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2019 Coal Combustion Product (CCP) Production & Use Survey Report

Beneficial Utilization versus Production Totals (Short Tons)

2019 CCP Categories	Fly Ash	Bottom Ash	Boiler Slag	FGD Gypsum	FGD Material Wet Scrubbers	FGD Material Dry Scrubbers	FGD Other	FBC Ash	CCP Production / Utilization Totals
Total CCPs Produced by Category	29,319,239	9,150,680	965,138	22,975,581	6,217,129	3,707,974	18,428	6,293,721	78,647,890
Total CCPs Used by Category	17,768,235	2,923,586	697,001	13,285,876	359,529	90,346	0	5,882,468	41,007,041
1. Concrete/Concrete Products /Grout	12,604,878	332,036	0	95,090	0	10,300	0	0	13,042,304
2. Blended Cement/ Feed for Clinker	2,556,358	910,914	65,758	1,464,262	0	0	0	3,442	5,000,734
3. Flowable Fill	102,196	0	0	0	0	0	0	0	102,196
4. Structural Fills/Embankments	501,668	532,676	67,104	617,122	0	0	0	0	1,718,570
5. Road Base/Sub-base	154,822	105,869	0	0	0	0	0	0	260,690
6. Soil Modification/Stabilization	76,239	126,719	0	3,911	0	0	0	0	206,869
7. Mineral Filler in Asphalt	4,598	4,711	3,831	0	0	94	0	0	13,234
8. Snow and Ice Control	0	73,720	10,114	0	0	0	0	0	83,834
9. Blasting Grit/Roofing Granules	0	362,281	245,601	0	0	0	0	0	607,883
10. Mining Applications	17,282	0	0	0	0	0	0	5,831,652	5,848,935
11. Gypsum Panel Products (formerly Wallboard)	0	0	0	9,688,345	82,703	0	0	0	9,771,048
12. Waste Stabilization/Solidification	604,222	57,689	0	16,503	0	11,858	0	47,374	737,646
13. Agriculture	0	2,449	0	572,399	0	59,966	0	0	634,814
14. Aggregate	63,609	137	0	0	0	0	0	0	63,745
15. Oil/Gas Field Services	152,053	436	0	0	0	8,128	0	0	160,617
16. CCR Pond Closure Activities	720,411	357,558	304,592	713,573	276,826	0	0	0	2,372,960
17. Miscellaneous/Other	209,898	56,391	0	114,671	0	0	0	0	380,960

Summary Utilization to Production Rate

CCP Categories	Fly Ash	Bottom Ash	Boiler Slag	FGD Gypsum	FGD Material Wet Scrubbers	FGD Material Dry Scrubbers	FGD Other	FBC Ash	CCP Utilization Total
Totals by CCP Type/Application	17,768,235	2,923,586	697,001	13,285,876	359,529	90,346	0	5,882,468	41,007,041
Category Use to Production Rate (%)	60.60%	31.95%	72.22%	57.83%	5.78%	2.44%	0.00%	93.47%	52.14%
2019 Cenospheres Sold (Pounds)	943,603	Data in this survey represents 152 GW of Name Plate rating of the total industry wide approximate 236 GW capacity based on EIA's July 2019 Electric Power Monthly.							