

Consumptive Use of Pitwater Worksheet Annual 2021

Revised

Pit Groundwater Volume		Amount	(gallons)				
1	Total volume of water pumped from the producing mine pit(s)	1,673,402,400					
2	Volume of precipitation that falls onto the surface of water in the producing mining pit(s)	161,578,502					
3	Portion of total precipitation that flows over the land surfaces that drains into the mine pit water	320,998,419		Area of Pit:	116	(acres)	Rainfall: 43 (inches)
4	Other non-pit waters pumped from the producing mine pit	143,360,624		Area of Watershed Drainage:	298	(acres)	Weighted CN: 78
5	Add lines 2 through 4	625,937,546		Retention Before Runoff (s):	2.9		Runoff: 40.06411
6	Pit Groundwater Volume (Line 1 - Line 5)	1,047,464,854		Area of Watershed Drainage Kite:	89		Weighted CN Kite: 66
				Retention Before Runoff (s) Kite:	5.2		Runoff: 37.68902
Defined Elements of Consumptive Use		Amount	(gallons)				
7	Volume of pit water that is driven off (by drying) the mined material transported off the mine site	13,029,337		Tons Mined:	1,087,303	% Moisture	5.0
8	Volume of pit water that is carried away with the mined material transported off the mining site (shipped)	0					
9	Volume of pit water that evaporates from the producing mine pit, process water ponds, and lined ponds (excluding structures used for augmentation)	26,034,483		ASHRAE Evaporation Model	A:	95	
10	Volume of pit water that is used for other beneficial uses off the mine site				B:	37.4	
11	Defined Elements of Consumptive Use of Pit Groundwater (add Lines 7 through 10)	39,063,820			V:	5	(ml/hr)
					Pw:	0.69	(in-Hg)
					Pa:	0.522	(in-Hg)
					Hv:	970.4	(Btu/lb)
					Evap Area:	10	(acre)
Pit Groundwater Balance		Amount	(gallons)				
12	Total groundwater from pit	1,008,401,035					
13	Groundwater Augmentation (Volume of pit groundwater returned to the groundwater basin or sub basin)	0					
14	Stream Augmentation (Volume of put groundwater discharged to a definite stream, during flow conditions that are less than or equal to 50% exceedance or median historic flows.	0					
15	Precipitation & Run-off (Volume of precipitation and surface run-off into a recharge pit or holding pond used for augmentation)	0					
16	Recycled Pit Groundwater (Volume of pit groundwater returned to a mine pit or holding basin not included on lines 7 through 10)	1,008,401,035					
17	Other Non-Consumptive Losses (Including pit groundwater returned to the land surface from which surface run-off flows into a mine pit, and other losses not included in lines 7 through 10)	0					
18	Add lines 13 through 18	1,008,401,035					
19	Other Consumptive Use (adjusted) Line 12 minus 18	0					
Total Reported Consumptive Use Of Pit		Amount	(gallons)				
21	Total Reported Consumptive Use Of Pit (add Line 11 and Line 19)	39,063,820				119.9	acre-feet
	Facility's Equal Proportionate Share (EPS)	97,559,917		at	0.2	acre-feet	for 1,497 acres

RECEIVED

FEB 07 2023

Oklahoma Water Resources Board