Section 3

Application Summary

The <u>Application Summary</u> shall include a brief description of the facility and its process, the type of permit application, the applicable regulation (i.e. 20.2.72.200.A.X, or 20.2.73 NMAC) under which the application is being submitted, and any air quality permit numbers associated with this site. If this facility is to be collocated with another facility, provide details of the other facility including permit number(s). In case of a revision or modification to a facility, provide the lowest level regulatory citation (i.e. 20.2.72.219.B.1.d NMAC) under which the revision or modification is being requested. Also describe the proposed changes from the original permit, how the proposed modification will affect the facility's operations and emissions, debottlenecking impacts, and changes to the facility's major/minor status (both PSD & Title V).

The **Process Summary** shall include a brief description of the facility and its processes.

<u>Startup, Shutdown, and Maintenance (SSM)</u> routine or predictable emissions: Provide an overview of how SSM emissions are accounted for in this application. Refer to "Guidance for Submittal of Startup, Shutdown, Maintenance Emissions in Permit Applications (http://www.env.nm.gov/aqb/permit/app_form.html) for more detailed instructions on SSM emissions.

Roper Construction, Inc. (Roper) is applying for a new 20.2.72 NMAC air quality permit for a 125 cubic yard per hour concrete batch plant (CBP) to be operated within the county of Lincoln, state of New Mexico. The facility will be identified as Alto CBP. Regulation governing this permit application is 20.2.72.200.A(1) NMAC.

Roper Construction's Alto CBP will be located off Highway 220, near Alto, north of Ruidoso in Lincoln County, New Mexico. The exact location of the facility will be UTM Zone 13, UTM Easting 438,235, UTM Northing 3,697,950, NAD 83. The approximate location of this site is 0.35 miles east of the intersection of Highways 48 and 220 north of Ruidoso, NM in Lincoln County.

The 125 cubic yard per hour concrete batch plant (CBP) will include a feed hopper with conveyor, 4-bin cold aggregate bin, aggregate weigh batcher with conveyor, cement/fly ash split silo with baghouse for each side, cement/fly ash weigh batcher with baghouse, concrete mixer truck loading area with baghouse, and natural gas hot water heaters (3 – 199,999 Btu). The plant will be powered by commercial line power. Processed concrete will be transported from the CBP to off-site sales. Haul roads will be paved and maintained to reduce particulate emissions from truck traffic. The CBP will limit hourly processing rate to 125 cubic yards/hour and 50,000 cubic yards per year. The hours of operation are presented below in Table 3-1. Daily throughput per month is presented in Table 3-2. Hot water heaters will be permitted to operate 8760 hours per year.

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TABLE 3-1: CBP Plant Hours of Operation (MST)

	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	1	0	0	0
6:00 AM	0	0	1	1	1	1	1	1	1	1	0	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	0	1	1	1	1	1	1	1	1	0	0
6:00 PM	0	0	0	1	1	1	1	1	1	0	0	0
7:00 PM	0	0	0	0	0	0	0	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
Total	10	10	12	14	14	14	14	14	14	12	10	10

TABLE 3-2: CBP Daily Throughput per Month

Months	Cubic Yards Per Day				
November - February	450				
March, October	625				
April, September	625				
May - August	750				

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Alto CBP

Operations will follow the guidelines issued by the department "Air Quality Permitting Guidelines for Night Operations of Crushing and Screening Plants, Hot Mix Asphalt Plants, and Concrete Batch Plants" (Ver.08/14/06). Nighttime conditions acceptable to Roper Construction, Inc. include:

Construction and Operation

The permittee shall install data logger(s) capable of continuously recording differential pressure measured by magnahelic gauges or equivalent differential pressure gauges installed on the Truck Loading Baghouse (Unit 7b). The permittee shall install differential pressure gauges for each silo baghouse (Units 9b and 10b).

Monitoring

The permittee shall, during nighttime loading of the Cement/Fly Ash Split Silo (Units 9 and 10), monitor the differential pressure across either the Cement or Fly Ash Silo Baghouse (Units 9b and 10b) by the use of a differential pressure gauge to ensure it is within the manufacturers or facility determined specified operating range. One reading shall be taken during the silo loading operation.

The permittee shall, during nighttime operation of the plant continuously monitor and record the differential pressure across the Drum Dryer/Mixer Baghouse (Unit 18) by the use of a differential pressure gauge with a data recording system to ensure it is within the manufacturers or facility determined specified operating range.

Recordkeeping

During night operation, the permittee shall record, by the use of a data logger, a continuous record of the differential pressure across Truck Loading Baghouse (Unit 7b).

During silo loading of the Cement/Fly Ash Split Silo (Units 9, 10), the operating baghouse (Units 9b or 10b) differential pressure shall be recorded once.

Routine or predictable emissions during Startup, Shutdown, and Maintenance (SSM)

No SSM emissions are predicted for this permit application. All control systems will be operational prior to the start or shutdown of concrete production. Maintenance will be performed during period with no production.

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