

I-11 Boulder City Bypass Public Information Meeting

Presentation at 5:30 p.m.

Tuesday, October 21, 2014 4 - 7 p.m.

Elaine K. Smith Center 700 Wyoming Street Boulder City, NV

> Brian Sandoval Governor

Rudy Malfabon Director

Nevada Department of Transportation 1263 S. Stewart Street Carson City, NV 89712





Traducción disponible en español.

October 21, 2014

WELCOME:

Thank you for attending this informational meeting regarding the I-11 Boulder City Bypass project to present information concerning the presence of naturally occurring asbestos (NOA) within the project area.

The Nevada Department of Transportation is conducting an open-house format meeting from 4 - 7 p.m. Project representatives will give a brief presentation beginning at 5:30 p.m. that will be followed by a short open comment period from the audience.

There will be displays around the room describing the proposed project and project representatives will be available. Please take this opportunity to ask questions and discuss the project with them.

During this meeting, as well as any public meetings conducted by NDOT, we are seeking your comments. There are several ways you may give us your comments for the public record. Exhibits you wish to submit as a part of the public record of this project will be accepted.

<u>First</u>: During the open-house portions of the meeting, you may make an oral statement to the court reporter. Comments you make during the audience comment period following the presentation will also be recorded for the public record.

<u>Second</u>: You may fill out the comment form attached to this handout and deposit it in the comment box or give the completed form to one of the project representatives.

<u>Third</u>: The public meeting record will remain open for two weeks following this meeting. If you would prefer to write a letter or mail your completed comment form and any exhibits, these will become part of the official transcript of the proceedings if mailed to **Tony Lorenzi**, **P.E.**, **Project Manager**, **Project Management Division**, **Nevada Department of Transportation**, 1263 South Stewart St., Carson City, **Nevada 89712**. Comments will be accepted until 5 p.m., **November 4**, 2014.

<u>Fourth</u>: You may e-mail your comments to <u>tlorenzi@dot.state.nv.us</u> Please reference the project in the subject line. E-mail comments will also be accepted until 5 p.m., November 4, 2014.

Thank you for attending this informational meeting and for giving us your comments.

Sincerely,

Tony Lorenzi, P.E. NDOT, Project Manager





Boulder City Bypass Project Frequently Asked Questions

Q: What is Naturally Occurring Asbestos?

A: Naturally Occurring Asbestos (NOA) refers to asbestos that is present naturally in soil and rock, as opposed to asbestos that was commercially mined and applied to building materials. NOA is found in many places in the United States and is present in at least 44 of California's 58 counties. When found, the amount of NOA ranges from less than 1 percent up to 25 percent concentration or more. Natural weathering and human activities may disturb NOA-bearing rock or soil and release mineral fibers into the air, which can result in adverse health effects if inhaled. However, measures can be taken to minimize the release of these mineral fibers.

Q: What were the test results and how much NOA is in the area?

A: Independent environmental engineering firms obtained and tested rock and soil samples from both NDOT Phase 1 and RTC Phase 2 project areas at depths ranging from ground level to more than 200 feet below the surface. Samples were tested to determine if NOA was present and, if so, where and at what concentrations.

- ➤ All 150 surface and subsurface rock and soil samples tested in the NDOT Phase 1 project area had NOA concentrations below 0.25 percent.
- ➤ Of the 194 surface rock and soil samples tested in the RTC Phase 2 project area, only one out of five had NOA detected and only 2 samples (approximately 1 percent) had concentrations above 1 percent.
- ➤ Of the 267 subsurface rock and soil samples tested in the RTC Phase 2 project area, more than half had NOA detected but only 12 samples (approximately 4 percent) had concentrations above 1 percent.
- ➤ Overall, the independently conducted soil and rock tests confirmed that NOA is present in the project areas, but NOA concentrations are generally low.

Q: What's significant about 0.25 percent and 1 percent amounts of asbestos found in the tests and are those safe concentrations?

A: In general, a material that contains 0.25 percent or greater is defined as a "Restricted Material" by the California Air Resources Board (CARB), which regulates the NOA mitigation measures in California where NOA is found at many project sites. A Restricted Material may not be used in California for surfacing applications, and there are requirements for covering or wetting surfacing materials if the NOA content is greater than 0.25 percent. The Boulder City Bypass project has adopted this standard for surfacing applications..

The Occupational Safety and Health Administration (OSHA) defines Asbestos Containing Material (ACM) as material (both commercially used and found naturally) that has greater than 1 percent asbestos. This level sets mandatory requirements for certain activities. This value does not have a "safe level" significance - it was designed to differentiate between building materials where commercial asbestos was applied and those where asbestos was not applied.

The amount of NOA in natural material, like soil and rock, is not a direct indicator of safe levels of NOA in the air. <u>Human exposures and risks are determined based on measured air concentrations</u>, not soil concentrations. If soil disturbance is high, uncontrolled, and does not include mitigation methods with water, a relatively small











amount of asbestos (such as found at the Boulder City Bypass project site) could still produce large airborne concentrations. However, if controlled during construction using established mitigation methods, even very large concentrations of asbestos (such as found in California) produce negligible levels in the air. That is why we will be implementing strict mitigation processes to minimize the release of dust potentially containing NOA.

Q: How are areas where NOA concentrations exceed 1 percent going to be addressed?

A: In accordance with OSHA requirements, activities in geologic materials with an average content of greater than 1 percent will be classified as Class 2 Work and special provisions per OSHA standards will be implemented. Site restrictions, training, dust control, wet methods, personal and perimeter air monitoring, personal protection, decontamination, trackout prevention, and many other standard protocols will be applied regardless of NOA content.

Q: Can NOA cause me health problems?

A: According to the Agency for Toxic Substances and Disease Registry (ATSDR), "being exposed to asbestos does not mean you will develop health problems." Many things need to be considered when evaluating whether you are at risk for health problems from asbestos exposure. From the ATSDR, the most important of these are:

- How long and how frequently you were exposed
- How long it has been since your exposure started
- How much you were exposed
- If you smoke cigarettes (cigarette smoking with asbestos exposure increases your chances of getting lung cancer)
- The size and type of asbestos to which you were exposed
- Other pre-existing lung conditions

Q: Is the project safe? Will it affect Boulder City's short and long-term public health?

A: NDOT and RTC are taking extraordinary efforts for worker and public safety. They have developed NOA mitigation measures modeled after the EPA's guidance for working with NOA, OSHA's asbestos standard for construction, California's NOA regulations for construction, and best-management practices employed at other asbestos sites across the country. Measures that will be incorporated into the project include special training of all workers, personal protection and respiratory protection, personal and perimeter monitoring, dust control measures that exceed Clark County Department of Air Quality requirements, third-party oversight to assure that specified practices are followed, and several other procedures and protocols designed to control NOA. Few construction projects in the country have similarly stringent dust control and monitoring programs. These mitigation measures will minimize exposure to dust potentially containing NOA during construction.

Q: How do I know the proposed NOA mitigation measures will be effective and who developed them?

A: The mitigation measures chosen for this project were adopted from California's Asbestos Airborne Toxic Control Measures that have been in place and proven since the late 1990's. The specifications for the project were developed by expert consultants that are highly experienced with the health effects and control of NOA, and input was provided by an expert team of geologists, engineers, toxicologists and other scientists with extensive experience in their fields of expertise. The project team also benefited from direction provided by individuals representing agencies that regulate NOA or implement NOA protocols, such as EPA, Caltrans, California Geologic Survey, Clark County Department of Air Quality, OSHA, California Air Resources Board, and others.











In addition to third party inspections, the mitigation measures will be verified by an extensive perimeter and ambient air monitoring system designed to capture daily levels and monitor long term averages. State of the art analytical tools will be used, including real time dust monitoring and air sample analysis by both Phase Contrast Microscopy and Transmission Electron microscopy.

Q: How will NOA mitigation compliance be enforced and by whom?

A: Air quality will be monitored continuously around work areas by the NDOT and RTC. The Clark County Department of Air Quality will be responsible for enforcing dust mitigation.

Q: Whom can I contact if I notice dust generated from the project during construction?

A: The NDOT and RTC will provide a project hotline for local residents to speak with project representatives who will address their concerns.

Q: Who can I contact if I notice dust coming from a location that is not the Boulder City Bypass Project?

A: The Clark County Department of air quality provides dust control oversight and would be the agency to contact.

Q: During construction, how will I be able to get the latest information update on NOA air quality construction related information?

A: A website will be developed for the project to keep everyone updated on the construction progress, ongoing rock and soil testing and ambient air monitoring.

Q: Do I have to take any precautionary measures for my personal safety during construction? Will my family be safe during construction?

A: Committed to public safety, rock and soil testing and air monitoring will be ongoing during construction and in accordance with the strict standards used in California, where construction projects routinely encounter NOA. The mitigation measures and air monitoring program is designed to prevent adverse health effects to workers on site and residents and visitors to Boulder City off site.

Q: What's the purpose of ambient air monitoring and how will it be conducted? What information will be reported and how often?

A: Ambient air monitoring is already under way at 12 different locations throughout and near the project area with weekly reports being generated. Air monitoring will also be conducted throughout the life of the project and done in accordance with EPA procedures for asbestos sampling. By monitoring air quality, the effectiveness of mitigation measures can be evaluated and adjusted if necessary.

Q: What will become of the asbestos in the soil? Will NOA material be removed from the project area and disposed of offsite?

A: All rock and soil excavated for the project will be used for construction of the project and will remain onsite. Any material with NOA concentrations above 0.25 percent will be buried and covered with a layer of surfacing material having an NOA concentration of less than 0.25 percent. There is an abundance of material on-site which has NOA concentrations well below 0.25 percent.

Q: Will I be able to access adjacent recreational areas through the project area and if so, will I be safe doing this?











A: Access to public recreation areas will be maintained across the project area during construction. Mitigation measures will be in place only at locations crossing the project.

Q: Will exposed rock cuts within the project area be safe? It seems these areas represent a newly exposed source of elevated NOA. Were any of the rock-cut areas covered in the samples tested?

A: Rock-cut areas were tested and found to have varying concentrations of NOA. However, NOA is bound within the rock structure, and therefore, is unlikely to contribute to airborne emissions.

Q: After construction, how is asbestos going to be managed in the project area and with the newly exposed rock cut slopes?

A: Per CARB standards, surfacing material with NOA concentrations of less than 0.25 percent will permanently cover exposed fill areas. Loose material will be cleared from rock-cut areas, and exposed rock will be left to naturally weather.

Q: Who is going to educate the public at-large regarding naturally occurring asbestos?

A: Both NDOT and the RTC are working with experts in the field who have experience with projects that require NOA mitigation. Both agencies will provide the public with information on the issue and the project through public forums and via their websites, where citizens can stay abreast of the project activities and the ongoing test results in the project area.

Q: Why wasn't NOA discovered years ago and why are we concerned today?

A: Testing is required at the microscopic level to determine the presence of asbestos which may be present in low concentrations in the soil. UNLV geological research in 2013 was the first to document the presence of NOA in Southern Nevada, including near the project area. As a result, NDOT and RTC conducted extensive rock and soil testing to determine the presence and concentrations of NOA in the project area.

Q: Will the air be sampled while they are building the new road? Who will be doing this?

A: Yes. Air monitoring during construction will be performed by the contractors under the supervision of the NDOT and RTC.

Q: If all soils are stable and maintained in a wet condition, can the public be exposed to asbestos?

A: Mitigation measures to prevent dust, such as wetting, are the most effective in minimizing the likelihood that NOA would become airborne during construction.

Q: How will workers be protected during construction?

A: Worker protection is a high priority for NDOT and the RTC. As work starts, OSHA requires that an initial assessment of each type of work be conducted to measure the potential exposure to workers. Based on this assessment, the appropriate level of respiratory protection for each worker will be determined, and workers will be monitored throughout the project to assure that they are not exposed to OSHA mandated thresholds of NOA. Trackout of asbestos from the site is prevented by wearing protective clothing, most commonly Tyvek suits, which are removed and disposed of daily. Workers use HEPA vacuums and water to remove soil from shoes or residual dust from clothing. Most importantly, each worker receives special training that informs them of how exposure occurs and how it can be prevented, as well as site requirements for handling NOA and other topics as required by OSHA.









Naturally Occurring Asbestos: Approaches for Reducing Exposure

Purpose and Intended Audience

This fact sheet provides an overview of approaches for reducing exposures to naturally occurring asbestos (NOA). It is intended to make general information about management options available to state and local government officials, project managers, and environmental professionals. The information should serve as a starting point for identifying current NOA management practices. In general, selecting an appropriate approach to reduce NOA exposure should be determined on a location-specific basis.

NOA management approaches can reduce but may not completely eliminate potential exposures to naturally occurring asbestos.

Information contained in this fact sheet was obtained from the currently available literature, including state and local government publications. To obtain more information on NOA management approaches, including their performance and frequency of use, refer to the resources provided at the end of this fact sheet.

Naturally Occurring Asbestos

NOA occurs in rocks and soil as a result of natural geological processes. Natural weathering and human activities may disturb NOA-bearing rock or soil and release mineral fibers into the air, which pose a greater potential for human exposure by inhalation.

The U.S. Geological Survey (USGS) has an ongoing project to map the locations of historical asbestos mines, former asbestos exploration prospects, and natural asbestos occurrences. At least 35 states have reported NOA locations. To locate NOA areas in a specific part of the country, begin by consulting the USGS reports (see below) and contact a state geologist.

U.S. Geological Survey Eastern United States http://pubs.usgs.gov/of/2005/1189/ Central United States http://pubs.usgs.gov/of/2006/1211/ Rocky Mountain States http://pubs.usgs.gov/of/2007/1182/ Southwestern United States http://pubs.usgs.gov/of/2008/1095/ California Geological Geological Survey Asbestos Reports, Maps, and Guidelines for Geologic Investigations http://www.conservation.ca.gov/cgs/minerals/hazardous_minerals/asbestos/ http://www.conservation.ca.gov/cgs/minerals/hazardous_minerals/asbestos/ http://www.conservation.ca.gov/cgs/minerals/hazardous_minerals/asbestos/ http://www.conservation.ca.gov/cgs/minerals/hazardous_minerals/asbestos/ http://www.conservation.ca.gov/cgs/minerals/hazardous_minerals/asbestos/

This fact sheet is intended solely to provide general information on approaches that may be useful when addressing naturally occurring asbestos (NOA). It is not intended, nor can it be relied upon, to create any rights enforceable by any party, including any party in litigation with the United States. EPA considers NOA to be in an altered form if it has been disturbed by human activity; NOA is not considered to be altered if modified solely through naturally occurring processes or phenomena, from a location where it is naturally found. This fact sheet may be revised periodically without public notice. Use or mention of trade names does not constitute endorsement or recommendation for use.

In this fact sheet, NOA does not refer to commercially processed, asbestos-containing material, such as insulation and fire protection in buildings or automobile brake linings. Information about commercial asbestos-containing products is available in other publications, including the resources mentioned on EPA's asbestos Web page http://www.epa.gov/asbestos.

Approaches for Mitigating Exposures to NOA

The following general approaches to mitigate inhalation exposures to NOA are aimed at reducing NOA releases from rock or soil into the air:

- · Leave NOA material in place and undisturbed
- Cover or cap NOA material
- Limit dust generating activities
- Excavate and dispose of NOA material

Depending on the situation, a combination of engineering controls, work practices, and institutional (administrative) controls may be needed to implement an approach and reduce potential exposures to NOA. Selecting an approach depends on factors including:

- Accessibility of NOA (ground surface vs. below ground surface)
- Types of activities that disturb NOA (construction project vs. gardening)
- Climate and weather conditions
- · Current and future land uses
- Technical and administrative feasibility of the approach

Typical engineering controls involve the use of covers and caps, vegetation, fencing, landscaping, and in some conditions, the application of water to suppress dust. Local factors, such as climate, influence the extent to which these approaches are implemented. For example, areas with dry or windy conditions may need more dust control than those with humid or less windy conditions.

Common work practices include limiting activities on NOA-containing areas, reducing driving speed on unpaved roads that may contain NOA, and cleaning vehicles driven over NOA. For example, during road construction or maintenance activities on unpaved areas where NOA is present, the Asbestos Airborne Toxics Control Measure (ATCM) for Construction, Grading, Quarrying, and Surface Mining Operations of the California Air Resources Board (ARB) requires that vehicle speeds not exceed 15 miles per hour. Worker health and safety measures that include respiratory protection may be warranted. For information, consult with Occupational Safety and Health Administration Asbestos Standards for the General Industry and Asbestos Standards for the Construction Industry (http://www.osha.gov/SLTC/asbestos/hazards.html).

Approaches for reducing NOA exposure are similar to practices used for asbestoscontaining materials in commercial applications.

Examples of Engineering and Work Practices that Reduce Exposure to NOA

Excavation,	Wet road surfaces with water using trucks, hoses, or sprinklers¹			
Grading, or Utility Work at	 Wet piles of excavated material and cover them with tarps, plastic sheeting, or other items¹ 			
Construction	• Continuously mist the work area ¹			
Projects	Install wind barriers around the work area			
	• Clean or decontaminate equipment and vehicles to ensure that no equipment or workers track soil out of the work area (a gravel pad, tire shaker, or wheel wash system may be used to clear soil from vehicles) ¹			
	• Wet the work area using a spray system attached directly to rock cutting or drilling equipment, such as a fine-mist sprayer or a variable-rate fogger nozzle (similar to those used in fire fighting) ²			
	• Excavate utility trenches to an adequate depth and backfill them with clean soil so that future repair work will not need excavation into potential NOA-containing materials ³			
	en transporting NOA-containing materials, avoid overloading trucks; p the material below the top of each truck compartment and cover terial with a tarp ⁴			
	• Limit personnel and vehicle access to the work area ⁵			
	dentify NOA-containing areas with signs ²			
	Reduce driving speed ¹			
	Reduce drilling or excavating speeds ⁶			
	Excavate during periods of calm or low winds ¹			
Roads and Parking Areas (unpaved and	 Cover roads with non-NOA-containing rock, chemical sealants or dust suppressants, chip seals, limestone aggregate, petroleum sealants, or asphalt cement paving^{1,7,8} 			
gravel roads)	Wet road surfaces with water ¹			
	Install windbreaks or berms ¹			
	Reduce driving speed ¹			
	Avoid dusty areas, especially in windy conditions ¹			

Around Communities (playgrounds, ball fields, pathways, and gardens)

- Cover areas of rock and soil with clean soil, rock, vegetation, or other material (see next section, General Considerations for Using Covers or Caps)^{3,9}
- Pave over unpaved walkways, driveways, or roadways containing NOA^{1, 10}
- Landscape areas with vegetation, such as NOA-tolerant plants, and add a layer of organic mulch or NOA-free soil. Water plants often until they are established to minimize erosion⁹
- Water garden areas before digging⁹
- Keep windows and doors closed on windy days and during periods when nearby rock or soil may be disturbed, such as during construction⁹
- Limit track-in by using entryway (door) mats, and wipe down pets before they enter buildings to reduce the amount of soil tracked indoors^{4, 9}
- Allow children to play in outdoor areas only if the area has a ground covering, such as wood chips, mulch, sand, pea gravel, grass, asphalt, shredded rubber, or rubber mats⁴
- Relocate outdoor activities to areas that do not contain NOA (walk, run, hike, and bike only on paved trails)⁴
- Avoid dusty areas, especially in windy conditions¹¹

General Considerations for Using Covers or Caps

One of the most common engineering controls is to place a cover system over the NOA. Cover materials may include clean soil or rock, concrete, chemical sealants or dust suppressants, chip seals, limestone aggregate, petroleum sealants, asphalt paving, geotextiles, wood chips, mulch, sand, pea gravel, shredded rubber, rubber mats, and vegetation.

The complexity of cover systems can vary from simple (e.g., a single soil layer) to complex (e.g., multiple layers of varying materials). Several factors, including cover material properties and site characteristics, affect the type of cover system appropriate for a particular area.

The availability of materials may influence the type of cover used. Materials that are readily available and close to the NOA area may be more desirable and cost effective than materials found farther away. For example, artificial turf and other imported materials may be more expensive than locally available soils. The cover material will likely need to be assessed for NOA or other undesirable constituents. Expected lifetime, maintenance, and monitoring requirements also affect the cost of covers.

The slope of the NOA area may influence the type and thickness of the cover material used. For example, steep slopes may need vegetation or shotcrete (concrete or mortar sprayed onto a surface with a pressurized hose) to promote slope stabilization. Steep slopes typically have a higher potential for erosion and therefore may demand thicker cover material.

The thickness of the cover material should provide a safety factor sufficient to ensure that airborne releases will not occur. Thicker covers may be needed in areas where there is a significant potential for erosion. The surface of a cover should protect against erosion by wind and rain. Materials used for erosion control typically include a layer of topsoil and vegetation. In areas where adequate vegetation is not possible, gravel, admixtures, or riprap may be used for the surface layer. The thickness of the cover may also depend on the presence of other cover components, such as irrigation lines.

A geotextile, which is a geosynthetic material made of polymer fabric, may be placed below the cover material to mark the presence of NOA and serve as an erosional indicator. Geotextiles also can provide protection, reinforcement, drainage, and separation when applied to the soil surface or between layers of materials. The California Department of Toxic Substances Control (DTSC) recommends that land-scaped areas and play fields at schools include a geotextile marker covered by sufficient cover material to provide an effective barrier to reduce NOA exposures.³ Placement of geotextile markers will demand additional time and expertise.

Long-Term Management Approaches

For long-term management of areas with NOA, institutional controls (ICs) and a maintenance plan may be desirable. In areas where NOA poses potential health concerns, local and state government officials should consider providing educational material to supplement engineering approaches for reducing exposures to NOA. The Agency for Toxic Substances and Disease Registry has developed a fact sheet about asbestos and NOA for the general public entitled "Asbestos and Health: Frequently Asked Questions."

Institutional Controls

Generally, ICs are administrative or legal mechanisms that are designed to help minimize the potential for human exposure to contamination. They also protect the integrity of the engineering measures. ICs are generally divided into four categories:

For additional information about ICs, refer to the Land Use Controls Web site at http://www.lucs.org

- Government controls include laws and permits (such as local zoning laws and permits required for excavating or digging). Work that may disturb NOA-containing soil may require government approval and may be subject to local or state construction guidelines. In California, the ATCM of the California ARB requires owners and operators to notify the local air quality management district within one business day of discovering NOA, serpentine mineral, or ultramafic rock in an area to be disturbed by construction, grading, quarrying, or surface mining operations. In Virginia, the Fairfax County Health Department requires a compliance plan that includes air monitoring to ensure effective dust control during construction in areas containing NOA.
- *Proprietary controls* include property use restrictions based on private property laws, such as land use easements or covenants.
- *Enforcement tools* include legally binding documents that require individuals or companies to conduct or prohibit specific actions.
- *Informational devices* include deed notices, public advisories, and other measures (such as warning signs and worker health and safety awareness training) that alert and educate people about an area.

Maintenance Plan

A maintenance plan can help ensure that engineering controls and work practices remain effective. In California, for example, DTSC and school districts enter into an agreement to develop and implement an approved long-term operation and maintenance plan under DTSC oversight. These plans generally contain information about the following topics:³

- Building locations, utility line locations, and the thickness of cover material across the area
- Routine inspections

- Maintenance work, including erosion and storm water control
- Procedures for repairing cover damage
- Monitoring activities, such as perimeter or personal air monitoring
- Reporting format and frequency
- Restrictions on future activities that may expose NOA
- Management of imported soil and future excavation or trenching activities

Additional Information

- Agency for Toxic Substances and Disease Registry http://www.atsdr.cdc.gov/NOA
- California Air Resources Board http://www.arb.ca.gov/toxics/asbestos/asbestos.htm
 - El Dorado County, California http://www.co.el-dorado.ca.us/emd/apcd/asbestos.html
 - Fairfax County, Virginia http://www.fairfaxcounty.gov/hd/asb
 - Sacramento County, California http://www.airquality.org/compliance/asbestosNaturallyOccurring.shtml
 - U.S. Environmental Protection Agency http://www.epa.gov/asbestos/pubs/clean.html

References

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- 3. Cal/EPA Department of Toxic Substances Control (DTSC). 2004. Interim Guidance: Naturally Occurring Asbestos (NOA) at School Sites. September 29. http://www.dtsc.ca.gov/Schools/upload/SMBRP POL Guidance Schools NOA.pdf
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- 5. El Dorado County. 2003. Naturally Occurring Asbestos and Dust Protection. Ordinance. Chapter 8.44. June 12. http://www.co.el-dorado.ca.us/emd/apcd/PDF/Naturally_Occuring_Asbestos_June_12.pdf
- 6. Fairfax County Health Department. Undated. "Basic Elements for a Naturally Occurring Asbestos Compliance Plan." http://www.fairfaxcounty.gov/hd/asb/pdf/asb50.pdf
- 7. Cal/EPA ARB. 2002. "Fact Sheet #3: Ways to Control Naturally-Occurring Asbestos Dust." January. http://www.arb.ca.gov/toxics/asbestos/3control.pdf
- 8. Cal/EPA DTSC. 2005. "DTSC Recommends Resurfacing of Serpentine Gravel Roads Based on Garden Valley Study." April. http://www.dtsc.ca.gov/SiteCleanup/Projects/Garden_Valley.cfm
- 9. Cal/EPA ARB. 2002. "Asbestos-Containing Rock and Soil What California Homeowners and Renters Need to Know." Compliance Assistance Program. CAP 03-035. http://www.arb.ca.gov/cap/pamphlets/asbestosbrochure.pdf

- 10. Cal/EPA DTSC. 2006. "Fact Sheet: Recommended Housekeeping Activities to Reduce Exposure to Naturally-Occurring Asbestos in Schools." October. http://www.dtsc.ca.gov/Schools/upload/Recommended-Housekeeping-for-NOA-102306.pdf
- 11. University of California Cooperative Extension. Undated. "Lake County Serpentine Landscape Demonstration Garden." Asbestos Serpentine Soils Education Program. http://www.capcoa.org/noa/%5B5%5D%20Lake%20County%20Serpentine%20Landscaping.pdf

List of Acronyms

ARB Air Resources Board

ATCM Airborne Toxic Control Measure

DTSC Department of Toxic Substances Control

ICs institutional controls

NOA naturally occurring asbestos

USGS U.S. Geological Survey



COMMENT FORM

Public Information Meeting I-11 Boulder City Bypass Tuesday, October 21, 2014

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Name:							
Address:							
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Would you lik	se someone to call you to discuss your com	ment or question	n?	ES NO			
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Com	ments will be accepted through 5 p.m.,	November 4	2014 Please mail to				
	nems wat de accepted through 5 p.m., ny Lorenzi, Project Manager, NDOT, Thank you for yo	1263 S. Stewar	rt St., Carson City, NV 8971	12			
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