	✓											
High Density Residential	🚫	👉	✓										
Professional Office	👉	👉	✓	✓									
Neighborhood Commercial	👉	👉	✓	✓	✓								
Corridor Commercial	🚫	🚫	✓	✓	✓	✓							
Mixed Use Residential/Office*	👉	👉	👉	✓	✓	✓	✓						
Mixed Use Office/Commercial*	🚫	🚫	👉	✓	✓	✓	✓	✓					
Mixed Use Office/Research/Industrial*	🚫	🚫	👉	👉	👉	✓	✓	✓	✓				
Government/Educational/Institutional	👉	👉	✓	✓	✓	✓	✓	✓	👉	✓			
Recreational	✓	✓	✓	✓	👉	👉	👉	👉	👉	✓	✓		
Utilities	🚫	🚫	🚫	✓	✓	✓	✓	✓	✓	👉	👉	✓	
Rural Density Residential	✓	✓	👉	🚫	🚫	🚫	🚫	🚫	👉	👉	👉	✓	✓

**Legend**

-  Compatible
-  Questionable (Compatible Only If Impacts Can Be Properly Mitigated)
-  Incompatible

\* Note: Compatibility of Mixed Use development is dependent on the proposed mixture of uses.

Table 1. Land Use Compatibility Matrix, Town of Union, NY

## Section II. Negative Impact on the Region

As already mentioned, incompatible Land Uses have a broader impact than that found in the immediate neighborhood surrounding the incompatible use. This was clearly articulated in the referral responses by Windsor, Greeley and Johnstown:

In their referral letters, Windsor and Greeley note that:

“However, the property is located within a sensitive location with various competing interests. It is important to consider – and, ideally, master plan -- this area in a collaborative manner due to the proximity of this site to three municipalities, an established unincorporated neighborhood, large swaths of productive agricultural land, and major regional transportation systems.

**The proposed use is incompatible with this particular vision [the Windsor-Greeley IGA] that the Town of Windsor and City of Greeley have developed for this area. The proposed batch plant is an intensive industrial use unsuited for the nature of this corridor, and its impacts likely cannot be fully mitigated. Furthermore, approval of this Use by Special Review, as proposed, would likely establish a sprawling and overly-intense land use pattern for future development of the corridor.**

We urge careful consideration for the proposed uses and its regional impact, particularly concerning future land use patterns for the area and along Highway 34. You are aware of the decades of discussion about preserving the unique identities of the Northern Colorado communities, with community buffers that allow cities and towns to maintain their character and thereby contributing to a larger regional economy. **With the proposed scale and location, this proposal may frustrate that vision, or at least contribute to the beginnings of a land use pattern with significant impacts to the gateway into the City of Greeley and Town of Windsor.”**

Similarly, Johnstown’s Town Council made an even stronger statement by passing a Resolution asking the County to deny the application:

**WHEREAS**, the proposed facility would negatively impact the nearby Indianhead residential subdivision by exposing the homes to continuous industrial operations, forcing them to coexist with large, otherwise unplanned, industrial development and creating potential losses of property value, quiet enjoyment and quality of life; and

**WHEREAS**, on a broader scale, the Town envisions growth along the U.S. Highway 34 corridor to include commercial, residential and mixed use development, consistent and harmonious with the current development; and

**WHEREAS**, the proposed facility is not only inconsistent with the Town’s vision of the growth along the U.S. Highway 34, but has considerable potential to lead to an expanded and unplanned heavy industrial presence along the U.S. Highway 34 corridor; and

**Table 2. Excerpt from Johnstown Resolution 2015-07 Opposing USR15-0027**

All three communities clearly recognize the threat of such extreme incompatibility, not only on the immediate neighbors, but also on their vision of how the region would be best developed.

In their attempt at rebuttal to the Windsor, Johnstown and Greeley referrals, MMM essentially discounts these concerns with several conclusory statements about the supposed positive economic impacts that can only be achieved at this site, and concludes that

“Each proposed land use in this area must be considered on its own merit.” **Letter from Pam Hora to Weld County, page 3, dated June 9, 2015.**

To consider this land use in isolation of its impact, and its potential to “drain the vitality of the community as a whole”, is completely incompatible with sound Land Use Planning principles!

### **III. Discussion of Specific Incompatibility Issues with Neighborhood Uses**

In their USR application as well as numerous ensuing communications with the County, MMM has insisted that they have made numerous attempts to address the concerns of the Neighborhoods surrounding their proposed operations. They repeatedly claim that they will be a “good neighbor” and that this is evidenced by the fact that they have hired experts to “address” the concerns that were expressed at their January 27<sup>th</sup> Open House at which they first presented their plans for this operation.

However, although they HAVE made some adjustments to their application, they have not, in fact made any significant effort to address the fundamental incompatibility that this major industrial operation would impose on the surrounding neighbors, including not only Indianhead Estates, but also the local farms, and the approved USR for a wedding venue at Rockin’ S Ranch (USR15-028).

Instead, essentially all of the adjustments that have been made are either 1) primarily for their own benefit; 2) items that they are already doing at other sites such as the Fort Collins Taft Hill Plant and would have been included at the beginning if their claims of being a “good neighbor” were valid; or, 3) things that would be required by the County or State in any case.

Furthermore, attempts by the neighborhoods to establish enforceable limits on their operations have been completely unsuccessful, especially in the areas of emissions, odors, noise and traffic. **MMM has been unwilling to be held accountable for ANY of their health, economic or other quality of life impacts.**

#### **III.A List of concerns that MMM addressed based on the January 27<sup>th</sup> Meeting**

In their application, MMM provides a list of neighborhood concerns that they determined to be important, based on the January 27<sup>th</sup> Open House. They then paid experts to evaluate the concerns. Not surprisingly, the conclusion of ALL the paid experts was that there was no reason for any of the concerns, and that the neighbors should be assured that because MMM is a “good neighbor” they would do mitigations and everything would be compatible.

The reality of these supposed steps is quite different, however. In this section, we examine the words and actions of MMM.

## **Issue: Noise**

Noise is undoubtedly one of the major sources of incompatibility between industrial activities of the sort that MMM proposes and the ability of the Neighborhoods to pursue their quiet enjoyment of their property without a substantial behavior change. MMM has acknowledged that there will be 2-3 trains arriving per week, potentially in the middle of the night. These will enter the rail loop at a necessarily very slow speed (~1 mph) and slowly make their way to the final position in preparation for unloading. The usual procedure will be for the locomotives to continue idling the entire time they are on site, and then there will be an extended unloading time during which additional noise generation will occur.

In addition to the rail activity, over which MMM acknowledges they have only limited control, the aggregate handling, the concrete batch plant operation, the asphalt plant operation, the concrete crushing and recycling, as well as the continuous truck traffic will also generate considerable noise at residences as close as 200 feet from the MMM property line.

Furthermore, MMM seeks to be approved for 24/7/365 operation, and to be permitted to only meet the Weld County requirements industrial activities (80dB/75dB for day/night operation.)

**MMM Conclusion:** [From their application] “A consultant was hired to prepare a Sound Analysis Report to analyze the noise that is anticipated to be generated by the facility. The Report demonstrated that the facility would operate in compliance with both Weld County’s and the State’s noise regulations even with no noise mitigation. However, in an effort to be a good and compatible neighbor, Martin Marietta will be implementing noise mitigation techniques through the installation of landscaped earthen berms on the site so that they operate in a manner that is quieter than the allowed standards. Martin Marietta will be using white noise back-up alarms, a below-grade hopper, and acoustical enclosures.”

**CLR-34 NA Concerns:** Although we have reviewed the applicant’s “Sound Analysis Report” carefully, we were not provided sufficient detail to enable us to reproduce their calculations and analysis. It does appear that significant noise generating equipment (trucks, loaders, etc.) were omitted from that analysis.

However, to understand the actual impact of noise on the surrounding neighborhoods, we have attempted to determine sufficient details about the proposed operation, including the train arrival times and length of activity, the aggregate unloading, the amount of aggregate handling that will actually occur, etc. We have also tried to explore the possibility that MMM would be willing to demonstrate their true willingness to be a compatible neighbor by limiting their permitted operating hours and meeting similar noise standards to those expected of lower intensity operations such as Commercial activities. Generally, we have found MMM to be evasive and misleading when such inquiries are made.

Example #1. We have repeatedly asked for clarification of the time that will be required for the arrival of the train, from the time that it enters the rail loop to the time that it is in its final position. Since the train will be over a mile long, and have locomotives on both ends<sup>1</sup>, and will

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<sup>1</sup> As per David Hagerman, Meeting with CLR-34NA, June 2, 2015

be required to slow down to much less than 5 miles an hour when it enters the switch to the rail loop, we estimate that the entire process will require at least 30 minutes and possibly as much as an hour. Because the trains are likely to arrive at night time, this rail activity will pose an extreme disruption to many of the neighbors. Yet, MMM has not been willing to provide accurate information about this impact.<sup>2</sup>

Example #2. One of the major potential issues with the rail-based aggregate activity is the noise associated with the aggregate unloading. It is anticipated that there may be nearly continuous banging between hopper cars as each car is moved over the dump area, aggregate is dumped and transferred onto the storage pile via conveyor. MMM claims that this noise source will be substantially avoided because they will be continuously unloading the rail cars from the bottom into a below grade hopper and that the train will not be starting and stopping, but will be continuously moving forward.

However, the numbers don't add up. Mr. Hagerman has stated<sup>3</sup> that the train will be moving at about 1 mph around the loop, which is 88 feet per minute. Since each hopper car is about 60 feet long, this means that it should be able to be emptied in less than 1 minute, meaning that the entire train will be emptied in less than 2 hours. Yet, on several occasions, Mr. Hagerman has stated that the actual time to empty the train is around 8 hours!<sup>4</sup> No explanation has been provided for why this extended unloading time is necessary, but this begs the question of the daily noise impact that will be experienced by the nearby Neighborhoods. In addition to the other noise generated at the site, the rail activities are clearly going to have an extreme impact on the surrounding properties.

Example #3. In the USR application, MMM states that there will be 1-3 trains per week arriving at the site. However, recently<sup>5</sup> Mr. Hagerman has started describing the train arrival as 2-3 trains per week. No explanation of this change has been offered. Mr. Hagerman has claimed that the MMM quarry in Wyoming cannot deliver more than 3 trains per week. Each train will deliver approximately 100 to 115 tons of aggregate. Using the stated annual production of the asphalt and concrete plants (450K tons/year, 650K tons<sup>6</sup>/year, respectively, 90% aggregate) between the asphalt plant and the concrete plant, the application claims that a total of about 1 million tons of product, about 75 trains would be needed annually. (Any discussion of raw aggregate distribution has generally been avoided<sup>7</sup>) Mr. Hagerman was quoted in the BizWest article on May 29, 2015 as saying that eventually, this site would be shipping 2 million tons of product each year. Since the asphalt plant and concrete plant together only account for about half of that, and would only need about 75 trains per year to supply, it's clear that 1) the other million tons of aggregate is destined to be used elsewhere, and 2) the trains will be arriving at least 3 times per week, 12 months a year. The fact that MMM has repeated suppressed these details is very concerning, and the impact on the neighborhoods is clear—the noise generated at this site will be relentless.

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<sup>2</sup> Requested at the June 2, 2015 meeting of CLR-34NA with Mr. Hagerman and Mr. Sharn.

<sup>3</sup> June 2, 2015 meeting with CLR-34NA

<sup>4</sup> June 2, 2015 meeting with CLR-34NA, June 9, 2015 Public Meeting

<sup>5</sup> June 9, 2015 Public meeting

<sup>6</sup> Assuming about 2 tons per cubic yard of concrete

<sup>7</sup> Direct question to Mr. Sharn at the "landscape charette" meeting on 6/24/15 was not answered.



Example #4. In their application and other various presentations<sup>8</sup> MMM has emphasized that their various mitigations, acoustical enclosures, berms, etc. will allow them to stay well below the appropriate industrial limits at the property line of this site. They even claim that based on their Sound Analysis Report, they will be approximately within range of the residential limits at the neighboring locations. They further assert that this will make them a “good and compatible neighbor”. **However, when we asked them to agree to accept an enforceable residential noise limit as part of their permit Design Standards at their property line, they simply refused.** (Note that this would be the case for other USR uses on Agriculturally zoned land<sup>9</sup>.) In fact, at this point, they have not indicated ANY willingness to agree to any enforceable standard except the industrial level of 80dB during the daytime and 75dB at night. This is clearly not compatible with the surrounding Neighborhoods, and would certainly require behavior changes to accommodate, including avoiding outdoor activities both in the daytime and evenings, which are such a large part of our Colorado lifestyle.

**Conclusion: ON the question of NOISE, the MMM Highway 34 Project is clearly incompatible with the existing USES in the NEIGHBORHOOD.**

## **Issue: Air Pollution and Dust**

At the January meeting, substantial concerns were raised by the surrounding property owners, regarding air pollution. While some concern regarding hazardous air pollutants such as benzene, formaldehyde, and other toxic materials have been voiced, an equally significant concern regarding compatibility with the surrounding properties is the substantial amount of dust that will be generated at the site. These “fugitive” emissions are difficult to control, and although there are some permitting requirements, those requirements are designed to manage a site such as this one when it is located in an industrial area. Appropriate requirements for a site adjacent to a residential area would need to be much more stringent to avoid the nuisance and health effects inherent in such emissions.

**MMM Conclusions:** “An Air Emissions Assessment” for the Asphalt Plant, Ready Mix Plant, and Asphalt Recycling facilities was completed by Stewart Environmental Consultants. This assessment concluded that the air emissions for the proposed Highway 34 facilities are well below the EPA standards and the more restrictive California air quality standards. The assessment concludes that “this facility will not negatively impact the surrounding environment or affect human health as it will meet all environmental standards.” **MMM USR 15-0027 Application**

“As is required by the County, a Dust Mitigation Plan has been developed for the project and is included in the application.” **MMM USR15-0027 Application**

**CLR-34NA Concerns:** We have reviewed the “Air Assessment Emissions” report that was prepared by Stewart Environmental Consultants as part of the MMM USR application. This report was submitted to Weld County. A review of our analysis was also performed by Ms.

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<sup>8</sup> E.g. June 9, 2015 Public Meeting

<sup>9</sup> For example, USR15-0028, was required to meet the residential day/night standard of 55/50 dB

Margie Klitch to confirm that the conclusions were sound. **In summary, the Stewart report falls far short of a suitable and complete analysis of the proposed MMM Highway 34 Project.** Key points that were discovered include:

- Statements regarding the annual production of the asphalt plant were misleading
- The annual production of the concrete batch plant was understated<sup>10</sup> by as much as 20%
- The hourly capacity for the asphalt plant was understated by as much as 25%
- Emissions for CO<sup>11</sup> were not estimated properly, resulting in over 2X higher emissions than reported.
- Understatement of pollutant concentrations at the MMM property line by as much as 2X
- Inaccurate estimate of particle emission from the concrete batch plant
- Suppression of information about extensive dust generation due to traffic on the site
- Suppression of dispersion information about dust from concrete batch plant.
- Complete lack of assessment fugitive emissions from aggregate handling<sup>12</sup>
- No consideration of health impacts of small particle dispersion

In addition, the EPA requires that ALL emissions from ALL sources on the site be included in order to be considered complete. Stewart's report only dealt with the asphalt plant itself and the concrete batch plant (which was incomplete). Furthermore, since MMM has not submitted their permit applications to the CDPHE for either the asphalt plant or the aggregate handling and traffic activities, we cannot be sure even now what their plans actually are. This uncertainty arises because the Stewart analysis for the concrete plant was for a lower amount than the requested permit limit in the APEN submitted for that facility.

Despite the inadequacy of the Stewart Environmental report, the conclusions of our analysis indicate that hazardous levels of small particulate pollution will be showered on the surrounding Neighborhoods, even when only the emissions from the asphalt plant and concrete batch plants are considered. Clearly then, once the entire site is evaluated, and the fugitive dust from traffic, aggregate handling, loading, unloading, etc, is included it will be found that the surrounding residents will be required to modify their behaviors, especially in the summer when activity will be at its most extreme.

**Conclusion: Based on the Air Pollution and Dust that will be generated, the proposed project is incompatible with the existing USES in the NEIGHBORHOOD.**

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<sup>10</sup> Compared to the APEN application for the concrete batch plant

<sup>11</sup> Based on the EPA's recommended emission factors

<sup>12</sup> Up to 2 million tons per year

## Issue: Health Risks

There is considerable information available that suggests that the emissions from asphalt plants may impact human health. While MMM does not dispute the hazardous nature of their emissions, in their application, MMM repeatedly asserts that there is no risk to the health of the surrounding neighbors because the concentrations of the pollutants are low enough that they are considered to be “safe”. This is not exactly a true statement.

Although the emission of explicitly hazardous air pollutants (HAPs, in the parlance of the EPA) from the asphalt plant are expected to be relatively low, a proper assessment of the medical literature from institutions such as the National Institutes of Health, the World Health Organization and the American Heart Association leads to the conclusion **that the true situation is one of uncertainty rather than of safety**. Especially for children and the elderly, there may well be a significant risk to exposure to such compounds as benzene and formaldehyde, even at levels below those set by the EPA and the State of California.

**MMM Conclusions:** “Martin Marietta contacted Dr. Scott Phillips, a physician who is board certified in medical toxicology and internal medicine to provide information related to the health impacts of living near an asphalt plant. The findings are that the facility will not pose a health risk.” MMM USR15-0027 Application

**CLR-34 Concerns:** In reviewing Dr. Phillips Q&A document, it’s clear that he takes the position that because the emission are so low, according to the Stewart Environmental report, then there will be no health risk. However, there are two important flaws in this conclusion. First, as discussed above, the Stewart report was badly flawed and did not correctly estimate the emissions from the asphalt plant. While it is correct that most of the HAP emission levels are still quite low, even after being corrected to account for the actual production rate for the asphalt plant, the level of formaldehyde emission, in particular, is nearly triple the level that Stewart reported as a result of those errors. Formaldehyde is considered to be a potential carcinogen.

In fact, the corrected level,  $27 \mu\text{g}/\text{m}^3$ , about 0.02 ppm, actually exceeds the National Institute of Occupational Safety and Health (NIOSH) Recommended exposure limit (REL) of 0.016 ppm<sup>13</sup>. Furthermore, the corrected estimate is about 20% of the ceiling REL of 0.1PPM, which should NEVER be exceeded for more than 15 minutes. In addition, NIOSH recommends the use of at least a cartridge respirator and sealed goggles when a human is exposed to levels higher than the NIOSH REL.

Besides formaldehyde emissions from the asphalt plant, the other major source of hazardous emissions is the dust emissions that will come from the MMM facility. Although Dr. Phillips did not address this issue at all, and in the Stewart report, there was not mention of the health hazards of small particulate matter<sup>14</sup>, in fact, there are numerous reports of the extreme hazards of even modest concentrations of these pollutants.

In our detailed analysis of the Stewartreport (submitted to Weld County on June 18, 2015) we found that Stewart neglected most of the sources of fugitive emissions from this proposed

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<sup>13</sup> NIOSH Pocket Guide to Chemical Hazards

<sup>14</sup> PM2.5, particles less than 2.5 microns and PM10, particles less than 10 microns are particularly hazardous

operation, and, incorrectly estimated other sources. However, even using only the PM emissions from the concrete plant and the asphalt plant, we found that the emission of both PM2.5 and PM10 would exceed the NAAQS level set by the EPA. Because Stewart did not address most of the fugitive emissions from the site, the situation will be far worse.

In Addendum B, we have included an EPA document that discusses the impact of exposure to small particles.

Exposure to PM2.5 causes not only chronic health issues, but can induce acute cardiac and pulmonary crises.

The levels of emissions of PM2.5 from the facility that MMM proposes WILL cause health hazards to the surrounding population.

Based on the increased risk due to these emissions, it is likely that over a 10 year period, several people will die as a direct result of MMM's presence. Although it will certainly be difficult to prove, and litigation would be needed to be compensated, the negative health impact of MMM on the NEIGHBORHOODS is clear.

**Conclusion: The MMM facility would have a negative health impact on the nearby residents. The proposed project is incompatible with the existing USES in the NEIGHBORHOOD.**

### **Issue: Odor**

One of the most difficult aspects of life near an asphalt plant is the odor that is experienced by nearby residents<sup>15</sup>. The olfactory assault on the neighbors that can occur requires them to close windows and stay indoors as there is no other escape. Consultation with the residents that live near the MMM asphalt plant on Taft Hill Road in Ft. Collins indicate that this is one of the most offensive aspects of that operation.

Investigation of odor complaints at the Taft Hill site yields only limited information—in 2014, there were 14 complaints. However, if there is more than one complaint on a particular day, only the first complaint is counted in the total. Furthermore, given the seasonal nature of asphalt production, the plant is expected operate for less than 180 days per year, which means that the complaint rate is nearly once every two weeks during the primary season!!

Furthermore, because of the process for evaluation of possible odor violations, it's likely that eventually the odor reports don't continue because the residents realize that there is no hope of stopping the problem.

**MMM Conclusions:** In their application, MMM states: "Occasionally, odors from heated materials may emanate from an asphalt plant, but they pose no danger to plant personnel or to the communities in which it operates. Martin Marietta is required to comply with federal, state and

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<sup>15</sup> <http://ohiocitizen.org/kokosing-asphalt-season-brings-noise-and-eye-watering-odors/>

local odor regulations. Measures are taken to reduce odors within the plant design, such as vertical orientation of the liquid AC tanks.

Additionally, Martin Marietta trains and certifies staff to operate and maintain equipment that measures odors. This ensures full compliance with all rules and regulations. Martin Marietta has never exceeded any existing rules and regulations at a similar site.”

In addition, MMM recently has decided to implement charcoal filters at some point in their process to reduce the odor issue.

**CLR-34 Concerns:** First, the fact that MMM asserts that the “vertical orientation” of the liquid AC tanks is a result of them being a “good neighbor” and listening to the neighbors odor concerns doesn’t pass the smell test. In fact, this was a change that was already being made at the Taft Hill site, and therefore should have been the starting point, if there was any true concern about their negative impact on the surrounding property owners. Further, MMM has provided no details of the charcoal filters that they propose to use, so there is no way to evaluate their effectiveness. However, they will be applied to the AC tanks, so other major sources of odor such as silo filling and truck load-out will be unaffected.

Additionally, there is no evidence that the “trained and certified” staff have any responsibility to reduce odors. Rather, their presence is focused on demonstrating that MMM is in compliance with odor regulations.

The problem is, however, that in Colorado, the process for determining compliance is to take a sample of tainted air, dilute it by 7X, and then determine whether the odor is still detectable. Only if it is still apparent will an odor violation be issued. Not surprisingly with this standard, there have been no actual violations at the Taft Hill site. **But, this does not mean that the odor is not a problem.**

In some jurisdictions, the required dilution is less, as little as 2X, which would allow substantially weaker odors to avoid violation. Since MMM makes such strong claims for their odor controls, we have asked them to accept a standard that is tighter than the 7X dilution—4X was proposed. However, as is the case with their other “mitigations” they have not been willing to be held to an enforceable standard.

**Conclusion: Based on the odor that MMM admits will be generated, the proposed project is incompatible with the existing USES in the NEIGHBORHOOD.**

### **Issue: Visual Impact**

The visual impact of the placement of the MMM facility will be extreme for several reasons. First, in the Indianhead Estates area, much of the neighborhood would be as much as 100 feet higher than the MMM facility. In addition, some of the structures, such as the concrete and asphalt silos are as much as 110 feet tall. The essential problem is that there is no buffer between the proposed MMM facility and the surrounding NEIGHBORHOOD USES.

**MMM Conclusions:** “The railroad and activities within the site will be screened by grassy earthen berms to mitigate visual and sound impacts on surrounding parcels (see USR Map for exact locations). There is a berm that wraps around the outside edge of the railroad spur on the northeast, east and southeast sides of the parcel. This berm is designed to be 10’ taller than the rail bed for the rail spur. When looking at this berm from outside of the property it will range from 11 to 24 feet above grade. It is about 11 feet tall on the north end of the site and transitions to be about 24 feet tall on the south end of the site. ... In addition, two more berms are proposed to be constructed on the interior of the rail spur loop to further shield activities and noise from surrounding properties. These two berms are both approximately 12 feet above grade.”

“A consultant was hired to develop a computer generated Visual Analysis Model of the site. The interactive model is available for us to show any interested parties, but for purposes of this application, we have included snapshots from the model from points around the site looking toward the project to give people an idea of what will be seen.”

**Revisions to application:** “... on June 24, 2015, Martin Marietta held a landscape design charrette meeting and invited neighbors around the site that have direct views of the facility to find out their thoughts on what they might like to see in the way of landscaping. Below are the steps that Martin Marietta will be taking in response to feedback received at that meeting.

- Martin Marietta will prepare a landscape plan for the site. Additional trees and shrubs will be proposed on the perimeter of the facility, where there is adequate space, to help soften views of the facility and make the landscape look more aesthetically pleasing. In addition, Martin Marietta has agreed that they will incorporate some variation to the topography of the berms to make them look more natural and less engineered. We are in the process of developing the landscape plan and will have that information available as part of the USR plat in time for the July 21, 2015 Planning Commission hearing.
- At the meeting on June 24th, it was explained to the attendees that if screening views of the facility is what is desired, landscaping will be more effective on their lots rather than on the Highway 34 Development site itself. Therefore, Martin Marietta is open to having a Development Standard associated with the USR plat that indicates that through the Community Group, Martin Marietta will provide a budget of up to \$100,000 that participants in the Community Group<sup>1</sup> can then decide how to distribute amongst interested individual landowners to pay for landscaping on their properties. If desired, Martin Marietta will make a landscape architect available to the landowners to help them decide where and what vegetation to plant on their properties to make sure it will most effectively screen views.”

**CLR-34 Concerns:** After our own careful analysis of the proposed site and the geography of the area, we have concluded that any significant visual mitigation of this facility would be impossible. Because of the tall structures and the elevation change, the only solution to the visual impact would be for MMM to:

1. Reduce the structure heights by as much as 50%
2. Install mature trees (20 feet or more) in the interior of the site

3. Reduce the size of the rail loop so that the site could be surrounded by berm structures that would also be planted with mature trees.
4. Enclose both the asphalt plant and the concrete plant as has been done at other locations

**Even with these steps, the visual impact would still be extreme, especially at the highest points of Indianhead Estates and the locations along WCR 56. In effect, MMM has failed to provide a suitable SCREENING Plan for this project as required by the Weld County Code.**

The fact that MMM's proposed solution to the visual impact is to plant trees on the properties of the affected neighbors instead of their own site, confirms the complete inadequacy of the berms, as well as MMM's unwillingness to adjust their facility design, or develop a suitable buffer between their operation and the surrounding NEIGHBORHOOD USES.

**Conclusion: Based on the visual impact of the MMM, and the unwillingness of MMM to provide a suitable buffer zone between its operation and the surrounding property owners, the proposed project is incompatible with the existing USES in the NEIGHBORHOOD.**

### **Issue: Traffic**

For the residents who live and work along the US-34 corridor, traffic management is becoming a major issue. The uncontrolled intersections at WCR 13 and WCR 15 are becoming more and more difficult to navigate as the months go by because of the surrounding growth. This has been recognized by the communities of Windsor, Greeley and Johnstown, as well as Larimer County. Although CDOT has a long term goal for managing the roads of the area, there is no funding available. Thus, when MMM announced their plans for the site, a major concern for residents of the NEIGHBORHOODS was the impact of the enormous amount of truck traffic to and from the site.

**MMM Conclusions:** "As is required by the County, a traffic study was prepared [ by Eugene Coppola] for the project that identifies the amount of traffic projected to be generated and the road improvements that will be required at the site access to WCR 13 as a result of the project and at the WCR13 and US Highway 34 intersection as a result of the background traffic and project traffic."

**Traffic Impact Study:**"Operating conditions in the area of Martin Marietta's proposed Highway 34 development are acceptable... Site peak hour trips can be easily accommodated by the short term roadway system shown on Figure 12 (stop sign at WCR 13 and US-34)"

**CLR-34 Concerns:** As shown in a separate section of this document, the Traffic Impact Study prepared by Coppola is deeply flawed and is generally a misrepresentation of the impact of the proposed MMM operation. For example, the representation in the initial Traffic Impact Study that conditions at the US-34/WCR 13 intersection are "acceptable" is remarkable. In fact, in that study, it is acknowledged that without a traffic light, the wait time to make a left turn onto US-34 for a truck leaving the site would be as much as 24 minutes!! Clearly, the situation is NOT

acceptable, and the MMM site traffic would make it a disaster without extensive modifications to the intersection.

In addition, in the report, it is stated that the frontage road access to Kelim is irrelevant and that access to US-34 from there would be blocked most of the time. Since there are several businesses in Kelim that currently employ more than the entire MMM site is projected to employ at its peak, the impact of the MMM operation on the region is clearly unacceptable.

Despite the conclusions of the Traffic Study, MMM quickly realized the absurdity of those claims, and, under the aegis of being a “good neighbor”, agreed to install a traffic light at US-34 and WCR 13. Like so many of their other responses to the community concerns however, this was entirely for their own benefit! Obviously, their operations would have come to a grinding halt without a light. However, the lack of an assessment of the regional impact, not only of the site generated by the MMM site, but even the traffic light itself make even this step inadequate. In reality, although the traffic on US-34 will continue to increase, the MMM operation would have a severe negative impact on traffic along the US-34 corridor, from I-25 to Greeley.

**Conclusion: Based on the traffic that the MMM site will generate, the proposed project is incompatible with the existing USES in the NEIGHBORHOODS surrounding the facility. In this case, the negative impact would extend for several miles in all directions.**

### **Issue: Property Values**

The negative impact of the MMM facility on the property values of the surrounding landowners is understandably a major concern. For many of the neighbors, their home is their primary financial asset. In addition, in many cases, the neighbors have resided in their current home for decades. And, although most of the residents will likely want to stay in their current location as long as possible, it's inevitable that some will need to liquidate their real estate assets as they have need for long-term care, for example. Thus, a substantial reduction in market value would have a severely negative impact.

**MMM Conclusions:** MMM has been all over the map on the topic of Property Values in the several months since they submitted their application to Weld County.

In the application, they state: “Real estate values are impacted by a variety of factors and so it is hard to determine the correlated impact that this proposed facility may have on neighboring residential properties. However, Martin Marietta recognizes this concern and they have proposed a plan that aims to mitigate impacts on the adjacent properties in order to minimize negative impacts on property values (including berms, open space buffers, acoustical enclosures, clustering the location of activities, etc.). “ Thus, they admit that there will be a negative impact and claim that it will be mitigated by the berms (!).

At their project website, they assert the following: “Property values are closely tied to the economic climate of a community and Weld County has one of the strongest economies in the state of Colorado. A benefit of a strong economy is increased building demand, which results in sustained or increased property values. This is evidenced by the continued development around



the Highway 34 and I-25 interchange area. Many factors, including fear of the unknown and fear of change on undeveloped land could potentially affect real estate values. Due to the efforts we are making to design the Highway 34 Development so that we operate as a good neighbor, we do not believe that the project will harm property values.” Note the careful wording that they don’t anticipate actual “harm” to property values because Weld County currently has a healthy economy... Apparently, they are blaming any concern on “fear of the unknown”...

Finally, MMM has paid for and submitted a “Real Estate Diminution Study”. Not surprisingly, by carefully choosing comparable properties, they conclude that there is no evidence for any Property Value reduction due to their operations!

**CLR-34 Concerns:** As discussed in more detail in another section of this report, the idea that there is not going to be a negative impact on the value of the surrounding properties is absurd on the face of it!! The value of any home is based on a combination of positive and negative factors. Factors like the convenience to amenities, school districts, view corridors, construction quality, etc. add to the property value while negative factors such as busy roads, proximity to unappealing industrial facilities, poor maintenance of both the home itself and the surrounding properties etc. have a negative impact on the property value.

In addition, the weight given to the positive and negative factors will depend on the specific concerns of the buyer and the willingness of the seller to take these factors into account.

For this reason, a “cherry picked” population of a small number of transactions such as the one that was submitted by MMM has very little, if any value in assessing the likely impact of the MMM site on the surrounding homes.

Rather, as summarized in Section V, the only way to truly estimate the impact on property values is to use a substantial sample of ALL of the transactions in a region near a “disamenity” such as the MMM project, and correlate the value reduction with the distance from the disamenity. As reported, the expected reduction of value for the nearest properties is as high as 30-40% and the impact is expected to extend as far as several miles!

**Conclusion: Based on the likely negative impact on home values that the MMM site will cause, the proposed project is incompatible with the existing USES in the NEIGHBORHOOD.**

## Compatibility Mitigation Claims by Martin Marietta

Ever since the January 27<sup>th</sup> Open House at which they announced their project, MMM has been claiming that they are a “good neighbor” that is concerned about their impact and that therefore, they have taken substantial steps to mitigate that impact. Most recently, at the Public Meeting on June 9, 2015, they listed the steps that they claim has improved their compatibility.

In addition, they recently submitted a document entitled “Compatibility Examples”. In reality, this document is simply a set of satellite images of locations where residences are located near various industrial operations. Actually, however, these photos do nothing to address compatibility since they don’t address negative impacts such as odor, dust, emissions, traffic, or noise!

Below, we summarize the various claims by MMM that they have attempted to be a “good neighbor”, have “listened to concerns”, and have mitigated their impact, as presented at the June 9<sup>th</sup> meeting.

Concern	MMM Action	Actual Impact
Noise	Berms	Already included in January. Nearly no impact.
	Noise suppression equipment	Impact unknown. No details offered.
	Move Rail Loop	Likely positive effect at IHE. No effect or negative impact at WCR 56
Air emissions	Consultant study. No Problem	Emissions, especially dust, will have an large impact.
	Street Sweeper	Positive effect, but likely needed to comply with fugitive dust regulations. Not adequate for small particulate matter. 30% effective.
Health effects	Consultant study. No Problem	Particulate emission, especially PM2.5 will kill people.
Odor	Vertical Asphalt tanks	Not mitigation—already in use in Ft. Collins
	Odor rangers	Not mitigation—only for demonstrating compliance. No enforcement
	Charcoal filters	Potentially positive effect on AC tanks only.
Traffic	Consultant Study. No Problem	Study incomplete. Regional affect will be substantial.
	Traffic light	Will disrupt US-34

Property Value	Landscape Charette	No impact. No plan was presented.
	Landscape plan	Unknown, planting on neighbors property to solve MMM problem is not acceptable
	Berms	No major impact for most neighbors
	Consultant study. No problem	Invalid results. No impact.
Visual Impact	Berms	No impact for most neighbors
	Landscaping	No impact, or negative impact if on neighbors property
Compatibility	Committee	No impact on compatibility since it will not be able to actually FIX anything.

In sum, nearly all of the efforts claimed by Martin Marietta to be in response to the concerns that the neighbors raised at the January meeting will have very little effect on site’s compatibility with the NEIGHBORHOODS. Furthermore, most of the adjustments in the plan have been primarily or entirely for MMM’s own benefit, rather than as a result of any concern for the neighboring landowners. Evidence for this lies in their continuing unwillingness to provide a complete description and analysis of the full range of activities that will be occurring at the site.

**Summary:**

For many reasons, the proposed Martin Marietta Materials Highway 34 project is fundamentally incompatible with both the surrounding NEIGHBORHOODS but also, on a larger scale, the entire region adjacent to the US-34 corridor between WCR 13 and WCR 17. The enormous negative impact would more than offset any potential economic benefit that would result from the use of this site compared to the several alternative sites that are available in Weld county.

Referring again to the Town of Union, NY, planning document, we conclude by observing that

**“Inappropriate land uses should rightfully be viewed as a poor choice or a misuse of the [County’s] land surface. Inappropriate land uses represent, by and large, opportunities that have been lost. This means that opportunities or potential for beneficial relationships may not materialize because the full potential was not recognized and/or not established as an attainable goal before development occurred.”**