



Corporate Environmental Affairs

June 23, 2015

Oklahoma Water Resources Board
3800 N. Classen
Oklahoma City, OK 73118
(405) 530-8800

**RE: Consumptive Water Use Report – Quarter 1, 2015
Mine L.E.-1565 – Unimin Corporation – Roff Facility**

Dear Sir or Madam:

Enclosed please find Unimin's consumptive water use report for the first quarter of 2015. As noted on the attached worksheet, the plant remains below our allocated equal proportionate share.

If you have any questions or require any additional information, please contact myself or Don Russell at (580) 456-7772.

Respectfully,

A handwritten signature in black ink, appearing to read "R. Amiri Alexander".

R. Amiri Alexander
Quality Control / Mine Supervisor

Attachments

CC: Plant
IRO

Consumptive Use of Pitwater Worksheet

Enter Values in Yellow

Pit Groundwater Volume	
1	Total volume of water pumped from the producing mine pit(s)
2	Volume of precipitation that falls onto the surface of water in the producing mining pit(s)
3	Portion of total precipitation that flows over the land surfaces that drains into the mine pit water
4	Other non-pit waters pumped from the producing mine pit
5	Add lines 2 through 4
6	Pit Groundwater Volume (Line 1 - Line 5)

Defined Elements of Consumptive Use

7	Volume of pit water that is driven off (by drying) the mined material transported off the mine site
8	Volume of pit water that is carried away with the mined material transported off the mining site (shipped)
9	Volume of pit water that evaporates from the producing mine pit, process water ponds, and lined ponds (excluding structures used for augmentation)
10	Volume of pit water that is used for other beneficial uses off the mine site
11	Defined Elements of Consumptive Use of Pit Groundwater (add Lines 7 through 10)

Pit Groundwater Balance

12	Line 6 minus Line 11
13	Groundwater Augmentation (Volume of pit groundwater returned to the groundwater basin or sub basin)
14	Stream Augmentation (Volume of pit groundwater discharged to a definite stream, during flow conditions that are less than or equal to 50% exceedance or median historic flows.
15	Precipitation & Run-off (Volume of precipitation and surface run-off into a recharges pit or holding pond used for augmentation)
16	Additional Discharge (Volume of pit groundwater discharged to a definite stream, not meeting stream augmentation credit criteria
17	Recycled Pit Groundwater (Volume of pit groundwater returned to a mine pit or holding basin not included on lines 7 through 10)
18	Other Non-Consumptive Losses (Including pit groundwater returned to the land surface from which surface runoff flows into a mine pit, and other losses not included in lines 7 through 10
19	Add lines 13 through 18
20	Other Consumptive Use (adjusted) Line 12 minus 19

Total Reported Consumptive Use Of Pit

21	Total Reported Consumptive Use Of Pit (add Line 11 and Line 20)
	Facility's Equal Proportionate Share (EPS)

Amount (gallons)

11,274,700
9,574,344
0
0
9,574,344
1,700,356

Amount (gallons)

3,148,754
0

ASHRAE Evaporation Model

A:	95	(in/hr)
B:	37.4	(in-hr)
V:	5	(in-hr)
Pw:	0.69	(in-hr)
Pa:	0.522	(in-hr)
Hw:	970.4	(hr)
Evap Area:	10	(acres)

Tons Mined: 262,931 % Moisture 5.0

CREDITS

-2,006,165
0
0
0
0
-2,006,165

Amount (gallons)

1,700,356
62,693,815

at 0.2 wet-foot for 962 acres