



State of Utah

Department of  
Environmental Quality

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*Executive Director*

DIVISION OF AIR QUALITY  
Richard W. Sprott  
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DAQE-AN0565012-03

December 29, 2003

Tony Christofferson  
Geneva Rock Products  
1565 West 400 North  
PO Box 538  
Orem, Utah 84059

Dear Mr. Christofferson:

Re: Approval Order: Increase Production and Reduce Generator Hours of Operation, Salt Lake County, CDS B; NA; MAINT; HAPs, NSPS  
Project Code: N0565-012

The attached document is the Approval Order (AO) for the above-referenced project.

Future correspondence on this Approval Order should include the engineer's name as well as the DAQE number as shown on the upper right-hand corner of this letter. Please direct any technical questions you may have on this project to Mr. Nando Meli. He may be reached at (801) 536-4052.

Sincerely,

Richard W. Sprott, Executive Secretary  
Utah Air Quality Board

RWS:NM:jc

cc: Salt Lake Valley Health Department

Mike Owens, EPA Region VIII

**STATE OF UTAH**

**Department of Environmental Quality**

**Division of Air Quality**

**APPROVAL ORDER: INCREASE PRODUCTION AND  
REDUCE GENERATOR HOURS OF OPERATION**

Prepared By: Nando Meli, Engineer  
(801) 536-4052  
Email: [nmeli@utah.gov](mailto:nmeli@utah.gov)

**APPROVAL ORDER NUMBER**

**DAQE-AN0565012-03**

**Date: December 29, 2003**

**Geneva Rock Products**  
Source Contact  
**Tony Christofferson**  
(801) 802-6913

**Richard W. Sprott**  
Executive Secretary  
Utah Air Quality Board

### *Abstract*

*Geneva Rock Products (GRP) operates a Sand and Gravel (S&G) Pit, Concrete Batch Plant (CBP), and Hot Mix Asphalt (HMA) Plant at the Point of the Mountain. GRP requests the current Approval Order (AO), DAQE-AN0565011-03, dated February 13, 2003, be modified to reduce electrical generation limits from 3,383,000 hp-hr/12-months to 240,500 hp-hr/12-months, increase the sand and gravel production from 4,350,000 tons/12-months to 4,500,000 tons/12-months; increase concrete production from 200,000 cubic yard/12-months to 250,000 cubic yards/12-months, add one 4.0 MMbtu/hr natural gas-fired hot water heater, increase asphalt production from 500,000 tons/12-months to 600,000 tons/12-months, and add a fugitive dust control plan to the AO. The operations east of I-15, known as the Hansen/Lehi Operation, straddle the Utah County and Salt Lake County Line. Salt Lake County is a Non-attainment area of the National Ambient Air Quality Standards (NAAQS) for PM<sub>10</sub> and SO<sub>2</sub>, and is a Maintenance area for Ozone. Utah County is a Non-attainment area for PM<sub>10</sub>. New Source Performance Standards apply to this source. This source is a Title V area source of the 1990 Clean Air Act.*

*The emissions, in tons per year, will change as follows: PM<sub>10</sub> - 8.99, NO<sub>x</sub> -39.00, SO<sub>2</sub> - 3.26, CO - 3.20, VOC - 2.46, and HAPs - 0.04. The changes in emissions will result in the following potential to emit totals: PM<sub>10</sub> = 80.61, SO<sub>2</sub> = 24.02, NO<sub>x</sub> = 60.67, CO = 53.68, VOC = 19.93, HAPs = 4.21.*

The project has been evaluated and found to be consistent with the requirements of the Utah Administrative Code Rule 307 (UAC R307). A public comment period was held in accordance with UAC R307-401-4 and no comments were received. This air quality Approval Order (AO) authorizes the project with the following conditions, and failure to comply with any of the conditions may constitute a violation of this order.

#### **General Conditions:**

1. This Approval Order (AO) applies to the following company:

##### Corporate Office Location

Geneva Rock Products, Inc.  
1565 West 400 North  
P. O. Box 538  
Orem, Utah 84059

Phone Number: (801) 281-7800

Fax Number: (801) 281-7830

The equipment listed in this AO shall be operated at the following location:

The Hansen/Lehi Point of the Mountain pit is located in Draper on the east side of Interstate 15 (I-15) near the I-15 exit 291.

Universal Transverse Mercator (UTM) Coordinate System: UTM Datum NAD27  
4,479.7 km Northing, 423.0 km Easting, Zone 12

2. All definitions, terms, abbreviations, and references used in this AO conform to those used in the Utah Administrative Code (UAC) Rule 307 (R307) and Title 40 of the Code of Federal Regulations (40 CFR). Unless noted otherwise, references cited in these AO conditions refer to those rules.
3. The limits set forth in this AO shall not be exceeded without prior approval in accordance with R307-401.
4. Modifications to the equipment or processes approved by this AO that could affect the emissions covered by this AO must be reviewed and approved in accordance with R307-401-1.
5. All records referenced in this AO or in applicable NSPS, which are required to be kept by the owner/operator, shall be made available to the Executive Secretary or Executive Secretary's representative upon request, and the records shall include the two-year period prior to the date of the request. Records shall be kept for the following minimum periods:
  - A. Used oil consumption Three years
  - B. Emission inventories Five years from the due date of each emission statement or until the next inventory is due, whichever is longer.
  - C. All other records Two years
6. Geneva Rock Products, Inc. (Geneva Rock) shall conduct its operations of the Hansen/Lehi pit in accordance with the terms and conditions of this AO, which was written pursuant to Geneva Rock's Notice of Intent submitted to the Division of Air Quality (DAQ) on July 17, 2003, and additional information submitted to DAQ on September 23, 2003 and October 21, 2003.
7. This AO shall replace the AO (DAQE-AN0565011-03) dated February 13, 2003.
8. The approved installations shall consist of the following equipment or equivalent\*:
  - A. Portland Concrete Batch Plant (CBP)  
Concrete Plant - Johnson-Ross Tilt Mixer with 8,500 cfm dust collector  
  
Three Cement Silos with 1,800 cfm dust collectors  
One Fly Ash Silo with 1,800 cfm dust collector  
Aggregate Bins and Silos
  - B. Hot Mix Asphalt Plant (HMA)  
Lime Silo - Todd Model 36-DK with 600 cfm Bin Vent  
Asphalt Plant - Gencor-Bituma 500 with Baghouse  
Asphalt Storage Silos  
Cold Aggregate Storage Bins
  - C. Natural Gas Fired Hot Oil Heater (HMA)  
2.8 x 10<sup>6</sup> BTU/hr

- D. Natural Gas Fired Hot Water Heater (CBP)\*\*  
4.0 x 10<sup>6</sup> BTU/hr
- E. Generators, Etc.  
Diesel/Gasoline/LPG Fueled Generator Sets  
Portable Generators, Lighting Plants, Pumps, and Compressors
- F. Storage Tanks  
Hot Oil, Waste Oil, Fuel Oil, and Diesel Tanks  
One 6,000 Gallon Gasoline Tank (underground)
- G. Off Highway Vehicles  
Front-End Loaders, Bulldozers, Scrapers, Drag-Lines, Track-Hoes, Haul Trucks,  
Water Trucks, Sweeper Truck, Fork-Lift Trucks, Boom Trucks, etc.
- H. Miscellaneous Aggregate Processing Equipment  
Grizzlies, Feeders, Splitters, Traps, and Load Bins  
Jaw Crushers, Cone Crushers, and VSI Crushers  
Dry Screens, Wet Screens, and Wash Plants  
Conveyors, Screws, Cyclones, Clarifiers, and Stackers  
(A current list of Aggregate Processing Equipment shall be maintained on-site  
and shall be made available to the Executive Secretary or the Executive  
Secretary's representative upon request.)
- I. Miscellaneous \*\*  
Welders, Pumps, Motors, Pressure Washers, Parts Washers, and other equipment  
associated with construction materials processing, manufacture, and  
maintenance.

\* Equivalency shall be determined by the Executive Secretary.

\*\* This equipment is listed for informational purposes only.

A detailed list of the above equipment is attached as Appendix A.

**Limitations and Tests Procedures**

- 9. Emissions to the atmosphere from the indicated emission point shall not exceed the following rates and concentrations:

Gencor-Bituma 500 Asphalt Plant

Pollutant	lbs/hr	Grains/dscf (68°F, 29.92 in Hg)	
PM <sub>10</sub> .....	10.6 .....	0.024.....	(while processing both recycle and virgin materials)

10. Stack testing to show compliance with the emission limitations stated in the above condition shall be performed as specified below:

A.	Testing	Test
	<u>Pollutant</u>	<u>Status</u> <u>Frequency</u>
	PM <sub>10</sub> (virgin materials)	* .....#
	PM <sub>10</sub> (recycle materials)	* .....#

B. Testing Status (To be applied to the source listed above)

- \*        The initial testing has already been performed.
- #        Test every five years.

C. Notification

The Executive Secretary shall be notified at least 30 days prior to conducting any required emission testing. A source test protocol shall be submitted to DAQ when the testing notification is submitted to the Executive Secretary.

The source test protocol shall be approved by the Executive Secretary prior to performing the tests. The source test protocol shall outline the proposed test methodologies, stack to be tested, and procedures to be used. A pretest conference shall be held, if directed by the Executive Secretary.

D. Sample Location

The emission point shall be designed to conform to the requirements of 40 CFR 60, Appendix A, Method 1, or other methods as approved by the Executive Secretary. An Occupational Safety and Health Administration (OSHA) or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.

E. Volumetric Flow Rate

40 CFR 60, Appendix A, Method 2 or other testing methods approved by the Executive Secretary.

F. PM<sub>10</sub>

For stacks in which no liquid drops are present, the following methods shall be used: 40 CFR 51, Appendix M, Methods 201, 201a, or other testing methods approved by the Executive Secretary. The back half condensibles shall also be tested using the method specified by the Executive Secretary. All particulate captured shall be considered PM<sub>10</sub>.

For stacks in which liquid drops are present, methods to eliminate the liquid drops should be explored. If no reasonable method to eliminate the drops exists, then the following methods shall be used: 40 CFR 60, Appendix A, Method 5, 5a, 5d, or 5e as appropriate, or other testing methods approved by the Executive

Secretary. The back half condensibles shall also be tested using the method specified by the Executive Secretary. The portion of the front half of the catch considered PM<sub>10</sub> shall be based on information in Appendix B of the fifth edition of the EPA document, AP-42, or other data acceptable to the Executive Secretary.

The back half condensibles shall not be used for compliance demonstration but shall be used for inventory purposes.

G. Calculations

To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary, to give the results in the specified units of the emission limitation.

H. New Source Operation

For a new source/emission point, the production rate during all compliance testing shall be no less than 90% of the production rate listed in this AO. If the maximum AO allowable production rate has not been achieved at the time of the test, the following procedure shall be followed:

- 1) Testing shall be at no less than 90% of the production rate achieved to date.
- 2) If the test is passed, the new maximum allowable production rate shall be 110% of the tested achieved rate, but not more than the maximum allowable production rate. This new allowable maximum production rate shall remain in effect until successfully tested at a higher rate.
- 3) The owner/operator shall request a higher production rate when necessary. Testing at no less than 90% of the higher rate shall be conducted. A new maximum production rate (110% of the new rate) will then be allowed if the test is successful. This process may be repeated until the maximum AO production rate is achieved.

I. Existing Source Operation

For an existing source/emission point, the production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

**In all cases, when testing for PM<sub>10</sub> emissions during manufacture of recycle asphalt, recycle asphalt shall be introduced into the plant at a rate no less than 15% of the plant production (i.e. if the plant is producing 400 tons per hour of finished product, then asphalt to be recycled shall be introduced into the plant at a rate no less than 60 tons per hour).**

11. Visible emissions from the following emission points shall not exceed the following values:
- A. All crushers - 10% opacity
  - B. All screens - 10% opacity
  - C. All conveyor transfer points - 10% opacity
  - D. All diesel engines - 20% opacity
  - E. Conveyor drop points - 20% opacity
  - F. Each baghouse (including asphalt plant) - 10%
  - G. All other points including fugitive dust sources - 20% opacity

Opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9. Visible emissions determinations for traffic sources shall use procedures similar to Method 9. The normal requirement for observations to be made at 15-second intervals over a six-minute period, however, shall not apply. Six points, distributed along the length of the haul road or in the operational area, shall be chosen by the Executive Secretary or the Executive Secretary's representative. An opacity reading shall be made at each point when a vehicle passes the selected points. Opacity readings shall be made 2 vehicle length or greater behind the vehicle and at approximately 2 the height of the vehicle or greater. The accumulated six readings shall be averaged for the compliance value.

12. The **emissions of Sulfur Dioxide (SO<sub>2</sub>)** from the Gencor-Bituma 500 Asphalt Plant **shall not exceed 19.72 tons per rolling 12-month period**. To determine compliance with a rolling 12-month total the owner/operator shall calculate a new 12-month total by the twentieth day of each month using data from the previous 12 months

The owner/operator shall provide test certification for each load of fuel oil received. Certification shall be either by their own testing or test reports from the fuel oil marketer. Records of fuel oil consumption and the test reports shall be kept for all periods when the plant is in operation.

The emissions of SO<sub>2</sub> emitted to the atmosphere from the Gencor-Bituma 500 Asphalt Plant shall be determined by maintaining a record of sulfur contained in all fuel used each month in the asphalt plant. The record shall include the following data for each fuel used:

- A. Name of the fuel containing sulfur.
- B. The density of the fuel listed in A in pounds per gallon.
- C. Percent by weight of all sulfur contained for each fuel listed in A. The percent by weight of the sulfur contained in the fuel can be obtained from the fuel oil certifications. Certification of fuels shall be either by Geneva's own testing or test reports from the fuel marketer.
- D. To calculate the above potentials contained in the material listed in A, use the following procedure:

$$\text{SO}_2 = 2 \times [\% \text{ Sulfur by Weight} \times [\text{Density (lb)}] \times \text{Gal Consumed} \times 1 \text{ ton}]$$

- |  |       |       |         |
|--|-------|-------|---------|
|  | (100) | (gal) | 2000 lb |
|--|-------|-------|---------|
- E. The amount of sulfur content in pounds contained in materials deposited as solid or hazardous waste for the month shall be quantified and subtracted from the quantities calculated above. This is done to allow quantification by the source of the total SO<sub>2</sub> emissions.
  - F. Records of consumption of fuel shall be kept for all periods when the plant is in operation.

13. The following production and/or consumption limits shall not be exceeded:

Asphalt Plant

- A. 500 tons of asphalt produced per hour (averaged over each operating day).
- B. 600,000 tons of asphalt produced per rolling 12-month period.
- C. 20% recycle asphalt used in the manufacture of asphalt (averaged over each operating day).

Concrete Batch Plant.

- D. 2,400 cubic yards of concrete produced per 24-hour period.
- E. 250,000 cubic yards of concrete produced per rolling 12-month period.

Aggregate Pit

- F. 4,500,000 tons of aggregate mined including bank run per rolling 12-month period.
- G. Hours of operation for the bulldozers, front-end loaders, off highway haul trucks and off highway water trucks per rolling 12-month period.
  - 1) 12,000 hours of operation per rolling 12-month period for the bulldozers
  - 2) 30,000 hours of operation per rolling 12-month period for the front end loaders
  - 3) 3,600 hours of operation per rolling 12-month period for the haul trucks and water trucks
- H. Horsepower-Hours (HP-hrs) of operation for the electrical generators per rolling 12-month period.
  - 1) 240,500 total HP-hrs of operation per rolling 12-month period for the electrical generators with a power rating less than 600 hp.
- I. 6,400 hours of operation for the natural gas fired hot oil heater per rolling 12-month period.

- J. 9,999 gallons of gasoline consumed per one-month period and 72,000 gallons of gasoline consumed per rolling 12-month period.

Asphalt and pit production shall be determined through the use of weigh scales and recording of the weights.

Compliance with the hourly limitations shall be determined on a daily average (12 a.m. to 12 a.m.). Each day the owner/operator shall calculate a new hourly average based on the previous days production. Records of production shall be kept on site and shall be kept for all periods when the plant is in operation.

To determine compliance with a rolling 12-month total the owner/operator shall calculate a new 12-month total by the twentieth day of each month using data from the previous 12 months. Records of production shall be kept on site and shall be kept for all periods when the plant is in operation. The records shall be kept on a daily basis. Supervisor monitoring and maintaining of an operations log shall determine hours of operation.

### **Roads and Fugitive Dust**

14. Geneva Rock shall abide by a fugitive dust control plan acceptable to the Executive Secretary for control of all dust sources associated with the Name of project. Geneva Rock shall submit a fugitive dust control plan to the Executive Secretary, attention: Compliance Section, for approval within 30 days of the date of this AO.
15. Water sprays or chemical dust suppression sprays shall be installed at the following points to control fugitive emissions:
- A. Crushers
  - B. Screens
  - C. Conveyor transfer points

The sprays shall operate to the extent necessary to keep the equipment operation within the opacity limitation of 10%.

16. The open or disturbed area shall not exceed 112 acres.
17. The facility shall abide by all applicable requirements of R307- 309 for PM<sub>10</sub> non-attainment areas for Fugitive Emission and Fugitive Dust sources.

### **Fuels**

18. The owner/operator shall use only used oil, fuel oil, #2 diesel or natural gas in the asphalt plant. Used oil shall comply with the conditions listed below for energy recovery.
19. The sulfur content of any fuel oil or diesel burned shall not exceed:
- A. 0.50 percent by weight for fuels used in the asphalt plant.
  - B. 0.05 percent by weight for diesel fuels consumed in all other equipment.

The sulfur content shall be determined by ASTM Method D-4294-89 or approved equivalent. The sulfur content shall be tested if directed by the Executive Secretary. Certification of used oil shall be either by Geneva's own testing or test reports from the used oil fuel marketer. Certification of other fuels shall be either by Geneva's own testing or test reports from the fuel marketer.

20. Burning used oil for energy recovery shall comply with the following:
  - A. The concentration/parameters of contaminants in any used oil fuel shall not exceed the following levels:
 

1)	Arsenic .....	5	ppm by weight
2)	Cadmium.....	2	ppm by weight
3)	Chromium .....	10	ppm by weight
4)	Lead .....	100	ppm by weight
5)	Total halogens.....	1,000	ppm by weight
6)	Sulfur .....	0.5	percent by weight
  - B. The flash point of all used oil to be burned shall not be less than 100 °F.
  - C. The owner/operator shall provide test certification for each load of used oil fuel received or generated on site. Certification shall be either by his own testing or test reports from the used oil fuel marketer. Records of used oil fuel consumption and the test reports shall be kept for all periods when the plant is in operation.
  - D. Used oil that does not exceed any of the listed contaminants content may be burned. The owner/operator shall record the quantities of oil burned on a daily basis.
  - E. Used oil that does exceed any of the above listed contaminants content shall not be burned until the owner/operator has submitted to the Executive Secretary for approval a modeling analysis of the projected emissions for each contaminant. The modeling analysis shall show in each case that the resulting concentration of contaminant in the ambient air does not exceed the TLV/100 value for the given contaminant.
  - F. Any used oil fuel that contains more than 1000 ppm by weight of total halogens shall be considered a hazardous waste and shall not be burned in the asphalt plant. The oil shall be tested for halogen content by ASTM Method D-808-81, EPA Method 8240 or Method 8260 before used oil fuel is transferred to the asphalt tank and burned.
  - G. Sources utilizing used oil, as a fuel shall comply with the State Division of Solid and Hazardous Waste in accordance with R315-15, UAC.

**Federal Limitations and Requirements**

21. In addition to the requirements of this AO, all applicable provisions of 40 CFR 60, New Source Performance Standards (NSPS) Subparts A, 40 CFR 60.1 to 60.18, Subpart I, 40 CFR 60.90 to 60.93 (Standards of Performance for Hot Mix Asphalt Plants), Subpart Kb,

CFR 60.110 to 60.117b (Standards of Performance for Volatile Liquid Storage Vessels for which construction, Reconstruction, or Modification Commenced after July 23, 1984, and Subpart OOO, 40 CFR 60.670 to 60.676 (Standards of Performance for Nonmetallic Mineral Processing), apply to affected equipment located at the Hansen/Lehi Pit.

### **Monitoring - General Process**

22. Geneva Rock shall install, calibrate, maintain, and operate a monitoring device for the continuous measurement of the pressure drop across the bags in the asphalt plant baghouse. The pressure drop shall be between two to six inches of water gauge. Calibration of the monitoring device shall be on an annual basis according to the manufacturer's instructions. Continuous recording of the measurements of the monitoring device is not required. However, daily records of readings shall be maintained.

### **Records & Miscellaneous**

23. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any equipment approved under this Approval Order including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Executive Secretary which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. All maintenance performed on equipment authorized by this AO shall be recorded.
24. The owner/operator shall comply with R307-150 Series. Inventories, Testing and Monitoring.
25. The owner/operator shall comply with R307-107. General Requirements: Unavoidable Breakdowns.

The Executive Secretary shall be notified in writing if the company is sold or changes its name.

This AO in no way releases the owner or operator from any liability for compliance with all other applicable federal, state, and local regulations including R307.

A copy of the rules, regulations and/or attachments addressed in this AO may be obtained by contacting the Division of Air Quality. The Utah Administrative Code R307 rules used by DAQ, the Notice of Intent (NOI) guide, and other air quality documents and forms may also be obtained on the Internet at the following web site:

[http://www.deq.utah.gov/EQOAS/AIR\\_NEW.HTM](http://www.deq.utah.gov/EQOAS/AIR_NEW.HTM)

The annual emission estimations below include point source, fugitive emissions, fugitive dust, road dust and tail pipe emissions, and do not include grandfathered emissions. These emissions are for the purpose of determining the applicability of Prevention of Significant Deterioration, non-attainment area, maintenance area, and Title V source requirements of the R307. They are not to be used for determining compliance.

The Potential To Emit (PTE) emissions for the Geneva Rock Hansen/Lehi site are currently calculated at the following values:

	<u>Pollutant</u>	<u>Tons/yr</u>
A.	PM <sub>10</sub> .....	80.61
B.	SO <sub>2</sub> .....	24.02
C.	NO <sub>x</sub> .....	60.67
D.	CO.....	53.68
E.	VOC.....	19.93
F.	HAPs.....	4.21

Approved By:

Richard W. Sprott, Executive Secretary  
Utah Air Quality Board

## Appendix A

### Geneva Rock - Hansen/Lehi Equipment List

**Whenever this equipment list is modified, the modified version shall replace the existing version, and the modified version shall be attached to the most current AO.**

Geneva Rock may alter or substitute portions of the equipment list, at any time, provided Geneva Rock submits these alterations for approval to the Executive Secretary in accordance with R307-401, UAC.

#### Non-Mobile Equipment List Updated: June 19, 2003

Class	No.	Group	Capacity	Description	Make	Serial No	NSPS	AO
62-	2065	GenSet	650 HP	GENERATOR D379	CAT	68B07287 85717-3	-	
69-	2010	Tank	500 Gal	FUEL TANK - OIL			-	8.H.
69-	2012	Tank	15000 Gal	FUEL TANK - OIL			Kb	8.H.
69-	2032	Tank	12000 Gal	FUEL TANK - OIL			Kb	8.H.
69-	2036	Tank	6000 Gal	FUEL TANK - UST - GASOLINE			-	8.H.
69-	2037	Tank	12000 Gal	FUEL TANK - OIL			Kb	8.H.
69-	2040	Tank	12000 Gal	FUEL TANK-OIL			Kb	8.H.
69-	2041	Tank	12000 Gal	FUEL TANK - OIL			Kb	8.H.
69-	2044	Tank	500 Gal	FUEL TANK - OIL			-	8.H.
72-	2001	HMA	500 TPH	ASPHALT PLANT VW BAGHOUSE	GENCOR	5BCF21783 94 NA	I	8.D.
		HMA		LIME SILO W/BIN VENT			-	8.D.
		HMA		ASPHALT STORAGE SILOS			-	8.D.
		HMA		COLD AGGREGATE STORAGE BINS			-	8.D.
		HMA	2.8 MMBTU	HOT OIL HEATER			-	8.E.
73-	2029	CBP	240 CY/HR	CONCRETE PLANT CENTRAL MIX 350-12	ROSS	2174	-	8.C.
		CBP		CEMENT SILO W/ DUST COLLECTION			-	8.C.
		CBP		CEMENT SILO W/ DUST COLLECTION			-	8.C.
		CBP		CEMENT SILO W/ DUST COLLECTION			-	8.C.
		CBP		FLY ASH SILO WITH DUST COLLECTION			-	8.C.
		CBP		AGGREGATE BINS AND SILOS			-	8.C.
75-	2003	Crusher		CRUSHER			000	8.1.
75-	2004	Crusher		CRUSHER			000	8.1.
75-	2008	Crusher		CRUSHER			000	8.1.
76-	2079	Crusher		VSI CRUSHER 9000 2 X 250 HP	REMCO		000	8.1.
76-	2022	Crusher		VSI CRUSHER 9000 2 X 250 HP	REMCO	90504-142	000	8.1.
76-	2173	Crusher		VSI CRUSHER 9500 2 X 300 HP	REMCO		000	8.L
76-	2254	Crusher		CONE CRUSHER 54" STD 200 HP	ELJAY	23B0193	000	8.L
76-	2257	Crusher		CONE CRUSHER 54" STD, RCII 300 HP	CEDARPDS	2BH0894	000	8.1.
99-	2012	Crusher		MOBILE CRUSHER PREMIERTRAK	PEGSON	QM015941	000	8.1.
81-	2036	Screen		FEEDER			000	8.1.
81-	2054	Screen		FEEDER-VIBRATING, TRAP	GRP		000	8.1.
81-	2112	Screen	2 HP	FEEDER VWTRAP	GRP		000	8.1.
81-	2128	Screen	5 HP	FEEDER	GRP		000	8.L
81-	2240	Screen	50 HP	FEEDER (52 X 20)	FABTEC		000	8.1.
81-	2272	Screen	40 HP	FEEDER (52 X 20)	FABTEC	49967	000	8.1.
75-	2011	Screen		SCREEN PLANT (5X16)	PWRSCREE		000	8.1.
76-	2257C	Screen	40 HP	CONE CRUSHER-SCREEN (6 X 20)	CEDARPDS	34B0693	000	8.1.
77-	2052	Screen	40 HP	WET SCREEN (6 X 20)	ELJAY	47966	000	8.L
77-	2061	Screen	30 HP	SCREEN (5X16)	ELJAY	34D1481	000	8.1.
77-	2069	Screen	10 HP	SCREEN (6 X 20)	FABTEC		000	8.1.
77-	2072	Screen	40 HP	SCREEN PLANT (6 X 20)	CEDARPDS	46057	000	8.1.
77-	2177	Screen	40 HP	SCREEN (6 X 20)	FABTEC	48169	000	8.1.
77-	2179	Screen	50 HP	SCREEN (7 X 20)	CEDARPDS	48178	000	8.1.
77-	2180	Screen	10 HP	SCREEN (4X12)	CEDARPDS		000	8.1.

77-	2186	Screen	40 HP	WET SCREEN (6 X 20)	CEDARPDS	49140	000	8.1.
77-	2187	Screen	40 HP	WET SCREEN (6 X 20)	CEDARPDS	49462	000	8.1.
77-	2233	Screen	40 HP	SCREEN (6 X 20)	CEDARPDS	34H0994	000	8.1.
77-	2276	Screen		SCREEN (5X15)	PWRSCREE	1401-01-386	000	8.1.
82-	2056	Conveyor	40 HP	SAND SCREW (54 X 34)	EIW		000	8.L
82-	2060	Conveyor	40 HP	SAND SCREW (54X31)	EIW	15043	000	8.1.

Class	No.	Group	Capacity	Description	Make	Serial No	NSPS	AO
82-	2182	Conveyor	40 HP	SAND SCREW (54X31)	EIW	15850	000	8.1.
76-	2254A	Conveyor	7.5 HP	CONE CRUSHER-CONVEYOR (36 X 26)	ELJAY		000	8.1.
76-	2257B	Conveyor	7.5 HP	CONE CRUSHER-CONVEYOR (48 X 13)	CEDARPDS		000	8.1.
77-	2061A	Conveyor	7.5 HP	SCREEN-CONVEYOR (36 X 21)	ELJAY		000	8.1.
76-	2257D	Conveyor	15 HP	CONE CRUSHER-CONVEYOR (60 X 25)	CEDARPDS		000	8.1.
77-	2061 B	Conveyor	5 HP	SCREEN-CONVEYOR (24 X 6)	ELJAY		000	8.1.
77-	2069A	Conveyor	10 HP	SCREEN-CONVEYOR (48 X 24)	FABTEC		000	8.1.
77-	2069B	Conveyor	5 HP	SCREEN-CONVEYOR (30 X 9)	FABTEC		000	8.1.
77-	2069C	Conveyor	5 HP	SCREEN-CONVEYOR (30 X 9)	FABTEC		000	8.L
77-	2072A	Conveyor	10 HP	SCREEN-CONVEYOR (60 X 26)			000	8.1.
77-	2177A	Conveyor	10 HP	SCREEN-CONVEYOR (48 X 26)	FABTEC		000	8.1.
77-	2177B	Conveyor	5 HP	SCREEN-CONVEYOR (30 X 10)	FABTEC		000	8.1.
77-	2177C	Conveyor	5 HP	SCREEN-CONVEYOR (24 X 10)	FABTEC		000	8.1.
77-	2179A	Conveyor	20 HP	SCREEN-CONVEYOR (48 X 26)	CEDARPDS		000	8.1.
77-	2233A	Conveyor	10 HP	SCREEN-CONVEYOR (60 X 26)	CEDARPDS		000	8.L
77-	2276A	Conveyor		SCREEN-CONVEYOR (48 X 14)	PWRSCREE		000	8.1.
77-	2276B	Conveyor		SCREEN-CONVEYOR (40 X 36.5)	PWRSCREE		000	8.1.
77-	2276C	Conveyor		SCREEN-CONVEYOR (30 X 31)	PWRSCREE		000	8.1.
77-	2276D	Conveyor		SCREEN-CONVEYOR (32 X 29)	PWRSCREE		000	8.L
77-	2276E	Conveyor		SCREEN-CONVEYOR (47 X 26.5)	PWRSCREE		000	8.1.
79-	2025	Conveyor	7.5 HP	CONVEYOR (24 X 36)	CEDARPDS		000	8.1.
79-	2039	Conveyor	10 HP	CONVEYOR (30 X 52)	GRP		000	8.1.
79-	2040	Conveyor	15 HP	CONVEYOR (30 X 68)	GRP		000	8.L
79-	2046	Conveyor	10 HP	CONVEYOR (30 X 52)	GRP		000	8.1.
79-	2049	Conveyor	10 HP	CONVEYOR (30 X 52)	GRP		000	8.1.
79-	2050	Conveyor	15 HP	CONVEYOR (30 X 54)	GRP		000	8.1.
79-	2051	Conveyor	15 HP	CONVEYOR (30 X 62)	GRP		000	8.1.
79-	2055	Conveyor	30 HP	CONVEYOR (24 X 62)	KIMBALL		000	8.1.
79-	2057	Conveyor	10 HP	CONVEYOR (30 X 52)	GRP		000	8.1.
79-	2062	Conveyor	10 HP	CONVEYOR (36X15)	CEDARPDS		000	8.1.
79-	2066	Conveyor	7.5 HP	CONVEYOR (30 X 68)	TELSMITH		000	8.1.
79-	2068	Conveyor	10 HP	CONVEYOR (30 X 52)	GRP		000	8.1.
79-	2070	Conveyor	10 HP	CONVEYOR (30 X 52)	GRP		000	8.1.
79-	2071	Conveyor	7.5 HP	CONVEYOR (30 XI 5.5)	GRP		000	8.1.
79-	2093	Conveyor	7.5 HP	CONVEYOR (30 X 25)	GRP		000	8.1.
79-	2117	Conveyor	15 HP	CONVEYOR (30X57.5)	GRP		000	8.1.
79-	2118	Conveyor	15 HP	CONVEYOR (30X118)	SYNTRON		000	8.1.
79-	2119	Conveyor	7.5 HP	CONVEYOR (30X45)	GRP		000	8.1.
79-	2131	Conveyor		CONVEYOR (24X140)			000	8.1.
79-	2132	Conveyor	7.5 HP	CONVEYOR (36 X 18)			000	8.1.
79-	2133	Conveyor	10 HP	CONVEYOR (30 X 52)	GRP		000	8.1.
79-	2134	Conveyor	15 HP	CONVEYOR (36 X 73)	GRP		000	8.L
79-	2135	Conveyor	10 HP	CONVEYOR (30 X 52) W/SCALE	GRP		000	8.1.
79-	2137	Conveyor	10 HP	CONVEYOR (30 X 34)	GRP		000	8.1.
79-	2138	Conveyor	10 HP	CONVEYOR (30 X 52)			000	8.1.
79-	2139	Conveyor	30 HP	CONVEYOR (30X112)FOLDOVER	AMER BN		000	8.1.
79-	2140	Conveyor	10 HP	CONVEYOR (30 X 52)	GRP		000	8.L
79-	2142	Conveyor	7.5 HP	CONVEYOR (30 X 50)	GRP		000	8.1.
79-	2148	Conveyor	15 HP	CONVEYOR (30X60)	GRP		000	8.1.
79-	2149	Conveyor	7.5 HP	CONVEYOR (30 X 52)	GRP		000	8.1.
79-	2150	Conveyor	15 HP	CONVEYOR (30 X 52)	GRP		000	8.1.
79-	2152	Conveyor	20 HP	CONVEYOR (30X60) STACKABLE	AMER BN		000	8.1.
79-	2156	Conveyor	20 HP	CONVEYOR (30X116) W/SCALE	GRP		000	8.1.
79-	2157	Conveyor	30 HP	CONVEYOR (30X112)FOLDOVER	AMERBN		000	8.1.
79-	2158	Conveyor	10 HP	CONVEYOR (30X60)	GRP		000	8.1.
79-	2161	Conveyor	30 HP	CONVEYOR (30X112)FOLDOVER	AMERBN		000	8.L
79-	2162	Conveyor	15 HP	CONVEYOR (30 X 72)	KIMBALL		000	8.1.
79-	2163	Conveyor	15 HP	CONVEYOR (30 X 72)	KIMBALL		000	8.1.
79-	2167	Conveyor	20 HP	CONVEYOR (30 X 60) STACKABLE	AMERBN		000	8.1.
79-	2168	Conveyor	20 HP	CONVEYOR (30 X 60) STACKABLE	AMERBN		000	8.1.
79-	2169	Conveyor	20 HP	CONVEYOR (30 X 60) STACKABLE	AMERBN	95-035-B	000	8.L
79-	2171	Conveyor	20 HP	CONVEYOR (30 X 60) STACKABLE	AMERBN	95-035-G	000	8.1.

79-	2178	Conveyor	15 HP	CONVEYOR (30 X 57)	GRP		000	8.L
79-	2185	Conveyor	7.5 HP	CONVEYOR (30 X 29)	GRP		000	8.1.
79-	2195	Conveyor	10 HP	CONVEYOR (24 X 60)	GRP		000	8.1.
79-	2204	Conveyor	50 HP	CONVEYOR (36 X 125) STACKABLE	KOLBERG		000	8.1.
79-	2215	Conveyor	20 HP	CONVEYOR (36 X 62) STACKABLE	AMER BN		000	8.1.
79-	2220	Conveyor	15 HP	CONVEYOR (30 X 54)	GRP		000	8.1.
79-	2221	Conveyor	50 HP	CONVEYOR (36X112)FOLDOVER	AMERBN	97-015-B	000	8.1.
79-	2222	Conveyor	50 HP	CONVEYOR (36 X 112)FOLDOVER	AMERBN	97-015-D	000	8.1.
79-	2223	Conveyor	50 HP	CONVEYOR (36 X 112)FOLDOVER	AMERBN	97-015-A	000	8.1.
79-	2224	Conveyor	50 HP	CONVEYOR (36 X 112)FOLDOVER	AMER BN	97-015-E	000	8.1.
79-	2225	Conveyor	60 HP	CONVEYOR (36 X 112)FOLDOVER	AMERBN	97-015-C	000	8.1.
79-	2226	Conveyor	7.5 HP	CONVEYOR (36 X 30)	GRP		000	8.1.

Class	No.	Group	Capacity	Description	Make	Serial No	NSPS	AO
79-	2227	Conveyor	7.5 HP	CONVEYOR (30 X 30)	GRP		000	8.1.
79-	2228	Conveyor	20 HP	CONVEYOR (36X42)	KIMBALL		000	8.1.
79-	2232	Conveyor	7.5 HP	CONVEYOR (30X17)	GRP		000	8.1.
79-	2236	Conveyor	15 HP	CONVEYOR (30 X 47) STACKABLE	KIMBALL		000	8.1.
79-	2237	Conveyor	15 HP	CONVEYOR (30 X 47) STACKABLE	KIMBALL		000	8.1.
79-	2238	Conveyor	15 HP	CONVEYOR (30 X 47) STACKABLE	KIMBALL		000	8.1.
79-	2244	Conveyor	15 HP	CONVEYOR (30 X 60)	GRP		000	8.1.
79-	2245	Conveyor	20 HP	CONVEYOR (36 X 62) W/SCALE	AMER BN		000	8.L
79-	2269	Conveyor	20 HP	CONVEYOR (36 X 40)	KIMBALL		000	8.1.
79-	2270	Conveyor	20 HP	CONVEYOR (36 X 60) STACKABLE	KIMBALL	7173	000	8.1.
79-	2271	Conveyor	20 HP	CONVEYOR (36 X 60) STACKABLE	KIMBALL	7174	000	8.1.
79-	2277	Conveyor	25 HP	CONVEYOR (36 X 60) W/SCALE	KIMBALL	7182	000	8.1.
79-	2286	Conveyor	20 HP	CONVEYOR (36 X 60) STACKABLE	KIMBALL	67438	000	8.1.
79-	2287	Conveyor	20 HP	CONVEYOR (36 X 60) STACKABLE	KIMBALL	67439	000	8.1.
79-	2288	Conveyor	20 HP	CONVEYOR (36 X 60) STACKABLE	KIMBALL	67440	000	8.1.
79-	2291	Conveyor	40 HP	CONVEYOR (36X107)	CARTER		000	8.1.
79-	2292	Conveyor	25 HP	CONVEYOR (36X107)	CARTER		000	8.1.
79-	2297	Conveyor		CONVEYOR (42 X 60)	KIMBALL		000	8.1.
80-	2031	Conveyor	25 HP	CONVEYOR (24X100)	KOLMAN		000	8.1.
80-	2120	Conveyor	40 HP	CONVEYOR STACKER (36 X 125)	IDEAL		000	8.1.
80-	2176	Conveyor	50 HP	CONVEYOR (30 X 120) STACKER	AMER BN		000	8.1.
80-	2183	Conveyor	30 HP	CONVEYOR (30 X 100) STACKER	GERYSTON	>FI330S100-	000	8.1.
80-	2231	Conveyor	60 HP	CONVEYOR (36 X 125) STACKER	AMER BN	96-108-XLS	000	8.1.
80-	2031A	Conveyor	3 HP	CONVEYOR-MOTOR (TRAVEL)			000	8.1.
80-	2120A	Conveyor	3 HP	CONVEYOR-MOTOR (TRAVEL)			000	8.1.

CHANGES SINCE LAST UPDATE:

## Appendix B

### Geneva Rock - Hansen/Lehi FUGITIVE DUST CONTROL PLAN

#### INTRODUCTION

This Fugitive Dust Control Plan (FDCP) describes the procedures implemented by Geneva Rock Products (GRP) to minimize emission from aggregate processing operations. Implementation of an effective FDCP is a condition of the Approval Orders (AO's) issued by the Utah Division of Air Quality (UDAQ). This FDCP replaces and supercedes corresponding requirements in the AO.

#### FUGITIVE DUST CONTROL MEASURES

The liberal application of water is the primary fugitive dust control measure. Aggregate materials are wetted to maintain an average 4.0% moisture content during all transfer and processing operations. Personnel visually monitor the operations and implement control measures whenever fugitive dust becomes excessive. Personnel apply liberal quantities of water to sources of fugitive dust whenever a visible plume rises more than four feet (4') above the point of generation. GRP believes this approach will effectively control emissions of particulate matter (PM<sub>10</sub>) and preclude generation of excessive opacity.

The specific control measures utilized by GRP are as follows:

1. Drilling and Blasting (R307-309-4 (1)(g) Drilling, blasting and pushing operations) Description: Drilling and basting is necessary to loosen the aggregate for removal by bulldozers and/or other heavy equipment  
Control Measures: Blasting is prohibited when:  
A. "No-Burn" order in effect for wood burning; or.  
B. Average wind speed exceeds 15.0 miles per hour.  
Records: Date of each blasting operation.
2. Mining and Excavation (R307-309-4 (1)(i) Earth moving and excavation)  
Description: Raw aggregate materials are removed from the sand and gravel quarry using bulldozers, front-end loaders, draglines, scrapers, backhoes, and other heavy equipment.  
Control Measures: Fugitive dust is controlled by water spray whenever a visible dust plume rises more than four feet (4') above the point of generation.  
Records: Hours of bulldozer operation per month and per rolling 12-months.
3. Loader Transfers (R307-309-4 (1)(e) Material loading and dumping)  
Description: Front-end loaders are used to transfer materials to and from excavations, storage piles, feed hoppers, and trucks.  
Control Measures: Loaders will minimize drop distance as small as practical. Whenever water is added at any point in the process all of the downstream processes benefit. Water spray or other dust suppression technology shall be installed and operated whenever a visible dust plume rises more than four feet (4') above the point of generation.  
Records: Date, time and location of water added.
4. Screening and Crushing (R307-309-4 (1)(c) Material processing)

Description: Raw materials are processed through a variety of screens and crushers to produce aggregate of the desired size and type.

Control Measures: Whenever water is added at any point in the process all of the downstream processes benefit. Water spray or other dust suppression technology shall be installed and operated whenever a visible dust plume rises more than four feet (4') above the point of generation.

Records: Total aggregate production per month and per rolling 12-months.

5. Conveyor Transfers (R307-309-4 (1)(b) Material handling and transfer)

Description: Conveyors are used to transfer materials to and from feed hoppers, screens, crushers, storage piles, and delivery trucks. (Note: Conveyors are an effective technique to minimize dust from material handling operations.)

Control Measures: Whenever water is added at any point in the process all of the downstream processes benefit. Water spray or other dust suppression technology shall be installed and operated whenever a visible dust plume rises more than four feet (4') above the point of generation.

Records: Date, time and location of water added.

6. Storage Piles (R307-309-4 (1)(a) Material Storage)

Description: Storage piles are needed to segregate materials of different size and grade.

Control Measures: Whenever water is added at any point in the process all of the downstream processes benefit. Water spray or other dust suppression technology shall be installed and operated whenever a visible dust plume rises more than four feet (4') above the point of generation.

Records: Date, time and location of water added.

7. Disturbed Areas (R307-309-4 (1)(j) Exposed surfaces)

Description: A portion of the site will be disturbed ground, including quarries, roads, storage piles, and process areas.

Control Measures: Fugitive dust is controlled by minimizing the disturbed area and by water spray whenever a visible dust plume rises more than four feet (4') above the point of generation. Disturbed areas quickly lose their fugitive dust generating potential when the disturbing activity is stopped.

Records: Date, time and location of water added.

8. Unpaved Roads (R307-309-4 (1)(d) Road ways and yard areas)

Description: Haul trucks and front-end loaders travel on unpaved roads and work areas.

Control Measures: All unpaved roads and other unpaved operational areas that are used by mobile equipments shall be water sprayed and/or chemically treated to control fugitive dust. Control is required at all times (24 hours per day) for the duration of operations. Water application shall be completed whenever a visible dust plume rises more than four feet (4') above the point of generation.

Records: Date, time and location of water added.

9. Additional dust control measures are utilized by GRP, including:

- A. Distances traveled on unpaved roads are minimized when practical;
- B. Speed on unpaved roads is limited to 15 miles per hour;
- C. Roads are graded, compacted, and chemically treated when needed;
- D. Conveyors are substituted for trucks and loaders when practical; and

- E. Roads are paved when practical.
10. Records: Records of water and chemical treatment shall be kept for all periods when the facility is in operation. The records shall include the following:
- A. Date;
  - B. Chemical treatment made, dilution ratio, and quantity;
  - C. Number of water applications and quantity; and
  - D. Approximate amount of rainfall, if any.
- All records specified in this FDCP shall be made available to the Executive Secretary upon request and shall include a period of two years ending with the date of the request.
11. Paved Roads (R307-309-4(1)(d) Road ways and yard areas)  
Description: Dust may become air borne when disturbed by tires and by air currents from moving vehicles. (Note: Paving is an effective technique to minimize dust emissions from travel surfaces.)  
Control Measures: All paved roads shall be swept and/or watered to control fugitive dust. Control is required at all times (24 hours per day) for the duration of operations. Sweeping or watering shall be completed whenever a visible dust plume rises more than four feet (4') above the point of generation. Additional dust control measures are utilized by GRP, including:
- A. Speed on paved roads is limited to 30 miles per hour.
  - B. Loaded trucks are covered in accordance with the Utah Tarp Law.
  - C. Spills of dust forming debris are cleaned-up promptly.
  - D. Records: Date, time, and location of sweeping and water added.
12. FUGITIVE DUST REGULATIONS  
The facility shall abide by all applicable requirements of UAC R307-309 for non-attainment area fugitive dust requirements, as follows:
- R307-309. Davis, Salt Lake and Utah Counties, Ogden City and Any Nonattainment Area for PM10: Fugitive Emissions and Fugitive Dust.
- R307-309-1. Applicability and Definitions.
- (1) Applicability. R307-309 applies to all sources of fugitive dust and fugitive emissions located in Davis, Salt Lake and Utah Counties, Ogden City, and any nonattainment area for PM10, except as specified in (2) below. Any source located in those areas for which limitations for fugitive dust or fugitive emissions are assigned pursuant to R307-401 is subject to R307-309 on May 4, 1999, unless the source has an operating permit issued under R307-415 prior to that date. If the source has an operating permit, the source is subject to R307-309 on the date of permit renewal or permit reopening as specified in R307-415, whichever occurs first.
  - (2) Exemptions.
    - (a) The provisions of R307-309 do not apply to agricultural or horticultural activities.
    - (b) Any source which is subject to R307-305-2 through 7 or R307-307 is exempt from all provisions of R307-309 except for R307-309-4.
    - (c) Any source regulated by R307-205-5 or R307-205-6 is exempt from all provisions of R307-309 except for R307-309-4.
  - (3) The following additional definitions apply to R307-309:
    - "Material" means sand, gravel, soil, minerals or other matter which may create fugitive dust.
    - "Road" means any public or private road.
- R307-309-2. Fugitive Emissions.  
Fugitive emissions from any source shall not exceed 15% opacity.

**R307-309-3. General Requirements for Fugitive Dust.**

(1) Opacity caused by fugitive dust shall not exceed: (a) 10% at the property boundary; and (b) 20% on site unless an approval order issued under R307-401 or a dust control plan specifies a lower level; except when the wind speed exceeds 25 miles per hour and the owner or operator is taking appropriate actions to control fugitive dust. If the source has a dust control plan approved by the executive secretary, control measures in the plan are considered appropriate. Wind speed may be measured by a hand-held anemometer or equivalent device.

(2) Any source with a dust control plan approved by the executive secretary prior to March 4, 1999, shall review and revise the plan in accordance with R307-309-4 below. The revised plan shall be submitted to the executive secretary no later than May 4, 1999.

**R307-309-4. Fugitive Dust Control Plan.**

(1) Any person owning or operating a new or existing source of fugitive dust, including storage, hauling or handling operations or engaging in clearing or leveling of land one-quarter acre or greater in size, earthmoving, excavation, or movement of trucks or construction equipment over cleared land one-quarter acre or greater in size or access haul roads shall submit a plan to control fugitive dust to the executive secretary no later than 30 days after the source becomes subject to the rule. The plan shall address fugitive dust control strategies for the following operations as applicable:

- (a) Material Storage;
  - (b) Material handling and transfer;
  - (c) Material processing;
  - (d) Road ways and yard areas;
  - (e) Material loading and dumping;
  - (f) Hauling of materials;
  - (g) Drilling, blasting and pushing operations;
  - (h) Clearing and leveling;
  - (i) Earth moving and excavation;
  - (j) Exposed surfaces;
  - (k) Any other source of fugitive dust.
- (2) Strategies to control fugitive dust may include:
- (a) Wetting or watering;
  - (b) Chemical stabilization;
  - (c) Enclosing or covering operations;
  - (d) Planting vegetative cover;
  - (e) Providing synthetic cover;
  - (f) Wind breaks;
  - (g) Reducing vehicular traffic;
  - (h) Reducing vehicular speed;
  - (i) Cleaning haul trucks before leaving loading area;
  - (j) Limiting pushing operations to wet seasons;
  - (k) Paving or cleaning road ways;
  - (l) Covering loads;
  - (m) Conveyor systems;
  - (n) Boots on drop points;
  - (o) Reducing the height of drop areas;
  - (p) Using dust collectors;
  - (q) Reducing production;
  - (r) Mulching;
  - (s) Limiting the number and power of blasts;

- (t) Limiting blasts to non-windy days and wet seasons;
- (u) Hydro drilling;
- (v) Wetting materials before processing;
- (w) Using a cattle guard before entering a paved road;
- (x) Washing haul trucks before leaving the loading site; or
- (y) Terracing.

(3) Each source shall comply with all provisions of the fugitive dust control plan as approved by the executive secretary.

R307-309-5. Storage, Hauling and Handling of Aggregate Materials.

Any person owning, operating or maintaining a new or existing material storage, handling or hauling operation shall prevent, to the maximum extent possible, material from being deposited onto any paved road other than a designated deposit site. Any such person who deposits materials which may create fugitive dust on a public or private paved road shall clean the road promptly.

R307-309-6. Construction and Demolition Activities.

Any person engaging in clearing or leveling of land with an area of one-quarter acre or more, earthmoving, excavating, construction, demolition, or moving trucks or construction equipment over cleared land or access haul roads shall prevent, to the maximum extent possible, material from being deposited onto any paved road other than a designated deposit site. Any such person who deposits materials which may create fugitive dust on a public or private paved road shall clean the road promptly.

R307-309-7. Roads.

(1) Any person responsible for construction or maintenance of any existing road or having right-of-way easement or possessing the right to use the same whose activities result in fugitive dust from the road shall minimize fugitive dust to the maximum extent possible. Any such person who deposits materials which may create fugitive dust on a public or private paved road shall clean the road promptly.

(2) Unpaved Roads.

(a) When unpaved roads have an average daily traffic volume of less than 150 vehicle trips per day, averaged over a consecutive 5-day period, fugitive dust shall be minimized to the maximum extent possible.

(b) When unpaved roads have an average daily traffic volume of 150 vehicle trips per day or greater, averaged over a consecutive 5 day period, control techniques shall be used which are equal to or better than 2-inch bituminous surface.

(c) Any person responsible for construction or maintenance of any new or existing unpaved road shall prevent, to the maximum extent possible, the deposit of material from the unpaved road onto any intersecting paved road during construction or maintenance. Any person who deposits materials which may create fugitive dust on a public or private paved road shall clean the road promptly.

KEY: air pollution, dust\*

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