

विधान सभा प्रश्न

विभाग का नाम	:	पर्यावरण, विज्ञान एवं प्रौद्योगिकी
प्रश्न संख्या तारांकित	:	4910
उत्तर की तिथि	:	08-03-2022
विषय	:	वायु गुणवत्ता
प्रश्नकर्ता का नाम	:	श्री संजय अवस्थी (अर्की)
सम्बन्धित मंत्री	:	मुख्य मंत्री

	प्रश्न	उत्तर
(क)	क्या मुख्य मन्त्री बतलाने की कृपा करेंगे कि:- गत तीन वर्षों में दिनांक 01.02.2022 तक माहवार अंबुजा सीमेंट प्लांट और अल्ट्राटेक सीमेंट प्लांट की परिवेशी वायु गुणवत्ता क्या है;	(क), (ख), (ग) तथा (घ) सूचना सभा पटल पर रख दी गई है।
(ख)	इस अवधि में क्या इसकी परिधि में आने वाले गांवों पर अंबुजा सीमेंट लिमिटेड और अल्ट्राटेक सीमेंट ने वायु प्रदूषण के प्रभाव का आकलन करने के लिए कोई सर्वेक्षण करवाया है;	
(ग)	यदि हां, तो माहवार उसके आंकड़े दें व इन दोनों सीमेंट संयंत्रों में कितने हिमाचली और गैर हिमाचली कार्यरत हैं; और	
(घ)	क्या कोई हिमाचली शीर्ष प्रबन्धन स्तर पर कार्यरत है; यदि हां, तो ब्यौरा दें?	

तारांकित विधान सभा प्रश्न संख्या 4910 जोकि श्री संजय अवरथी (अर्की) द्वारा वायु गुणवत्ता बारे पूछा गया है, से सम्बन्धित सूचना:-

- (क) सीमेंट प्लांट के लिये माहवार राष्ट्रीय परिवेशी वायु गुणवत्ता मानक निर्धारित नहीं है परन्तु राष्ट्रीय परिवेशी वायु गुणवत्ता मानक 2009 की अधिसूचना के अनुसार केवल आठ घंटे के आधार पर, दैनिक एवं वार्षिक मापदण्ड निर्धारित है। हिमाचल प्रदेश राज्य प्रदूषण नियन्त्रण बोर्ड द्वारा अंबुजा सीमेंट प्लांट और अल्ट्राटेक सीमेंट प्लांट के दैनिक आंकड़ों के अनुसार गणना किये गये मासिक औसत वायु गुणवत्ता के आंकड़े अनुलग्नक 1 व अनुलग्नक 2 पर संलग्न हैं ।
- (ख) इस अवधि में हिमाचल प्रदेश राज्य प्रदूषण नियन्त्रण बोर्ड द्वारा अंबुजा सीमेंट प्लांट और अल्ट्राटेक सीमेंट प्लांट की परिधि में गांवों पर वायु प्रदूषण के प्रभाव का आकलन करने के लिए कोई सर्वेक्षण नहीं करवाया गया है परन्तु बोर्ड की जाँच व्यवस्था से प्रदूषण के विभिन्न मापदण्डों को मापा जाता है ।
- (ग) दोनों सीमेंट संयंत्रों में कार्यरत हिमाचली व गैर-हिमाचली का विवरण निम्न प्रकार से है:-

संयंत्र का नाम	कुल	हिमाचली	गैर हिमाचली
अंबुजा सीमेंट	617	507	110
अल्ट्राटेक सीमेंट	1195	674	521

- (घ) उपरोक्त वर्णित संयंत्रों में शीर्ष कार्यकारी प्रबन्धन के पदों पर कार्यरत हिमाचलियों का विवरण:-

संयंत्र का नाम	शीर्ष कार्यकारी प्रबन्धन पर कार्यरत हिमाचली
अंबुजा सीमेंट	236
अल्ट्राटेक सीमेंट	35

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## Monthly CAAOMS Average Air Quality Values of Ambuja Cement Plant (Suli Plant)

Table -01 (April, 2019 – January, 2022)

Month	Suli_CAAQMS-PM10 - (µg/m3)	Suli_CAAQMS-PM2.5 - (µg/m3)	Suli_CAAQMS-SO2 - (µg/m3)	Suli_CAAQMS-NOx - (µg/m3)
Apr-19	36.16	21.85	18.32	27.36
May-19	4.46	21.45	18.05	12.13
Jun-19	31.07	10.69	19.34	14.59
Jul-19	53.79	5.42	16.92	19.14
Aug-19	36.16	10.88	21.42	6.87
Sep-19	38.12	11.43	14.13	10.84
Oct-19	31.83	12.73	12.15	11.28
Nov-19	40.57	11.44	16.81	11.28
Dec-19	29.58	25.32	16.32	11.18
Jan-20	53.85	20.16	18.01	10.90
Feb-20	51.00	32.49	7.14	4.45
Mar-20	41.74	17.83	8.12	8.36
Apr-20	31.10	16.90	8.15	14.3
May-20	31.18	24.44	8.34	14.45
Jun-20	30.90	9.71	6.27	14.12
Jul-20	31.12	15.42	6.98	13.77
Aug-20	30.65	14.93	6.94	9.93
Sep-20	31.15	15.55	6.00	17.12
Oct-20	31.20	15.37	6.45	16.17
Nov-20	28.30	15.92	8.93	10.61
Dec-20	27.61	15.53	14.69	7.82
Jan-21	31.06	14.96	17.90	2.14
Feb-21	30.76	14.07	NA	3.90
Mar-21	30.77	15.34	14.82	11.74
Apr-21	31.6	16.03	15.63	14.12
May-21	31.62	15.56	14.99	13.95
Jun-21	32.48	15.39	14.69	13.83
Jul-21	32.03	15.45	13.68	13.12
Aug-21	34.42	17.73	7.21	8.29
Sep-21	33.24	17.74	27.89	8.97
Oct-21	29.13	18.30	15.70	5.40
Nov-21	3.60	17.40	15.92	7.60
Dec-21	44.00	22.88	15.70	43.70
Jan-22	43.47	21.90	15.82	44.58

**Monthly CAAOMS Average Air Quality values of Ambuja Cement Plant (Rauri Plant)**

**Table -02(April, 2019 – January, 2022)**

<b>Month</b>	<b>Rauri_CAAQMS- PM10 - (µg/m3)</b>	<b>Rauri_CAAQMS- PM2.5 - (µg/m3)</b>	<b>Rauri_CAAQMS- SO2 - (µg/m3)</b>	<b>Rauri_CAAQMS- NOx - (µg/m3)</b>
Apr-19	40.02	13.72	5.23	5.00
May-19	39.33	3.75	4.94	5.00
Jun-19	39.53	13.89	5.21	5.01
Jul-19	39.42	13.79	6.34	5.03
Aug-19	39.50	13.99	7.93	4.99
Sep-19	39.87	13.93	8.43	5.01
Oct-19	43.93	13.77	11.88	5.03
Nov-19	31.40	13.28	4.21	4.99
Dec-19	29.53	14.20	3.00	5.03
Jan-20	29.57	13.89	7.19	5.00
Feb-20	29.75	13.62	7.06	5.01
Mar-20	29.59	13.04	2.60	5.02
Apr-20	29.78	13.33	3.47	5.01
May-20	29.99	13.77	6.53	5.05
Jun-20	29.53	13.75	6.47	5.02
Jul-20	29.72	13.40	3.42	5.03
Aug-20	29.53	13.61	2.69	5.03
Sep-20	29.88	13.56	4.58	4.99
Oct-20	29.84	13.39	3.91	5.04
Nov-20	30.01	13.49	2.66	4.90
Dec-20	30.22	13.57	2.57	5.02
Jan-21	31.85	13.70	2.60	5.00
Feb-21	37.85	13.89	2.20	4.90
Mar-21	28.81	10.15	20.16	9.90
Apr-21	25.85	10.67	12.86	10.50
May-21	25.76	10.75	9.82	10.51
Jun-21	25.65	11.01	9.77	10.29
Jul-21	25.69	10.68	11.30	10.40
Aug-21	NA	NA	NA	NA
Sep-21	42.58	12.00	6.94	10.20
Oct-21	22.31	12.25	7.88	10.19
Nov-21	22.66	12.41	7.04	10.22
Dec-21	77.71	28.26	7.13	16.12
Jan-22	32.41	22.51	NA	17.94

**Monthly Manual Stations' Average Air Quality values of Ambuja Cement Plant (Suli Plant)**  
**Table -03 (April, 2019 – January, 2022)**

Month	Khata				Pacheure				Batedh			
	PM 10 (µg/m3)	PM 2.5 (µg/m3)	SO2 (µg/m3)	NOx (µg/m3)	PM 10 (µg/m3)	PM 2.5 (µg/m3)	SO2 (µg/m3)	NOx (µg/m3)	PM 10 (µg/m3)	PM 2.5 (µg/m3)	SO2 (µg/m3)	NOx (µg/m3)
Apr-19	55.67	19.67	4.56	9.14	58.14	22.59	5.70	9.31	63.38	30.41	5.50	9.50
May-19	62.70	39.97	5.79	11.35	54.94	31.31	5.24	11.33	62.09	33.49	7.09	11.84
Jun-19	52.43	27.21	4.75	13.38	46.54	29.30	4.15	11.25	66.74	36.58	6.06	12.63
Jul-19	53.09	26.91	6.69	15.44	50.83	25.97	5.15	11.66	50.97	24.33	5.96	14.11
Aug-19	67.58	31.17	6.03	14.64	66.34	37.34	5.06	15.89	45.48	18.11	3.85	10.93
Sep-19	62.72	29.50	3.80	8.50	53.49	27.47	5.06	14.51	51.15	28.21	4.68	10.43
Oct-19	48.69	29.86	7.71	13.24	45.96	30.86	4.38	9.66	51.81	32.29	5.89	13.10
Nov-19	63.31	35.24	6.16	13.59	45.33	32.79	4.75	10.39	45.48	29.30	5.68	11.43
Dec-19	61.97	34.15	6.70	14.68	64.50	33.69	5.71	10.73	64.31	29.08	5.38	11.96
Jan-20	63.63	30.33	6.13	14.85	60.88	27.95	4.23	11.4	66.57	34.59	5.48	12.04
Feb-20	68.04	30.18	6.83	15.44	65.08	30.13	4.88	11.16	67.30	30.91	5.81	12.70
Mar-20	62.80	34.90	7.40	15.88	56.20	24.94	5.20	11.73	61.04	36.30	6.08	12.93
Apr-20	<b>NA due to Covid-19 Plant shut down</b>											
May-20	49.35	33.10	5.03	8.81	53.25	29.67	4.53	8.99	56.94	32.88	6.19	11.41
Jun-20	44.95	29.98	3.58	7.47	49.16	29.12	3.66	8.40	67.57	37.54	5.16	12.29
Jul-20	66.54	35.09	5.26	11.34	49.07	22.11	3.68	8.60	66.32	36.59	5.38	15.06
Aug-20	40.06	25.66	5.90	11.93	45.39	33.64	5.35	10.89	48.00	30.24	7.24	13.90
Sep-20	74.99	36.82	6.36	15.14	64.93	32.92	5.18	10.85	59.58	24.03	5.45	10.99
Oct-20	71.73	30.99	5.06	17.36	68.20	30.59	4.14	16.00	61.56	26.24	4.01	12.56
Nov-20	68.20	30.60	5.70	12.30	47.00	31.70	4.40	10.80	63.8	29.90	5.60	12.90
Dec-20	64.06	30.70	5.64	9.81	60.63	31.30	4.50	8.40	52.58	25.94	5.65	9.36
Jan-21	69.77	30.77	6.15	14.20	60.37	28.51	4.43	11.94	67.76	33.53	5.39	11.90
Feb-21	47.40	31.50	5.60	8.60	41.70	28.90	4.40	6.50	52.40	37.80	3.90	8.00
Mar-21	60.10	28.00	5.60	10.40	56.10	26.70	3.70	7.30	64.70	34.40	5.20	10.10
Apr-21	61.56	26.81	4.20	13.43	66.39	31.21	4.01	11.70	75.87	37.44	5.06	17.20
May-21	50.31	32.42	5.04	14.09	53.57	29.43	4.51	12.36	52.21	35.18	5.71	19.43
Jun-21	54.90	35.82	5.95	11.95	51.33	34.41	3.74	7.33	59.09	41.39	6.05	13.28
Jul-21	49.84	24.33	4.86	10.49	48.89	26.91	5.04	11.94	43.25	26.55	5.86	13.25
Aug-21	61.38	30.90	5.23	11.25	64.56	33.54	5.04	11.69	57.22	30.81	4.13	11.50
Sep-21	36.90	30.40	4.40	8.70	48.70	29.60	4.40	10.70	52.80	34.80	5.20	11.60
Oct-21	54.10	35.10	6.30	13.10	37.80	27.50	4.80	10.70	57.10	27.40	6.30	14.60
Nov-21	53.50	35.89	4.78	10.56	50.51	33.36	4.38	8.00	65.88	32.15	4.89	10.94
Dec-21	63.93	27.52	5.68	12.15	55.35	20.09	3.63	12.58	75.87	37.44	5.06	17.20
Jan-22	58.83	36.31	5.69	17.46	53.48	33.65	4.20	11.94	51.34	31.13	5.39	13.38

**Monthly Manual Stations' Average Air Quality values of Ambuja Cement Plant (Rauri Plant)**  
**Table -4 (April, 2019 – January, 2022)**

Month	Rauri - 1 (village Rauri)				Rauri - 2 ( Village Sulag)				Rauri - 3 (Temple Near Township)			
	PM 10( $\mu\text{g}/\text{m}^3$ )	PM 2.5 ( $\mu\text{g}/\text{m}^3$ )	SO2 ( $\mu\text{g}/\text{m}^3$ )	NOx ( $\mu\text{g}/\text{m}^3$ )	PM 10( $\mu\text{g}/\text{m}^3$ )	PM 2.5 ( $\mu\text{g}/\text{m}^3$ )	SO2 ( $\mu\text{g}/\text{m}^3$ )	NOx ( $\mu\text{g}/\text{m}^3$ )	PM 10( $\mu\text{g}/\text{m}^3$ )	PM 2.5 ( $\mu\text{g}/\text{m}^3$ )	SO2 ( $\mu\text{g}/\text{m}^3$ )	NOx ( $\mu\text{g}/\text{m}^3$ )
Apr-19	59.80	25.42	4.38	12.88	64.08	29.06	5.00	15.00	65.69	26.25	4.25	15.53
May-19	66.35	29.93	6.13	14.25	68.87	32.71	5.38	13.00	70.71	28.49	5.50	13.63
Jun-19	60.81	20.83	4.63	12.38	58.37	22.40	5.00	13.75	64.93	26.17	4.50	14.50
Jul-19	27.54	10.73	4.40	7.60	29.01	8.49	4.67	5.67	31.04	9.06	4.60	7.40
Aug-19	37.47	4.95	3.60	10.14	39.69	4.69	5.33	13.29	41.54	5.36	5.20	14.43
Sep-19	54.19	20.10	4.75	14.00	57.15	18.85	4.50	13.63	60.01	23.13	4.38	12.88
Oct-19	61.41	14.06	4.75	12.63	65.44	17.08	5.88	13.38	57.74	16.00	5.00	14.13
Nov-19	60.53	19.64	3.63	9.50	58.50	23.23	4.63	11.88	56.46	21.87	4.25	11.50
Dec-19	63.64	17.86	4.88	14.50	61.50	23.02	7.00	12.13	66.02	19.32	6.00	13.88
Jan-20	61.89	23.91	3.75	11.25	58.16	21.77	4.13	13.75	56.60	19.64	4.00	12.13
Feb-20	60.25	17.97	4.63	10.38	61.71	22.14	4.75	11.50	63.72	24.32	4.88	14.25
Mar-20	58.25	18.06	4.17	12.00	52.18	21.67	4.50	13.67	55.08	16.94	4.83	13.83
Apr-20	NA due to Covid-19 Plant Shutdown											
May-20	45.02	22.13	4.63	11.25	47.18	20.78	4.88	12.50	50.44	21.20	5.00	12.25
Jun-20	64.83	25.56	6.50	12.75	62.60	29.22	5.88	13.88	60.35	27.08	5.38	13.00
Jul-20	32.35	14.84	3.67	7.88	29.91	17.66	3.67	7.25	31.14	16.67	4.43	6.75
Aug-20	37.53	15.42	3.43	8.29	39.04	14.11	4.00	8.00	42.50	16.20	4.75	8.86
Sep-20	60.93	29.17	4.38	12.88	66.16	26.41	4.25	11.13	63.12	24.48	5.13	10.88
Oct-20	67.28	21.41	6.38	16.13	60.69	24.69	8.63	15.88	62.37	24.74	7.25	15.50
Nov-20	62.75	26.61	4.25	11.88	64.35	31.46	5.00	13.50	61.95	28.59	4.88	12.50
Dec-20	60.16	23.75	3.88	8.75	61.67	27.66	3.75	10.38	65.06	25.26	4.88	11.63
Jan-21	65.00	28.23	3.88	10.88	60.54	24.58	3.63	12.50	63.63	26.82	4.75	12.13
Feb-21	63.14	22.86	4.13	12.25	68.04	25.73	4.63	13.13	65.06	28.02	5.25	12.75
Mar-21	60.43	28.23	4.63	11.88	66.55	26.35	4.63	12.38	58.43	24.53	5.00	12.88
Apr-21	57.63	24.79	4.88	12.25	59.54	27.08	5.00	11.13	62.58	29.32	5.32	12.50
May-21	61.16	29.38	4.50	11.38	64.35	36.20	4.88	13.38	67.08	33.28	5.00	12.50
Jun-21	52.77	24.01	4.88	11.40	55.54	22.24	5.00	10.50	56.59	20.83	6.25	11.40
Jul-21	42.43	13.02	3.71	6.30	40.21	11.25	3.43	5.30	38.37	10.63	4.25	6.10
Aug-21	31.19	12.14	4.75	9.50	34.38	15.21	4.25	11.60	36.67	17.14	4.88	10.50
Sep-21	46.92	17.50	4.13	9.00	51.03	19.90	4.25	9.30	49.00	21.61	4.38	9.50
Oct-21	60.23	22.29	4.00	10.75	63.04	25.57	3.88	11.75	58.96	26.82	4.38	12.00
Nov-21	74.47	29.00	5.88	14.25	77.70	32.45	6.50	16.00	73.88	36.09	6.88	13.50
Dec-21	69.75	26.27	4.50	14.50	64.12	32.54	5.63	15.13	71.75	30.73	5.63	15.38
Jan-22	54.51	21.04	4.57	11.00	51.82	19.64	4.00	7.70	57.17	22.24	4.88	9.40

**Monthly Average Realtime Air Quality values of Ultratech Cement Plant Hanuman Temple  
Table -5 (April, 2019 –January, 2022)**

Month	CAAQMS_HT-PM10_Raw (µg/m3)	CAAQMS_HT-PM2.5_Raw (µg/m3)	CAAQMS_HT-SO2_Raw (µg/m3)	CAAQMS_HT-NOx_Raw (µg/m3)
Apr-19	66.39	30.89	6.56	22.21
May-19	37.91	45.58	6.34	39.41
Jun-19	32.88	43.50	6.36	44.47
Jul-19	32.77	38.99	6.28	21.51
Aug-19	32.78	37.58	6.16	21.35
Sep-19	32.83	41.09	6.68	28.08
Oct-19	33.02	45.46	6.60	37.90
Nov-19	33.15	46.55	7.05	23.58
Dec-19	33.03	42.56	6.91	24.04
Jan-20	41.66	32.49	7.13	28.26
Feb-20	39.22	32.47	6.64	42.51
Mar-20	37.17	32.50	6.52	20.32
Apr-20	35.84	32.48	0.96	20.20
May-20	37.44	32.52	1.18	20.31
Jun-20	36.00	32.50	0.97	20.43
Jul-20	35.40	32.50	1.13	20.93
Aug-20	37.16	32.53	1.18	21.58
Sep-20	34.79	32.58	1.08	20.67
Oct-20	34.14	32.74	1.15	20.29
Nov-20	33.40	32.92	2.78	24.94
Dec-20	33.32	33.05	15.12	23.53
Jan-21	35.39	33.03	18.10	32.00
Feb-21	36.14	33.13	16.64	31.42
Mar-21	37.22	33.10	18.01	25.25
Apr-21	40.86	33.15	18.43	21.64
May-21	45.12	33.14	18.80	23.06
Jun-21	46.82	33.24	0.00	24.51
Jul-21	55.52	32.92	0.00	25.41
Aug-21	60.27	32.94	0.00	25.40
Sep-21	61.05	33.01	12.11	25.22
Oct-21	59.78	33.08	12.27	73.13
Nov-21	44.86	33.23	11.69	46.51
Dec-21	38.55	33.41	11.55	37.12
Jan-22	34.19	11.51	33.57	37.16

**Monthly Average Realtime Air Quality values of Ultratech Cement PlantTownship-  
Table -6 (April, 2019 –January, 2022)**

<b>Month</b>	<b>CAAQMS_TS- PM10_Raw (µg/m3)</b>	<b>CAAQMS_TS- PM2.5_Raw (µg/m3)</b>	<b>CAAQMS_TS- SO2_Raw (µg/m3)</b>	<b>CAAQMS_TS- NOx_Raw (µg/m3)</b>
Apr-19	25.14	2.18	0	0
May-19	25.72	2.51	0	0
Jun-19	26.78	7.11	0	0
Jul-19	28.04	2.1	0	0
Aug-19	4.69	39.13	7.15	0
Sep-19	6.21	49.14	21.02	0
Oct-19	0	12.51	11.59	9.17
Nov-19	0	10.38	0	9.07
Dec-19	1.05	10.92	0	9.41
Jan-20	16.67	0.00	9.30	16.76
Feb-20	16.67	0.00	9.43	37.33
Mar-20	16.67	0.00	8.96	45.95
Apr-20	16.67	0.00	8.77	88.70
May-20	16.67	0.00	8.61	10.30
Jun-20	16.67	0.00	8.52	72.72
Jul-20	16.67	0.00	8.83	35.56
Aug-20	16.67	0.00	9.25	30.51
Sep-20	16.67	0.00	9.53	46.63
Oct-20	16.67	0.00	9.31	35.41
Nov-20	16.43	0.00	9.78	13.93
Apr-21	0.00	9.32	0.00	0.00
May-21	0.00	11.56	0.00	0.00
Jun-21	0.00	14.48	0.00	0.00
Jul-21	32.10	10.81	7.33	21.03
Aug-21	37.62	13.29	0.53	20.71
Sep-21	24.97	3.35	0.00	0.00
Oct-21	29.37	0.00	0.00	0.00
Nov-21	34.69	12.52	0.00	0.00
Dec-21	41.35	10.31	0.00	0.00
Jan-22	8.99	46.71	0	0



**Monthly Manual Stations Average Ambient Air Quality Monitoring Report of Cement Plant**  
**Table no -7 (April,2019 to January,2022)**

Month	Near Panali Camp				Near Village- Baga				Shalughat				Township			
	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>
Apr-19	56.80	25.30	12.50	19.00	62.40	41.90	11.20	17.90	66.40	31.10	11.80	20.10	49.20	21.60	9.80	14.80
May-19	43.30	26.90	12.80	21.70	43.90	26.50	12.60	20.90	44.90	25.90	12.40	21.70	47.40	28.00	12.20	19.90
Jun-19	42.90	26.50	12.60	21.10	42.80	25.50	12.40	19.70	44.00	24.90	12.50	20.90	46.80	27.00	12.40	19.40
Jul-19	42.90	26.60	12.80	19.90	42.70	25.90	12.00	18.50	44.70	24.00	12.30	20.00	46.80	26.30	12.60	18.90
Aug-19	43.00	26.40	12.50	20.00	43.40	26.10	12.20	18.10	44.70	24.20	12.30	20.10	46.90	26.50	12.80	18.70
Sep-19	43.00	26.50	12.50	20.90	42.90	25.30	12.30	19.50	44.20	24.50	12.60	20.80	46.80	26.80	12.40	17.00
Oct-19	43.20	26.60	13.00	21.10	43.40	25.80	12.60	19.60	43.90	24.20	12.60	20.60	47.00	26.60	12.70	20.00
Nov-19	44.10	26.80	13.00	21.00	44.10	25.80	12.70	19.80	44.50	24.70	12.80	20.60	46.90	26.50	12.80	20.10
Dec-19	44.40	26.50	13.00	21.00	44.40	25.90	12.90	19.90	44.70	24.70	12.80	20.70	46.90	26.50	12.90	20.20
Jan-20	44.70	27.60	13.20	21.00	45.80	26.00	13.20	19.90	46.70	26.90	13.10	20.90	47.10	28.00	13.00	19.50
Feb-20	54.10	38.50	12.30	20.90	52.30	40.40	11.20	18.30	59.80	89.30	11.90	18.40	54.20	37.70	6.20	13.00
Mar-20	60.40	44.60	12.70	19.40	57.30	39.50	8.80	15.30	64.70	46.10	12.40	18.00	54.80	38.40	5.00	8.70
Apr-20	NA due to Covid-19 Plant shutdown															
May-20	58.30	41.80	9.30	15.20	53.60	39.40	3.80	8.30	65.70	49.50	11.50	17.60	49.20	21.6	9.80	14.80
Jun-20	54.10	34.10	11.40	16.80	44.80	35.60	7.90	13.80	63.10	39.80	12.60	18.90	59.40	38.9	11.10	17.00
Jul-20	51.50	30.60	9.80	15.50	49.10	32.50	7.30	13.10	63.20	41.30	13.60	20.50	45.50	31.2	8.20	16.10
Aug-20	46.60	22.80	12.50	19.70	43.10	21.10	9.70	16.90	52.30	25.60	14.60	21.80	39.50	19.3	7.40	14.60
Sep-20	47.60	23.30	12.10	19.30	46.60	22.80	8.90	16.10	54.20	26.50	14.30	21.50	39.80	19.5	7.80	15.00

Oct-20	55.50	27.20	11.10	18.30	52.60	25.70	7.30	14.50	64.40	31.50	12.70	19.90	46.50	22.8	5.70	12.90
Nov-20	59.60	44.50	9.70	14.90	56.90	38.20	7.70	14.90	65.10	50.70	12.20	19.40	53.80	41.8	4.50	11.70
Dec-20	44.30	23.40	12.20	23.60	45.60	25.40	9.70	16.90	52.20	27.80	14.60	21.80	37.30	17.70	6.30	13.50
Jan-21	43.30	23.60	12.30	23.60	45.20	25.50	9.60	17.00	51.80	27.60	14.30	21.10	37.60	17.90	6.00	13.20
Feb-21	55.00	34.40	13.40	25.10	48.30	27.00	9.00	16.70	60.20	41.80	15.60	28.50	57.00	42.00	7.60	15.80
Mar-21	54.90	33.90	13.30	25.00	47.30	26.70	9.70	16.40	60.30	41.30	15.00	28.40	56.00	41.00	7.70	15.70
Apr-21	56.30	33.80	13.40	24.30	48.40	26.50	10.20	15.80	63.00	42.50	15.30	27.50	57.80	41.70	7.90	15.80
May-21	54.80	31.40	12.50	19.70	46.40	25.00	9.30	16.50	61.70	41.20	14.50	21.70	56.20	40.40	7.30	14.50
Jun-21	54.20	30.30	12.30	19.50	45.80	24.50	9.30	16.50	61.70	41.20	14.00	21.20	56.40	39.30	7.20	14.40
Jul-21	53.60	30.00	12.40	19.60	45.30	25.00	9.20	16.40	60.90	41.20	12.70	19.90	55.70	39.10	7.20	14.40
Aug-21	52.00	28.60	11.60	18.80	43.90	24.30	8.70	15.90	59.50	40.20	12.10	19.30	55.10	37.20	6.80	14.00
Sep-21	50.70	28.00	12.10	19.30	42.20	22.10	8.50	15.70	56.80	39.00	11.40	18.60	53.40	34.90	7.00	14.20
Oct-21	51.40	26.50	11.90	19.10	41.90	21.30	9.10	16.30	51.80	39.10	11.60	18.80	53.10	34.80	7.50	14.70
Nov-21	46.20	23.20	10.80	19.10	42.40	20.50	8.80	16.00	54.90	35.30	11.00	18.20	48.30	28.60	7.60	14.80
Dec-21	47.60	23.30	12.10	19.30	46.60	22.80	8.90	16.10	54.20	26.50	14.30	21.50	39.80	19.50	7.80	15.00
Jan-22	46.60	22.80	12.50	19.70	43.10	21.10	9.70	16.90	52.30	25.60	14.60	21.80	39.50	19.30	7.40	14.60