

# Universal Application 4

## Air Dispersion Modeling Report

Refer to and complete Section 16 of the Universal Application form (UA3) to assist your determination as to whether modeling is required. If, after filling out Section 16, you are still unsure if modeling is required, e-mail the completed Section 16 to the AQB Modeling Manager for assistance in making this determination. If modeling is required, a modeling protocol would be submitted and approved prior to an application submittal. The protocol should be emailed to the modeling manager. A protocol is recommended but optional for minor sources and is required for new PSD sources or PSD major modifications. Fill out and submit this portion of the Universal Application form (UA4), the "Air Dispersion Modeling Report", only if air dispersion modeling is required for this application submittal. This serves as your modeling report submittal and should contain all the information needed to describe the modeling. No other modeling report or modeling protocol should be submitted with this permit application.

### 16-A: Identification

1	Name of facility:	Las Vegas HMA Plant
2	Name of company:	Short Line, LLC
3	Current Permit number:	New Permit
4	Name of applicant's modeler:	Paul Wade
5	Phone number of modeler:	505-830-9680 x6
6	E-mail of modeler:	pwade@montrose-env.com

### 16-B: Brief

1	Was a modeling protocol submitted and approved?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
2	Why is the modeling being done?	New Facility	
3	Describe the permit changes relevant to the modeling.	New facility consisting of a new HMA plant and crushing and screening plant each operating under a different permit	
4	What geodetic datum was used in the modeling?	NAD83	
5	How long will the facility be at this location?	Permanent	
6	Is the facility a major source with respect to Prevention of Significant Deterioration (PSD)?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

7	Identify the Air Quality Control Region (AQCR) in which the facility is located	154
8	List the PSD baseline dates for this region (minor or major, as appropriate).	
	NO2	NA
	SO2	NA
	PM10	NA
9	Provide the name and distance to Class I areas within 50 km of the facility (300 km for PSD permits).	
	Pecos Wilderness Area, 20.7 km	
10	Is the facility located in a non-attainment area? If so describe below	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
11	Describe any special modeling requirements, such as streamline permit requirements.	

**16-C: Modeling History of Facility**

1	Describe the modeling history of the facility, including the air permit numbers, the pollutants modeled, the National Ambient Air Quality Standards (NAAQS), New Mexico AAQS (NMAAQs), and PSD increments modeled. (Do not include modeling waivers).			
	Pollutant	Latest permit and modification number that modeled the pollutant facility-wide.	Date of Permit	Comments
	CO	NA		New Permit
	NO <sub>2</sub>	NA		New Permit
	SO <sub>2</sub>	NA		New Permit
	H <sub>2</sub> S	NA		New Permit
	PM2.5	NA		New Permit
	PM10	NA		New Permit
	Lead	N/A		
	Ozone (PSD only)	N/A		
NM Toxic Air Pollutants (20.2.72.402 NMAC)	NA		New Permit	

**16-D: Modeling performed for this application**

1	For each pollutant, indicate the modeling performed and submitted with this application. Choose the most complicated modeling applicable for that pollutant, i.e., culpability analysis assumes ROI and cumulative analysis were also performed.				
	Pollutant	ROI	Cumulative analysis	Culpability analysis	Waiver approved

CO	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
NO <sub>2</sub>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SO <sub>2</sub>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
H <sub>2</sub> S	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PM <sub>2.5</sub>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PM <sub>10</sub>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lead	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ozone	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
State air toxic(s) (20.2.72.402 NMAC)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**16-E: New Mexico toxic air pollutants modeling**

1	List any New Mexico toxic air pollutants (NMTAPs) from Tables A and B in 20.2.72.502 NMAC that are modeled for this application.					
2	List any NMTAPs that are emitted but not modeled because stack height correction factor. Add additional rows to the table below, if required.					
	Pollutant	Emission Rate (pounds/hour)	Emission Rate Screening Level (pounds/hour)	Stack Height (meters)	Correction Factor	Emission Rate/Correction Factor
	Asphalt Fumes	1.5	0.333	6.5	5	0.3

**16-F: Modeling options**

1	Was the latest version of AERMOD used with regulatory default options? If not explain below.	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

**16-G: Surrounding source modeling**

1	Date of surrounding source retrieval	6/1/2023
2	If the surrounding source inventory provided by the Air Quality Bureau was believed to be inaccurate, describe how the sources modeled differ from the inventory provided. If changes to the surrounding source inventory were made, use the table below to describe them. Add rows as needed.	
	AQB Source ID	Description of Corrections

16-H: Building and structure downwash			
1	How many buildings are present at the facility?	6 – HMA Plant	
2	How many above ground storage tanks are present at the facility?	1 – HMA Plant	
3	Was building downwash modeled for all buildings and tanks? If not explain why below.	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
4	Building comments		

16-I: Receptors and modeled property boundary						
1	<p>“Restricted Area” is an area to which public entry is effectively precluded. Effective barriers include continuous fencing, continuous walls, or other continuous barriers approved by the Department, such as rugged physical terrain with a steep grade that would require special equipment to traverse. If a large property is completely enclosed by fencing, a restricted area within the property may be identified with signage only. Public roads cannot be part of a Restricted Area. A Restricted Area is required in order to exclude receptors from the facility property. If the facility does not have a Restricted Area, then receptors shall be placed within the property boundaries of the facility.</p> <p>Describe the fence or other physical barrier at the facility that defines the restricted area.</p>					
	Fencing and Gates restrict access					
2	Receptors must be placed along publicly accessible roads in the restricted area. Are there public roads passing through the restricted area?			Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
3	Are restricted area boundary coordinates included in the modeling files?			Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
4	Describe the receptor grids and their spacing. The table below may be used, adding rows as needed.					
	Grid Type	Shape	Spacing	Start distance from restricted area or center of facility	End distance from restricted area or center of facility	Comments
	Very Fine	Fence Following	50	0	500	
	Very Fine	Fence Following	100	500	1000	
	Fine	Fence Following	250	1000	3000	
	Fine	Fence Following	500	3000	5000	
5	Describe receptor spacing along the fence line.					
	25 meters					

6	Describe the PSD Class I area receptors.
	NA

### 16-J: Sensitive areas

1	Are there schools or hospitals or other sensitive areas near the facility? If so describe below. This information is optional (and purposely undefined) but may help determine issues related to public notice.	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
3	The modeling review process may need to be accelerated if there is a public hearing. Are there likely to be public comments opposing the permit application?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

### 16-K: Modeling Scenarios

1	Identify, define, and describe all modeling scenarios. Examples of modeling scenarios include using different production rates, times of day, times of year, simultaneous or alternate operation of old and new equipment during transition periods, etc. Alternative operating scenarios should correspond to all parts of the Universal Application and should be fully described in Section 15 of the Universal Application (UA3).		
	None		
2	Which scenario produces the highest concentrations? Why?		
	NA		
3	Were emission factor sets used to limit emission rates or hours of operation? (This question pertains to the "SEASON", "MONTH", "HROFDY" and related factor sets, not to the factors used for calculating the maximum emission rate.)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
4	If so, describe factors for each group of sources. List the sources in each group before the factor table for that group. (Modify or duplicate table as necessary. It's ok to put the table below section 16-K if it makes formatting easier.) Sources: Daylight Hours all sources except Asphalt Heater (Unit 10) and Asphalt Cement Storage Tank (Unit 11). For Units 10 and 11, sources will be permitted to operate 24 hours per day.		

<b>HMA/Aggregate Crushing and Screening Plant Production Hours of Operation (MST)</b>												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	0	0	0	1	1	1	1	1	0.5	0	0	0
6:00 AM	0	0.5	1	1	1	1	1	1	1	1	0.5	0
7:00 AM	1	1	1	1	1	1	1	1	1	1	1	1
8:00 AM	1	1	1	1	1	1	1	1	1	1	1	1
9:00 AM	1	1	1	1	1	1	1	1	1	1	1	1
10:00 AM	1	1	1	1	1	1	1	1	1	1	1	1
11:00 AM	1	1	1	1	1	1	1	1	1	1	1	1
12:00 PM	1	1	1	1	1	1	1	1	1	1	1	1
1:00 PM	1	1	1	1	1	1	1	1	1	1	1	1
2:00 PM	1	1	1	1	1	1	1	1	1	1	1	1
3:00 PM	1	1	1	1	1	1	1	1	1	1	1	1
4:00 PM	1	1	1	1	1	1	1	1	1	1	1	1
5:00 PM	0.5	1	1	1	1	1	1	1	1	1	0	0
6:00 PM	0	0	0	1	1	1	1	1	0.5	0	0	0
7:00 PM	0	0	0	0	0	0.5	0.5	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>10.5</b>	<b>11.5</b>	<b>12</b>	<b>14</b>	<b>14</b>	<b>14.5</b>	<b>14.5</b>	<b>14</b>	<b>13</b>	<b>12</b>	<b>10.5</b>	<b>10</b>

5

If hourly, variable emission rates were used that were not described above, describe them below.

None

6	Were different emission rates used for short-term and annual modeling? If so describe below.	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
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<b>16-L: NO<sub>2</sub> Modeling</b>	
1	Which types of NO <sub>2</sub> modeling were used? Check all that apply.
<input checked="" type="checkbox"/>	ARM2
<input type="checkbox"/>	100% NO <sub>x</sub> to NO <sub>2</sub> conversion

	<input type="checkbox"/>	PVMRM	
	<input type="checkbox"/>	OLM	
	<input type="checkbox"/>	Other:	
2	Describe the NO <sub>2</sub> modeling.		
	Both ROI and Cumulative analysis were run using ARM2		
3	Were default NO <sub>2</sub> /NO <sub>x</sub> ratios (0.5 minimum, 0.9 maximum or equilibrium) used? If not describe and justify the ratios used below.	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
4	Describe the design value used for each averaging period modeled.		
	1-hour: 98th percentile as calculated by AERMOD Annual: Highest Annual Average of Three Years		

16-M: Particulate Matter Modeling				
1	Select the pollutants for which plume depletion modeling was used.			
	<input type="checkbox"/>	PM2.5		
	<input type="checkbox"/>	PM10		
	<input checked="" type="checkbox"/>	None		
2	Describe the particle size distributions used. Include the source of information.			
3	Does the facility emit at least 40 tons per year of NO <sub>x</sub> or at least 40 tons per year of SO <sub>2</sub> ? Sources that emit at least 40 tons per year of NO <sub>x</sub> or at least 40 tons per year of SO <sub>2</sub> are considered to emit significant amounts of precursors and must account for secondary formation of PM2.5.	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
4	Was secondary PM modeled for PM2.5?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
5	If MERPs were used to account for secondary PM2.5 fill out the information below. If another method was used describe below.			
	NO <sub>x</sub> (ton/yr)	SO <sub>2</sub> (ton/yr)	[PM2.5] <sub>annual</sub>	[PM2.5] <sub>24-hour</sub>

16-N: Setback Distances	
1	Portable sources or sources that need flexibility in their site configuration requires that setback distances be determined between the emission sources and the restricted area boundary (e.g. fence line) for both the initial location and future locations. Describe the setback distances for the initial location.
	NA

2	Describe the requested, modeled, setback distances for future locations, if this permit is for a portable stationary source. Include a haul road in the relocation modeling.

**16-O: PSD Increment and Source IDs**

The unit numbers in the Tables 2-A, 2-B, 2-C, 2-E, 2-F, and 2-I should match the ones in the modeling files. Do these match? If not, provide a cross-reference table between unit numbers if they do not match below.	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
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	Unit #	Model ID	Description
1	<b>HMA Plant</b>		
	7	HMASTK	HMA Baghouse Stack
	10	HMAHEAT	HMA Asphalt Cement Heater
	8	DRUMUNL	HMA Asphalt Silo Loading
	9	HMASILO	HMA Asphalt Silo Unloading
	12	HMAGEN	HMA Generator
	AGGPILE	HMAPILE1	HMA Storage Pile Handling 1
	AGGPILE	HMAPILE2	HMA Storage Pile Handling 2
	AGGPILE	HMAPILE3	HMA Storage Pile Handling 3
	AGGPILE	HMAPILE4	HMA Storage Pile Handling 4
	AGGPILE	HMAPILE5	HMA Storage Pile Handling 5
	1	HMABIN1	HMA 1 Bin Loading (3 Bins)
	1	HMABIN2	HMA 1 Bin Loading (3 Bins)
	2	HMATP1	HMA Bin 1 Unloading
	2	HMATP2	HMA Bin 2 Unloading
	4	HMASCR	HMA Scalping Screen
	5	HMATP3	HMA Scalping Screen Unloading
	6	HMATP4	HMA Conveyor Transfer to Drum Conveyor
	11	ASPHTANK	Asphalt Cement Storage Tank
	13	HR_0001-0049	HMA Haul Road Volume 1-49
	YARD	HR_0027-0049	HMA Yard
	<b>Crushing and Screening Plant</b>		
	12	GEN1	Crusher Generator 1
	13	GEN2	Crusher Generator 2
	RAW	RAW	Raw Material Piles
	1	FEED	Feeder
	2	TP1	Waste Conveyor
	3	PCRSR	Primary Crusher
	4	TP2	Primary Crusher Conveyor
	5	SCRSH	Secondary Crusher
6	TP3	Secondary Crusher Conveyor	
7	SCR	Screen	



	8	TP4	Screen Conveyor		
	9	TP5	Screen Conveyor		
	10	TP6	Screen Conveyor		
	11	STK1	Stacker Conveyor Drop to Pile		
	11	STK2	Stacker Conveyor Drop to Pile		
	11	STK3	Stacker Conveyor Drop to Pile		
	FPILE	FP	Finish Piles		
	14	CR_0001-0023	Crusher Haul Road Volume 1-23		
2	The emission rates in the Tables 2-E and 2-F should match the ones in the modeling files. Do these match? If not, explain why below.			Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
3	Have the minor NSR exempt sources or Title V Insignificant Activities" (Table 2-B) sources been modeled?			Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
4	Which units consume increment for which pollutants?				
	Unit ID	NO <sub>2</sub>	SO <sub>2</sub>	PM10	PM2.5
	NA				
5	PSD increment description for sources. (for unusual cases, i.e., baseline unit expanded emissions after baseline date).		NA		
6	Are all the actual installation dates included in Table 2A of the application form, as required? This is necessary to verify the accuracy of PSD increment modeling. If not please explain how increment consumption status is determined for the missing installation dates below.			Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

**16-P: Flare Modeling**

1	For each flare or flaring scenario, complete the following			
	Flare ID (and scenario)	Average Molecular Weight	Gross Heat Release (cal/s)	Effective Flare Diameter (m)
	NA			

**16-Q: Volume and Related Sources**

1	Were the dimensions of volume sources different from standard dimensions in the Air Quality Bureau (AQB) Modeling Guidelines?			Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
	If not please explain how increment consumption status is determined for the missing installation dates below.				
	Describe the determination of sigma-Y and sigma-Z for fugitive sources.				

2	For storage piles the model inputs were based on the size of the pile (100 feet)/4.3 (sigma-Y) and a release height of 8 feet or a sigma-Z of 8ft*2/2.15. All others followed standard dimensions from Air Quality Bureau (AQB) Modeling Guidelines.		
3	Describe how the volume sources are related to unit numbers. Or say they are the same.		
	Unit #	Model ID	Description
	<b>HMA Plant</b>		
	AGGPILE	HMAPILE1	HMA Storage Pile Handling 1
	AGGPILE	HMAPILE2	HMA Storage Pile Handling 2
	AGGPILE	HMAPILE3	HMA Storage Pile Handling 3
	AGGPILE	HMAPILE4	HMA Storage Pile Handling 4
	AGGPILE	HMAPILE5	HMA Storage Pile Handling 5
	1	HMABIN1	HMA 1 Bin Loading (3 Bins)
	1	HMABIN2	HMA 1 Bin Loading (3 Bins)
	2	HMATP1	HMA Bin 1 Unloading
	2	HMATP2	HMA Bin 2 Unloading
	4	HMASCR	HMA Scalping Screen
	5	HMATP3	HMA Scalping Screen Unloading
	6	HMATP4	HMA Conveyor Transfer to Drum Conveyor
	11	ASPHTANK	Asphalt Cement Storage Tank
	13	HR_0001-0049	HMA Haul Road Volume 1-49
	YARD	HR_0027-0049	HMA Yard
<b>Crushing and Screening Plant</b>			
	RAW	RAW	Raw Material Piles
	1	FEED	Feeder
	2	TP1	Waste Conveyor
	3	PCRSR	Primary Crusher
	4	TP2	Primary Crusher Conveyor
	5	SCRSH	Secondary Crusher
	6	TP3	Secondary Crusher Conveyor
	7	SCR	Screen
	8	TP4	Screen Conveyor
	9	TP5	Screen Conveyor
	10	TP6	Screen Conveyor
	11	STK1	Stacker Conveyor Drop to Pile
	11	STK2	Stacker Conveyor Drop to Pile
	11	STK3	Stacker Conveyor Drop to Pile
	FPILE	FP	Finish Piles
	14	CR_0001-0023	Crusher Haul Road Volume 1
	Describe any open pits.		

4	None
5	Describe emission units included in each open pit.
	NA

### 16-R: Background Concentrations

1	Were NMED provided background concentrations used? Identify the background station used below. If non-NMED provided background concentrations were used describe the data that was used.		Yes <input type="checkbox"/>	No <input type="checkbox"/>
	CO: Del Norte High School (350010023)			
	NO <sub>2</sub> : N/A			
	PM <sub>2.5</sub> : Santa Fe (350490020)			
	PM <sub>10</sub> : Santa Fe (350490020)			
	SO <sub>2</sub> : N/A			
	Other:			
	Comments:	For NO <sub>2</sub> 1-Hour and Annual, and SO <sub>2</sub> 1-Hour averaging periods modeling only neighboring sources were included as discussed in Table 20. Facility location is outside the city of Las Vegas		
2	Were background concentrations refined to monthly or hourly values? If so describe below.		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

### 16-S: Meteorological Data

1	Was NMED provided meteorological data used? If so select the station used. Santa Fe 2017 - 2021	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
2	If NMED provided meteorological data was not used describe the data set(s) used below. Discuss how missing data were handled, how stability class was determined, and how the data were processed.		

### 16-T: Terrain

1	Was complex terrain used in the modeling? If not, describe why below.	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
	Yes, for point sources only. For volume sources, model was run in source selected flat terrain mode.		
2	What was the source of the terrain data?		
	USGS National Elevation Data (NED)		

**16-U: Modeling Files**

1	Describe the modeling files:		
	File name (or folder and file name)	Pollutant(s)	Purpose (ROI/SIA, cumulative, culpability analysis, other)
	Shortline Combustion ROI	NOx, CO, SO2	ROI
	Shortline PM ROI	PM10, PM2.5	ROI
	Shortline NO2 1Hour	NO2	cumulative
	Shortline NO2 Annual	NO2	cumulative
	Shortline PM10	PM10	cumulative
	Shortline PM25 24Hr	PM2.5	cumulative
	Shortline PM25 Yr	PM2.5	cumulative
	Shortline SO2 1Hour	SO2	cumulative
	Shortline H2S	H2S	ROI
	Shortline PM10 Setback	PM10	setback
	Shortline PM25 24 Hr Setback	PM25	setback
	Shortline PM25 Annual Setback	PM25	setback
	Shortline NO2 Annual Setback	NO2	setback
Shortline NO2 1 Hour Setback	NO2	setback	
Shortline SO2 Setback	SO2	setback	

**16-V: PSD New or Major Modification Applications**

1	A new PSD major source or a major modification to an existing PSD major source requires additional analysis. Was preconstruction monitoring done (see 20.2.74.306 NMAC and PSD Preapplication Guidance on the AQB website)?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
2	If not, did AQB approve an exemption from preconstruction monitoring?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
3	Describe how preconstruction monitoring has been addressed or attach the approved preconstruction monitoring or monitoring exemption. Not a PSD Source		
4	Describe the additional impacts analysis required at 20.2.74.304 NMAC. Not a PSD Source		
5	If required, have ozone and secondary PM2.5 ambient impacts analyses been completed? If so describe below.	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
	Not a PSD Source		

**16-W: Modeling Results**

1	If ambient standards are exceeded because of surrounding sources, a culpability analysis is required for the source to show that the contribution from this source is less than the significance levels for the specific pollutant. Was culpability analysis performed? If so describe below.	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
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2	Identify the maximum concentrations from the modeling analysis. Rows may be modified, added and removed from the table below as necessary.
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Pollutant, Time Period and Standard	Modeled Facility Concentration (µg/m3)	Modeled Concentration with Surrounding Sources (µg/m3)	Secondary PM (µg/m3)	Background Concentration (µg/m3)	Cumulative Concentration (µg/m3)	Value of Standard (µg/m3)	Percent of Standard	Location		
								UTM E (m)	UTM N (m)	Elevation (ft)
NO2 1 hr	182.8	182.8	NA	NA	182.8	188.0	97.2	482220.6	3943006.9	1982.99
NO2 ann	14.0	1.0	NA	NA	15.0	94.0	16.0	482164.9	3942934.2	1982.40
CO 1 hr	607.0	NA	NA	NA	607.0	SIL - 2000	30.4	482133.9	3943095.8	1982.43
CO 8 hr	219.8	NA	NA	NA	219.8	SIL - 500	44.0	482206.6	3942988.7	1983.00
SO2 1 hr	77.5	77.5	NA	NA	77.5	196.4	39.5	482100.0	3943100.0	1985.32
PM2.5 24 hr	7.5	7.7	NA	9.2	17.0	35.0	48.3	482262.3	3943061.5	1983.54
PM2.5 ann	3.6	3.9	NA	3.7	7.6	12.0	63.3	482234.5	3943025.1	1983.29
PM10 24 hr	64.3	68.3	NA	19.0	87.3	150.0	58.2	482113.9	3942854.9	1981.59
H2S 1 hr	0.24	NA	NA	NA	0.24	SIL - 1.0	24.0	482176.8	3943113.0	1985.74

**16-X: Summary/conclusions**

	A statement that modeling requirements have been satisfied and that the permit can be issued.
1	Dispersion modeling was performed for the new Las Vegas HMA & Crusher permit applications. All facility pollutants with ambient air quality standards were modeled to show compliance with those standards. All results of this modeling showed the facility in compliance with applicable ambient air quality standards.

**Change Log – Do not submit this page with your application.**

If you are using a form older than the most current form posted on the website, you are required to incorporate the changes listed. Periodically, AQB will announce when older form versions will no longer be accepted.

Version Date	Changes Incorporated
8/31/2020	Older versions of form this form will not be accepted.
7/12/2023	Changed font to Calibri