

**Status of Water Quality, Ambient Air Quality and
Noise Level before, during and after Durga Puja**

(2018 to 2022)



Studies conducted and reported by:

**Central Laboratory
Pollution Control Board, Assam
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Water Quality Monitoring before, during and after immersion of idols of Durga Puja

Durga Puja is one of the biggest festivals of Assam. The entire state wears a new look with festivals all around during the Puja. In this festival, devotees worship Goddess Durga through offering 'puja' to beautifully crafted idols of Goddess Durga and a few other Gods and Goddesses believed to be of her family, for five consecutive days. On the fifth day, after offering worship and completion of other rituals, the exquisitely crafted idols of goddess Durga and others are immersed in water, mainly in rivers, beels, lakes and ponds, as a part of the celebration.

Keeping the circumstances in perspective and apprehending possible contamination of water bodies due to immersion of the idols, the Pollution Control Board, Assam has been carrying out water quality monitoring at different immersion sites across the state as per the guidelines of CPCB. Moreover, the Board has also been issuing directives/guidelines regarding organizing Durga Puja in eco-friendly manner and crafting of idols using organic colours and naturally found substances.

The analytical results of the said monitoring for the year 2018, 2020, 2021, 2022 are presented station/location –wise in the following tables-

Water Quality of Brahmaputra River at Pandu Ghat Before, During and After Idol Immersion of Durga puja 2018, 2020, 2021, 2022

Parameter	Year and Day of Monitoring											
	2018			2020			2021			2022		
	BI	DI	AI	BI	DI	AI	BI	DI	AI	BI	DI	AI
	5 th Oct	19 th Oct	20 th Oct	8 th Oct	26 th Oct	27 th Oct	28 th Sep	15 th Oct	16 th Oct	21 th Sep	5 th Oct	7,9,11, 13 th Oct
DO (mg/l)	7.3	6.8	7.1	7.2	6.4	7.1	6.5	7.1	6.8	6.2	6.3	6.2
pH	7.4	7.2	7.3	7.5	7.1	7.3	7.5	7.6	7.4	7.3	7.6	7.1
Turbidity(NTU)	10	38	24	8	28	24	5	12	8	4	10	9
Cond (µS/cm)	107	111	109	110	114	108	154	160	156	150	166	163
BOD (mg/l)	0.6	2.5	2.1	2.0	2.6	2.2	2.2	2.5	2.4	2.4	2.5	2.3
COD (mg/l)	2.6	9.5	4.6	8	11.2	9.3	6.8	8.6	7.2	7	8	7.7
TDS (mg/l)	70	76	72	68	74	72	104	114	102	106	118	107
TS (mg/l)	128	306	143	124	208	168	194	212	198	42	54	48.5
Pb (mg/l)	0.02	0.02	0.02	BDL	0.03	0.02	BDL	0.08	0.03	0.1	0.38	0.10
Zn (mg/l)	0.04	0.06	0.03	0.01	0.05	0.03	0.04	0.09	0.09	0.27	0.70	0.09
Cu (mg/l)	0.01	0.01	0.01	0.01	0.01	0.01	BDL	BDL	BDL	0.03	0.36	0.11
Cr (T) (mg/l)	0.03	0.03	0.03	BDL	0.01	0.002	BDL	BDL	BDL	0.06	0.06	0.06

Note: BI – Before immersion; DI – During immersion; AI – After immersion;
BDL – Below Detectable Limit



**Water Quality of Brahmaputra River at Kasomari Ghat Before, During and After Idol
Immersion of Durga puja 2018, 2020, 2021, 2022**

Parameter	Year and Day of Monitoring											
	2018			2020			2021			2022		
	BI	DI	AI	BI	DI	AI	BI	DI	AI	BI	DI	AI
	5 th Oct	19 th Oct	20 th Oct	8 th Oct	26 th Oct	27 th Oct	28 th Sep	15 th Oct	16 th Oct	21 th Sep	5 th Oct	7,9,11, 13 th Oct
DO (mg/l)	7.5	7.1	7.2	7	6.6	6.6	8.1	6.5	6.9	7.8	7.9	7.4
pH	7.3	7.1	7.3	7.1	6.8	7.2	7.3	7.3	7.2	7.5	7.7	7.5
Turbidity(NTU)	12	40	18	10	36	22	7	9	8	6	9	8
Cond (µS/cm)	107	114	108	111	118	112	161	166	160	156	164	159
BOD (mg/l)	1.2	3.0	1.7	2.1	3.0	2.3	2.3	2.9	2.8	2.3	2.4	2.6
COD (mg/l)	4.3	9.5	6.1	8.6	14.4	10.1	7.2	9.2	8.8	6.7	7.7	8.2
TDS (mg/l)	70	84	76	68	78	72	98	106	102	96	112	107.5
TS (mg/l)	136	196	144	146	204	162	128	155	118	46	56	54
Pb (mg/l)	0.015	0.02	0.015	BDL	0.032	0.016	BDL	0.135	0.08	0.1	0.252	0.1
Zn (mg/l)	0.055	0.06	0.06	0.01	0.04	0.026	0.025	0.262	0.2	0.132	0.372	0.2785
Cu (mg/l)	0.009	0.01	0.005	0.01	0.018	0.012	BDL	BDL	BDL	0.03	0.148	0.3485
Cr (T) (mg/l)	0.018	0.06	0.038	BDL	0.018	0.004	BDL	BDL	BDL	0.06	0.06	0.06

Note: BI – Before immersion; DI – During immersion; AI – After immersion;

BDL – Below Detectable Limit

**Water Quality of Brahmaputra River at Sunsali Ghat Before, During and After Idol
Immersion of Durga puja 2018, 2020, 2021, 2022**

Parameter	Year and Day of Monitoring											
	2018			2020			2021			2022		
	BI	DI	AI	BI	DI	AI	BI	DI	AI	BI	DI	AI
	5 th Oct	19 th Oct	20 th Oct	8 th Oct	26 th Oct	27 th Oct	28 th Sep	15 th Oct	16 th Oct	21 th Sep	5 th Oct	7,9,11, 13 th Oct
DO (mg/l)	7.5	6.3	7	6.2	7.4	7	8.2	6.2	6	7.6	7	7.1
pH	6.9	7.1	7	7	6.7	7.2	7.4	7.7	7.5	7.6	7.9	7.7
Turbidity(NTU)	12	49	22	14	42	26	8	12	9	6	12	9
Cond (µS/cm)	112	120	110	114	122	116	150	198	160	142	154	149
BOD (mg/l)	2.3	2.7	2.5	2.1	2.8	2.4	2	2.6	2.6	1.8	2.6	2.3
COD (mg/l)	5.7	10.88	6.14	12.2	16	10.98	6.8	7.6	8	6.2	7.7	7.2
TDS (mg/l)	64	82	74	72	84	76	98	122	106	94	118	103.5
TS (mg/l)	168	344	193	182	264	196	122	162	116	44	48	45
Pb (mg/l)	0.015	0.03	0.018	BDL	0.016	0.01	BDL	0.081	0.027	0.1	0.1	0.1
Zn (mg/l)	0.032	0.143	0.045	0.013	0.032	0.015	0.066	0.092	0.016	0.138	0.78	0.197
Cu (mg/l)	0.009	0.074	0.009	0.009	0.062	0.028	BDL	BDL	BDL	0.03	0.148	0.09
Cr (T) (mg/l)	0.021	0.22	0.028	BDL	BDL	BDL	BDL	BDL	BDL	0.06	0.06	0.06

Note: BI – Before immersion; DI – During immersion; AI – After immersion;

BDL – Below Detectable Limit



Water Quality of Brahmaputra River at Basistha Ghat Before, During and After Idol Immersion of Durga puja 2018, 2020, 2021, 2022

Parameter	Year and Day of Monitoring											
	2018			2020			2021			2022		
	BI	DI	AI	BI	DI	AI	BI	DI	AI	BI	DI	AI
	5 th Oct	19 th Oct	20 th Oct	8 th Oct	26 th Oct	27 th Oct	28 th Sep	15 th Oct	16 th Oct	21 th Sep	5 th Oct	7,9,11, 13 th Oct
DO (mg/l)	3.1	1.8	2.8	6	6.1	6	4.2	3.8	3.6	5.2	5.8	5.9
pH	6.5	6.2	6.3	6.7	6.2	6.4	6.6	6.9	7	6.8	7.4	7.1
Turbidity(NTU)	5	13	7	8	16	10	12	22	10	6	11	11
Cond (µS/cm)	61	84	66	62	78	66	50	82	76	77	168	156
BOD (mg/l)	1.5	7	3.6	1.8	5.8	3.4	2.8	3.6	2.9	2.4	2.7	2.5
COD (mg/l)	4.27	20.4	9.61	7.7	28.8	13.1	7.8	14	8.8	8.7	9.5	8.6
TDS (mg/l)	38	56	46	42	54	48	36	52	48	54	112	102
TS (mg/l)	112	230	128	116	218	142	88	122	102	42	48	44.5
Pb (mg/l)	0.005	0.01	0.01	0	0.02	0.01	BDL	0.03	0.03	0.1	0.1	0.1
Zn (mg/l)	0.019	0.07	0.04	0	0.05	0.032	0.035	0.05	0.02	0.124	0.6	0.286
Cu (mg/l)	BDL	0	BDL	0	0.01	0.009	BDL	BDL	BDL	0.03	0.1	0.094
Cr (T) (mg/l)	BDL	0.07	0	BDL	BDL	BDL	BDL	BDL	BDL	0.06	0.1	0.06

Note: BI – Before immersion; DI – During immersion; AI – After immersion;
BDL – Below Detectable Limit

Water Quality of Brahmaputra River at Saukuchi Ghat Before, During and After Idol Immersion of Durga puja 2018, 2020, 2021, 2022

Parameter	Year and Day of Monitoring											
	2018			2020			2021			2022		
	BI	DI	AI	BI	DI	AI	BI	DI	AI	BI	DI	AI
	5 th Oct	19 th Oct	20 th Oct	8 th Oct	26 th Oct	27 th Oct	28 th Sep	15 th Oct	16 th Oct	21 th Sep	5 th Oct	7,9,11, 13 th Oct
DO (mg/l)	3.4	0.5	0.9	4	2.5	2.3	4.8	3.8	4.2	4.8	5	4.9
pH	6.7	6.8	6.6	6.8	6.6	7	6.4	7	6.8	6.6	7.3	7.1
Turbidity(NTU)	6	10	10	8	12	10	10	30	12	8	14	14
Cond (µS/cm)	179	216	192	182	220	194	87	352	188	158	282	235
BOD (mg/l)	10.5	18	13	8.2	14.6	10.2	2.8	3.4	2.8	2.5	2.6	2.4
COD (mg/l)	19.97	42.72	26.2	14.6	18.46	12.2	9.2	12.6	7.6	9.7	12.8	11.5
TDS (mg/l)	122	140	128	120	144	126	56	230	124	98	188	153.5
TS (mg/l)	162	321	156	156	264	148	130	296	178	48	56	49
Pb (mg/l)	0.013	0.015	0.02	0.02	0.032	0.02	BDL	0.08	0.03	0.1	0.1	0.1
Zn (mg/l)	0.014	0.06	0.04	0.02	0.042	0.03	0.048	0.08	0.04	0.138	0.324	0.164
Cu (mg/l)	0.001	0.003	BDL	0.01	0.018	0.01	BDL	BDL	BDL	0.03	0.148	0.082
Cr (T) (mg/l)	0.013	0.015	0	BDL	0.006	0	BDL	BDL	BDL	0.06	0.06	0.06

Note: BI – Before immersion; DI – During immersion; AI – After immersion;
BDL – Below Detectable Limit



Water Quality of Brahmaputra River at Chandrapur Ghat Before, During and After Idol Immersion of Durga puja 2018, 2020, 2021, 2022

Parameter	Year and Day of Monitoring											
	2018			2020			2021			2022		
	BI	DI	AI	BI	DI	AI	BI	DI	AI	BI	DI	AI
	5 th Oct	19 th Oct	20 th Oct	8 th Oct	26 th Oct	27 th Oct	28 th Sep	15 th Oct	16 th Oct	21 th Sep	5 th Oct	7,9,11, 13 th Oct
DO (mg/l)	7	5.9	6.9	6.2	6.8	6.3	5.8	5.6	6	5.7	5.8	5.6
pH	6.6	6.5	6.5	6.8	6.5	6.6	7	7.5	7.4	7.3	7.8	7.6
Turbidity(NTU)	19	28	27	16	24	22	7	10	8	6	12	10
Cond (µS/cm)	61	64	64	64	70	66	70	165	155	59	114	101
BOD (mg/l)	1.2	2.4	1.2	1.8	2.6	2	2.6	2.8	2.5	2.3	2.6	2.5
COD (mg/l)	4.27	7.68	5.7	6.2	14.4	8.6	7.8	8.4	7.4	7.9	11.1	10.2
TDS (mg/l)	40	44	44	42	46	42	52	108	98	30	58	46
TS (mg/l)	156	184	165	162	204	188	112	212	186	14	32	23
Pb (mg/l)	0.01	0.018	0.015	BDL	0.012	0	BDL	0.027	0.03	0.1	0.1	0.1
Zn (mg/l)	0.03	0.111	0.045	0.005	0.036	0.02	0.032	0.049	0.05	0.12	0.68	0.285
Cu (mg/l)	0	0.017	0.004	0.007	0.024	0.01	BDL	BDL	BDL	0.03	0.232	0.059
Cr (T) (mg/l)	0.01	0.037	0.034	BDL	BDL	BDL	BDL	BDL	BDL	0.06	0.06	0.06

Note: BI – Before immersion; DI – During immersion; AI – After immersion;

BDL – Below Detectable Limit

Water Quality of Brahmaputra River at Majarbaha Ghat Before, During and After Idol Immersion of Durga puja 2018, 2020, 2021, 2022

Parameter	Year and Day of Monitoring											
	2018			2020			2021			2022		
	BI	DI	AI	BI	DI	AI	BI	DI	AI	BI	DI	AI
	5 th Oct	19 th Oct	20 th Oct	8 th Oct	26 th Oct	27 th Oct	28 th Sep	15 th Oct	16 th Oct	21 th Sep	5 th Oct	7,9,11, 13 th Oct
DO (mg/l)	7.3	6.7	7.1	7.1	7.6	7.4	6.3	6	6.5	5.7	5.8	5.6
pH	7.3	7.2	7.2	7.1	6.8	6.9	7.3	6.8	7	7.8	7.9	7.8
Turbidity(NTU)	11	32	14	12	28	16	8	16	9	5	12	8.5
Cond (µS/cm)	112	114	110	116	122	118	83	160	112	121	162	137
BOD (mg/l)	0.7	2	1.9	1.2	3.1	2	2.4	2.9	2.8	1.8	2.4	2.2
COD (mg/l)	2.56	5.7	4.62	6.4	12.8	8.2	8.2	10.6	8.8	7.8	9.5	8.6
TDS (mg/l)	70	76	70	74	82	76	58	106	92	62	88	78.5
TS (mg/l)	174	355	188	182	264	198	108	206	156	28	40	38
Pb (mg/l)	0.01	0.015	0.011	BDL	0.048	0.022	BDL	0.081	0.081	0.1	0.172	0.102
Zn (mg/l)	0.036	0.051	0.039	0.023	0.048	0.039	0.028	0.193	0.138	0.18	0.272	0.199
Cu (mg/l)	0.006	0.017	0.013	0.007	0.019	0.01	BDL	BDL	BDL	0.03	0.136	0.092
Cr (T) (mg/l)	0.043	0.054	0.043	BDL	BDL	BDL	BDL	BDL	BDL	0.06	0.06	0.06

Note: BI – Before immersion; DI – During immersion; AI – After immersion;

BDL – Below Detectable Limit



Water Quality of Dikhow River at Thanaghat immersion point, Sivasagar Before, During and After Idol Immersion of Durga puja 2018, 2020, 2021, 2022

Parameter	Year and Day of Monitoring											
	2018			2020			2021			2022		
	BI	DI	AI	BI	DI	AI	BI	DI	AI	BI	DI	AI
	5 th Oct	19 th Oct	20 th Oct	8 th Oct	26 th Oct	27 th Oct	28 th Sep	15 th Oct	16 th Oct	21 th Sep	5 th Oct	7,9,11, 13 th Oct
DO (mg/l)	6.5	5.7	6.1	7.8	7	6.8	7.3	6.2	6.4	5.8	6	5.8
pH	7.6	7.6	7.4	7.4	7.6	7.2	7.9	7.5	7.5	7	7.4	7.1
Turbidity(NTU)	27	58	38	24	52	34	22	27	26	13	19	16
Cond (µS/cm)	140	151	143	97	120	109	152	166	160	125	162	150
BOD (mg/l)	0.8	1.6	1.4	1.4	2	1.6	1.5	2.1	1.8	1.3	1.8	1.8
COD (mg/l)	4.62	8.92	6.95	6.24	8.62	7.8	6.9	10.7	9.2	6.8	7.8	7.6
TDS (mg/l)	92	100	92	62	76	70	104	110	106	82	106	103.5
TS (mg/l)	166	206	180	162	202	184	160	180	172	32	48	38.5
Pb (mg/l)	0.015	0.018	0.01	BDL	0.02	0.008	BDL	0.027	0.008	0.1	0.1	0.1
Zn (mg/l)	0.641	2.6	1.63	0.152	0.35	0.195	0.984	2.436	0.913	0.184	1.508	0.379
Cu (mg/l)	0.038	0.05	0.04	0.012	0.016	0.012	BDL	BDL	BDL	0.03	0.148	0.067
Cr (T) (mg/l)	0.016	0.039	0.03	BDL	BDL	BDL	BDL	BDL	BDL	0.06	0.06	0.06

Note: BI – Before immersion; DI – During immersion; AI – After immersion;
BDL – Below Detectable Limit

Water Quality of Bhogdoi River at Jorhat Before, During and After Idol Immersion of Durga puja 2018, 2020, 2021, 2022

Parameter	Year and Day of Monitoring											
	2018			2020			2021			2022		
	BI	DI	AI	BI	DI	AI	BI	DI	AI	BI	DI	AI
	5 th Oct	19 th Oct	20 th Oct	8 th Oct	26 th Oct	27 th Oct	28 th Sep	15 th Oct	16 th Oct	21 th Sep	5 th Oct	7,9,11, 13 th Oct
DO (mg/l)	6.1	5.9	6.1	6.5	5.9	6.1	6.8	6.3	6.1	5.5	5.6	5.4
pH	7.5	6.9	7.5	7.2	7.6	7.7	7	6.7	6.8	6.6	6.5	6.7
Turbidity(NTU)	18	33	24	29	36	28	18	26	20	15	22	17
Cond (µS/cm)	100	150	123	169	192	178	180	197	203	176	203	191
BOD (mg/l)	1.3	1.6	1.5	1.9	2.1	1.4	1.2	1.8	1.7	1.8	2	2.2
COD (mg/l)	5.69	8.54	6.5	8.73	9.85	7.9	6.7	8	8	5.8	7.8	7.9
TDS (mg/l)	80	98	76	110	126	114	116	128	132	114	136	127
TS (mg/l)	112	165	146	114	186	142	216	168	194	36	48	38
Pb (mg/l)	0.008	0.018	0.01	0.01	0.038	0.01	BDL	0.03	0	0.1	0.1	0.1
Zn (mg/l)	0.369	0.691	0.44	0.08	1.384	0.64	1.54	2.21	1.63	2.636	6.268	2.491
Cu (mg/l)	0.006	0.015	0.01	0.01	0.022	0.01	BDL	BDL	BDL	0.03	0.108	0.045
Cr (T) (mg/l)	0.008	0.052	0.03	BDL	BDL	BDL	BDL	BDL	BDL	0.06	0.06	0.06

Note: BI – Before immersion; DI – During immersion; AI – After immersion;
BDL – Below Detectable Limit



Water Quality of Brahmaputra River at Pujaghat Dibrugarh Before, During and After Idol Immersion of Durga puja 2018, 2020, 2021, 2022

Parameter	Year and Day of Monitoring											
	2018			2020			2021			2022		
	BI	DI	AI	BI	DI	AI	BI	DI	AI	BI	DI	AI
	5 th Oct	19 th Oct	20 th Oct	8 th Oct	26 th Oct	27 th Oct	28 th Sep	15 th Oct	16 th Oct	21 th Sep	5 th Oct	7,9,11, 13 th Oct
DO (mg/l)	7	6.3	6.8	6.7	6.3	6.9	6.8	6.6	6.7	5.3	5.8	5.4
pH	7.3	7.6	7.1	7.7	7.3	7.8	7.1	8	8.1	8.1	7.7	7.5
Turbidity(NTU)	12	18	14	18	22	20	46	56	47	11	18	16
Cond (µS/cm)	122	135	132	107	132	111	152	175	171	145	168	163
BOD (mg/l)	0.9	1.2	1.1	1	1.6	1.2	1.3	1.8	1.4	1.2	2.6	2
COD (mg/l)	4.8	5.9	5.3	4.71	6.6	5.6	6.6	9.3	5.3	5.9	9	6.8
TDS (mg/l)	80	88	86	68	86	74	98	126	110	96	108	98.5
TS (mg/l)	111	132	122	98	134	118	224	254	234	42	58	49.0
Pb (mg/l)	0.01	0.018	0.02	BDL	BDL	BDL	BDL	0.08	0.08	0.1	0.1	0.1
Zn (mg/l)	0.19	0.771	0.24	0.098	0.3	0.225	0.405	1.21	0.97	0.18	2.052	0.7
Cu (mg/l)	0	0.023	0.01	0.009	0.09	0.057	BDL	BDL	BDL	0.03	0.108	0.0
Cr (T) (mg/l)	0.01	0.018	0.01	BDL	0.01	BDL	BDL	BDL	BDL	0.06	0.06	0.1

Note: BI – Before immersion; DI – During immersion; AI – After immersion;

BDL – Below Detectable Limit

Water Quality of Brahmaputra River at Guijan Pujaghat, Tinsukia Before, During and After Idol Immersion of Durga puja 2018, 2020, 2021, 2022

Parameter	Year and Day of Monitoring											
	2018			2020			2021			2022		
	BI	DI	AI	BI	DI	AI	BI	DI	AI	BI	DI	AI
	5 th Oct	19 th Oct	20 th Oct	8 th Oct	26 th Oct	27 th Oct	28 th Sep	15 th Oct	16 th Oct	21 th Sep	5 th Oct	7,9,11, 13 th Oct
DO (mg/l)	7.3	6.5	7.2	5.6	5.8	6.1	6	5.8	6	5.3	5.8	5.3
pH	7.6	6.8	7.3	7.9	7.8	7.9	8	7.7	7.9	7.2	7.6	7.4
Turbidity(NTU)	13	16	15	20	26	24	14	19	12	15	22	19
Cond (µS/cm)	130	144	135	98	130	106	131	154	151	136	168	157
BOD (mg/l)	0.8	1.2	1.2	1.3	2.5	1.6	1	1.4	1.2	2	2.1	2.3
COD (mg/l)	1.62	4.62	2.84	6.24	7.39	5.96	4	4.2	3.8	5.8	6.2	6.5
TDS (mg/l)	85	94	88	62	86	68	86	102	98	88	112	108.5
TS (mg/l)	125	134	122	138	162	144	138	140	136	28	38	33.5
Pb (mg/l)	0.01	0.02	0.015	0.005	0.02	0.01	BDL	0.081	0.08	0.1	0.1	0.1
Zn (mg/l)	0.39	1.08	0.784	0.092	0.19	0.11	0.3	1.038	0.99	0.808	1.372	0.857
Cu (mg/l)	0.01	0.14	0.022	0.012	0.03	0.02	BDL	BDL	BDL	0.03	0.108	0.046
Cr (T) (mg/l)	0.02	0.02	0.019	BDL	BDL	BDL	BDL	BDL	BDL	0.06	0.06	0.06

Note: BI – Before immersion; DI – During immersion; AI – After immersion;

BDL – Below Detectable Limit



Water Quality of Dhansiri River near Dhansiri Bridge, Golaghat Before, During and After Idol Immersion of Durga puja 2018, 2020, 2021, 2022

Parameter	Year and Day of Monitoring											
	2018			2020			2021			2022		
	BI	DI	AI	BI	DI	AI	BI	DI	AI	BI	DI	AI
	5 th Oct	19 th Oct	20 th Oct	8 th Oct	26 th Oct	27 th Oct	28 th Sep	15 th Oct	16 th Oct	21 th Sep	5 th Oct	7,9,11 , 13 th Oct
DO (mg/l)	5.9	5.6	5.8	6	6.4	6.2	7.3	6.3	6.6	8	8.4	8.2
pH	7.2	7	6.7	7.3	6.9	7.1	7.6	7.9	7.8	7.3	7.7	7.6
Turbidity(NTU)	12	19	18	14	22	18	34	43	27	14	22	18
Cond (µS/cm)	114	138	122	116	148	132	156	183	185	122	194	174
BOD (mg/l)	0.8	7.76	4.52	1	3.4	2.5	1.9	2.1	1.6	2.2	2.4	2.3
COD (mg/l)	2.6	14.96	12.08	4.6	10.4	8.2	7.4	8.2	7	7.4	8.6	8.4
TDS (mg/l)	72	90	78	74	96	82	102	118	120	68	94	84.5
TS (mg/l)	137	294	162	132	214	178	236	272	190	36	44	40.5
Pb (mg/l)	0.013	0.019	0.015	0.006	0.016	0.01	BDL	0.03	0.027	0.1	0.1	0.1
Zn (mg/l)	0.027	0.036	0.029	0.018	0.078	0.044	0.802	0.9	0.862	0.63	2.16	0.958
Cu (mg/l)	BDL	0.006	BDL	BDL	0.014	0.006	BDL	BDL	BDL	0.03	0.436	0.075
Cr (T) (mg/l)	BDL	0.055	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.06	0.06	0.06

Note: BI – Before immersion; DI – During immersion; AI – After immersion;
BDL – Below Detectable Limit

Water Quality of Gelabeel at Dergaon, Golaghat Before, During and After Idol Immersion of Durga puja, 2018, 2020, 2021, 2022

Parameter	Year and Day of Monitoring											
	2018			2020			2021			2022		
	BI	DI	AI	BI	DI	AI	BI	DI	AI	BI	DI	AI
	5 th Oct	19 th Oct	20 th Oct	8 th Oct	26 th Oct	27 th Oct	28 th Sep	15 th Oct	16 th Oct	21 th Sep	5 th Oct	7,9,11, 13 th Oct
DO (mg/l)	9	7.6	7.7	8.2	7.4	7.6	5.9	4.6	5.5	6.8	7.2	6.6
pH	6.6	6.6	7.2	6.8	6.5	7.1	6.9	7.1	7.2	7.2	7.6	7.1
Turbidity(NTU)	4	20	13	8	24	15	23	30	28	20	30	26
Cond (µS/cm)	72	121	112	74	118	106	185	201	198	75	86	79
BOD (mg/l)	1.2	1.9	1.2	1.4	2	1.6	1.2	1.8	1.4	2.4	2.6	2.5
COD (mg/l)	3.6	5.7	4.66	4.6	6.8	5.2	5.3	6.6	6	8.6	10.6	9.3
TDS (mg/l)	40	78	74	46	74	70	120	130	128	46	54	48.5
TS (mg/l)	84	320	197	98	182	124	182	216	222	22	30	29.5
Pb (mg/l)	0.01	0.02	0.02	BDL	0.02	0.01	BDL	0.03	0.03	0.1	0.1	0.1
Zn (mg/l)	0.02	0.03	0.03	0.01	0.03	0.02	1.13	2.98	2.07	0.43	2.208	0.9315
Cu (mg/l)	BDL	0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.03	0.356	0.0693
Cr (T) (mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.06	0.06	0.06

Note: BI – Before immersion; DI – During immersion; AI – After immersion;
BDL – Below Detectable Limit



Water Quality of Kuchiara River at Kalibari, Karimganj Before, During and After Idol Immersion of Durga puja 2018, 2020, 2021, 2022

Parameter	Year and Day of Monitoring											
	2018			2020			2021			2022		
	BI	DI	AI	BI	DI	AI	BI	DI	AI	BI	DI	AI
	5 th Oct	19 th Oct	20 th Oct	8 th Oct	26 th Oct	27 th Oct	28 th Sep	15 th Oct	16 th Oct	21 th Sep	5 th Oct	7,9,11 13 th Oct
DO (mg/l)	5.8	5.3	5.5	5.1	5.5	5.3	5.8	5.5	5.8	5.5	5.8	5.4
pH	7.2	7.3	7.3	7.2	7.3	7.3	7.2	7.3	7.3	7.2	7.4	7.3
Turbidity(NTU)	8	12	10	10	10	10	8	10	10	8	14	10
Cond (µS/cm)	108	116	110	104	112	110	108	116	110	102	112	105
BOD (mg/l)	1.6	3.2	2.4	2.1	3.2	2.2	2.4	3.2	2.2	2.3	2.8	2.6
COD (mg/l)	4.9	9.6	5.7	6.4	9.6	9.6	6.4	9.6	9.6	6.4	8	7.5
TDS (mg/l)	72	78	74	68	74	70	68	72	74	56	64	62.5
TS (mg/l)	172	188	174	152	212	182	168	182	174	20	28	25
Pb (mg/l)	0.01	0.02	0.02	0.005	0.04	0.024	0.03	0.08	0.042	0.1	0.1	0.1
Zn (mg/l)	0.01	0.03	0.02	0.01	0.03	0.015	BDL	0.05	0.03	0.932	2.08	1.333
Cu (mg/l)	BDL	0	0	BDL	0	0.002	BDL	BDL	BDL	0.03	0.15	0.035
Cr (T) (mg/l)	BDL	0.01	BDL	BDL	0	BDL	BDL	BDL	BDL	0.06	0.06	0.06

Note: BI – Before immersion; DI – During immersion; AI – After immersion;
BDL – Below Detectable Limit

Water Quality of Barak River at Sadarghat, Silchar Before, During and After Idol Immersion of Durga puja, 2018, 2020, 2021, 2022

Parameter	Year and Day of Monitoring											
	2018			2020			2021			2022		
	BI	DI	AI	BI	DI	AI	BI	DI	AI	BI	DI	AI
	5 th Oct	19 th Oct	20 th Oct	8 th Oct	26 th Oct	27 th Oct	28 th Sep	15 th Oct	16 th Oct	21 th Sep	5 th Oct	7,9,11, 13 th Oct
DO (mg/l)	6	5.3	5.7	6.2	5.1	5.7	6	6.3	6.5	6.1	6.6	6.2
pH	7.2	7.2	7.2	7.3	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.3
Turbidity(NTU)	8	10	10	10	24	16	8	10	10	8	11	9
Cond (µS/cm)	96	120	96	96	116	102	96	120	96	112	134	119
BOD (mg/l)	2.2	2.6	2.4	2	2.6	2.4	2.2	2.4	2.4	2	2.6	2.5
COD (mg/l)	4.8	9.6	6.8	4.8	9.6	7.4	4.8	9.6	9.6	5.8	7.4	6.6
TDS (mg/l)	58	76	64	64	76	68	64	76	64	54	68	62
TS (mg/l)	152	176	174	164	208	188	156	176	174	22	38	29
Pb (mg/l)	0.01	0.018	0.012	0.01	0.02	0.01	BDL	0.061	0.02	0.1	0.1	0.1
Zn (mg/l)	0.015	0.025	0.02	0.01	0.03	0.02	0.058	0.067	0.05	0.48	1.08	0.53
Cu (mg/l)	BDL	0.001	BDL	BDL	0	BDL	BDL	BDL	BDL	0.03	0.03	0.03
Cr (T) (mg/l)	BDL	0.01	BDL	BDL	0.01	BDL	BDL	BDL	BDL	0.06	0.06	0.06

Note: BI – Before immersion; DI – During immersion; AI – After immersion;
BDL – Below Detectable Limit



Water Quality of Dhaleshwari River at Hailakandi Before, During and After Idol Immersion of Durga puja, 2018, 2020, 2021, 2022

Parameter	Year and Day of Monitoring											
	2018			2020			2021			2022		
	BI	DI	AI	BI	DI	AI	BI	DI	AI	BI	DI	AI
	5 th Oct	19 th Oct	20 th Oct	8 th Oct	26 th Oct	27 th Oct	28 th Sep	15 th Oct	16 th Oct	21 th Sep	5 th Oct	7,9,11, 13 th Oct
DO (mg/l)	5.3	5.1	5.2	5.3	5	5	5.5	5.2	5.1	5.4	5.8	5.3
pH	6.6	6.8	6.7	6.6	6.8	6.7	6.6	6.8	6.7	6.5	6.4	6.3
Turbidity(NTU)	8	10	10	10	18	12	8	10	10	6	12	11
Cond (µS/cm)	88	116	98	90	122	116	88	116	98	106	122	115
BOD (mg/l)	2.2	3	2.4	2	3.1	2.3	2.2	3	2.4	2.3	2.6	2.4
COD (mg/l)	8	12.8	11.2	8.4	12.8	10.2	8	12.8	11.2	8	10.2	9
TDS (mg/l)	58	78	66	56	82	76	60	78	66	60	72	67
TS (mg/l)	154	180	176	162	236	182	156	180	176	28	40	37.5
Pb (mg/l)	0.01	0.02	0.015	0.01	0.028	0.016	0.03	0.081	0.03	0.1	0.1	0.1
Zn (mg/l)	0.01	0.03	0.018	0.02	0.034	0.022	0.03	0.054	0.05	0.12	1.03	0.525
Cu (mg/l)	BDL	0	BDL	BDL	0.004	BDL	BDL	BDL	BDL	0.03	0.04	0.034
Cr (T) (mg/l)	BDL	0.01	0.003	BDL	0.008	0.002	BDL	BDL	BDL	0.06	0.06	0.06

Note: BI – Before immersion; DI – During immersion; AI – After immersion;
BDL – Below Detectable Limit

Water Quality of Pond water at Bongaigaon Before, During and After Idol Immersion of Durga puja 2018, 2020, 2021, 2022

Parameter	Year and Day of Monitoring											
	2018			2020			2021			2022		
	BI	DI	AI	BI	DI	AI	BI	DI	AI	BI	DI	AI
	5 th Oct	19 th Oct	20 th Oct	8 th Oct	26 th Oct	27 th Oct	28 th Sep	15 th Oct	16 th Oct	21 th Sep	5 th Oct	7,9,11, 13 th Oct
DO (mg/l)	6.8	5.9	6	6.5	5.8	6	5.7	5.6	5.8	5.4	5.8	5.2
pH	7	7.5	7	6.9	7.2	7	7.4	8	8	7.3	8.1	7.6
Turbidity(NTU)	14	22	18	16	26	18	12	18	12	12	18	16
Cond (µS/cm)	58	78	64	66	82	74	74	92	82	62	88	82
BOD (mg/l)	1.2	3.2	2.2	1.8	3.8	2.4	1.4	2.8	2.6	1.8	2.8	2.6
COD (mg/l)	7.2	16.6	10.6	11.5	21.6	14.4	8	10.6	9.8	4.3	10.8	9.7
TDS (mg/l)	84	126	112	44	56	46	32	44	40	48	76	92
TS (mg/l)	111	433	156	166	248	202	66	106	80	29	53	72
Pb (mg/l)	0.02	0.03	0.02	0.01	0.04	0.02	BDL	0.027	0	0.1	0.1	0.1
Zn (mg/l)	0.02	0.08	0.03	0.03	0.07	0.032	BDL	0.058	0.02	0.17	5.626	0.476
Cu (mg/l)	BDL	0	0	BDL	0.01	0.002	BDL	BDL	BDL	0.03	0.108	0.079
Cr (T) (mg/l)	BDL	0.01	BDL	BDL	0	BDL	BDL	BDL	BDL	0.06	0.06	0.06

Note: BI – Before immersion; DI – During immersion; AI – After immersion;
BDL – Below Detectable Limit



Water Quality of Brahmaputra River at Jahajghat near Circuit House, Tezpur Before, During and After Idol Immersion of Durga puja, 2018, 2020, 2021, 2022

Parameter	Year and Day of Monitoring											
	2018			2020			2021			2022		
	BI	DI	AI	BI	DI	AI	BI	DI	AI	BI	DI	AI
	5 th Oct	19 th Oct	20 th Oct	8 th Oct	26 th Oct	27 th Oct	28 th Sep	15 th Oct	16 th Oct	21 th Sep	5 th Oct	7,9,11, 13 th Oct
DO (mg/l)	6.8	6.8	6.3	7.6	7.2	7.5	7	6.4	6.7	7.2	8.3	7.5
pH	8.2	7.9	8.1	7.9	8.2	8.4	7.4	7.3	7.6	7.8	8.4	7.8
Turbidity(NTU)	18	28	22	22	30	24	6	9	7	6	9	9
Cond (µS/cm)	112	128	116	114	134	118	144	150	149	110	124	116
BOD (mg/l)	1.8	2.3	1.9	1.4	3.2	2.9	2.2	2.8	2.6	1.3	2.8	1.8
COD (mg/l)	7.36	8.83	7.52	7.9	8.2	8.4	6.4	8.8	8	6	9	8.5
TDS (mg/l)	68	78	72	74	86	72	96	102	98	62	68	64.5
TS (mg/l)	170	212	196	182	234	182	156	178	160	28	52	45
Pb (mg/l)	0.01	0.018	0.013	BDL	0.03	0.01	0.03	0.08	0.026	0.1	0.1	0.1
Zn (mg/l)	0.034	0.038	0.044	0.032	0.05	0.04	BDL	0.04	0.012	0.48	2.35	0.589
Cu (mg/l)	0.007	0.044	0.038	0.005	0.04	0.03	BDL	BDL	BDL	0.11	0.15	0.097
Cr (T) (mg/l)	0.03	0.073	0.048	BDL	BDL	BDL	BDL	BDL	BDL	0.06	0.06	0.06

Note: BI – Before immersion; DI – During immersion; AI – After immersion;
BDL – Below Detectable Limit

Water Quality of Kolong River at Neherubali, Nagaon Before, During and After Idol Immersion of Durga puja, 2018, 2020, 2021, 2022

Parameter	Year and Day of Monitoring											
	2018			2020			2021			2022		
	BI	DI	AI	BI	DI	AI	BI	DI	AI	BI	DI	AI
	5 th Oct	19 th Oct	20 th Oct	8 th Oct	26 th Oct	27 th Oct	28 th Sep	15 th Oct	16 th Oct	21 th Sep	5 th Oct	7,9,11, 13 th Oct
DO (mg/l)	5.7	5.5	5.7	5.8	6.6	6.1	6.6	5.1	6	4.6	4.8	4.4
pH	6.8	6.6	6.7	7	6.8	6.7	6.8	6.9	7.1	7.3	7.6	7.4
Turbidity(NTU)	6	14	11	8	18	12	5	9	8	11	13	11
Cond (µS/cm)	100	132	129	96	144	132	144	176	164	142	162	154
BOD (mg/l)	2.1	5.7	2.8	2.4	6.2	3.1	2	2.6	2.1	2.2	2.8	2.4
COD (mg/l)	4.27	9.02	6.01	6.8	13.85	7.69	5.2	8.6	7.4	5.8	9.2	7.5
TDS (mg/l)	66	88	80	62	90	84	108	118	112	72	86	81
TS (mg/l)	128	191	135	178	212	198	188	212	196	24	36	36
Pb (mg/l)	0.01	0.02	0.01	0.004	0.024	0.01	BDL	0.081	0.04	0.1	0.1	0.1
Zn (mg/l)	0.024	0.06	0.04	0.022	0.064	0.04	0.041	0.095	0.07	0.172	0.93	0.79
Cu (mg/l)	BDL	0.01	0	BDL	0.005	0.002	BDL	BDL	BDL	0.03	1.15	0.4405
Cr (T) (mg/l)	0.007	0.04	0.04	0.002	0.022	0.01	BDL	BDL	BDL	0.06	0.06	0.06

Note: BI – Before immersion; DI – During immersion; AI – After immersion;
BDL – Below Detectable Limit



Report on Ambient Air Quality and Noise Level Monitoring before and during Durga Puja Festival-2019

During Durga Puja festival lots of activities takes place that may have negative impacts on air environment. Considering the circumstances in perspectives and apprehending possible impacts on ambient air quality and noise levels, the Pollution Control Board, Assam has carried out air quality monitoring at different location across the State to assess the level of air quality deterioration if any due to the festival.

Ambient Air Quality:

The Ambient Air Quality status of few selected locations of Assam during Durga Puja festival for the year 2019 is presented below:

**Ambient Air Monitoring before and during Durga Puja, 2019
at selected location at in Assam**

Monitoring Location	Parameters monitored								
	Before Puja on 26.09.2019			During Puja on 05.10.2019			During Puja on 08.10.2019		
	SO ₂	NO ₂	PM ₁₀	SO ₂	NO ₂	PM ₁₀	SO ₂	NO ₂	PM ₁₀
Bamunimaidam, Guwahati	11	9	48	8	12	60	10	8	23
Santipur, Guwahati	6	14	77	6	17	76	6	18	72
Khanapara, Guwahati	7	15	75	7	13	55	7	13	47
Margherita	5	10	28	5	11	32	6	13	44
RO, Dibrugarh	6	12	24	6	11	27	6	12	36
Shreepuria, Tinsukia	5	10	28	6	11	31	5	12	33
Sivdham, Tinsukia	5	10	25	7	14	65	6	13	56
Borguri, Tinsukia	5	11	30	7	14	54	6	13	43
Lakhimpur	5	14	26	6	13	94	6	13	40
Janiganj, Silchar	6	11	46	7	12	52	7	12	50
RLO Silchar Office Building	6	9	41	8	11	50	7	11	45
ONGC Colony, Sivasagar	6	12	48	6	13	60	5	10	20
RLO, Sivasagar	4	11	40	6	11	49	5	11	37
Tezpur	6	11	40	6	14	94	6	13	40
RO, Golaghat	6	12	34	6	12	26	5	11	21
NAAQ Standards	80	80	100	80	80	100	80	80	100
• All values (24 hourly Avg.) are in µg/m ³ .									

From the data it has been observed that the concentration of parameters of SO₂, NO₂ and PM₁₀ before and during Durga Puja Festival were well within the prescribed standards.



Ambient Noise Level:

The Ambient Noise Level status of few selected locations of Assam before and during Durga Puja festival for the year 2019 is presented below:

Ambient Noise Level at selected locations of Assam before and during Durga Puja, 2019

City/ Town	Monitoring Location	Parameters monitored		
		Before Puja on 26.09.2019	During Puja on 05.10.2019	During Puja on 08.10.2019
Guwahati	Ulubari (R)	75.8	84.6	80.0
	Latasil (S)	70.1	79.8	84.1
	Jonali (R)	71.1	76.8	76.1
	Ganeshguri (C)	76.4	80.1	79.2
	Bharalumukh (C)	74.7	79.2	77.3
	Maligaon (C)	73.0	78.3	78.0
Sivasagar	K.P.M Charali (R)	55.8	59.8	55.1
	Central Market (C)	57.0	57.6	55.6
	Dolmukh Charali (C)	56.3	55.9	55.6
	Station Charali (C)	56.8	55.9	54.6
Bongaigaon	Barpara (R)	49.2	52.6	53.0
	Mayapuri (C)	64.6	69.7	69.4
	Civil Hospital (S)	45.7	52.8	50.8
Nagaon	Near BP Civil Hospital (S)	75.4	70.8	-
	Christian atty, Nagaon (R)	74.5	84.6	-
	Haibargaon Bazar (C)	82.8	78.0	-
Silchar	GC College (S)	49.5	62.7	51.8
	Tarapur (C)	64.8	76.5	67.7
	Ambicapatty (R)	58.0	64.3	60.3
Tezpur	Chowkbazar (C)	75.3	79.2	76.4
	Civil Hospital (S)	66.6	68.5	54.5
	Mazgaon (R)	53.6	57.3	55.5

Monitoring were carried out from 18:00 Hrs. to 24:00 Hrs.

Noise standard in dB(A)			
During day time (in between 6AM and 10 PM)		During night time (in between 10PM and 6 AM)	
Industrial Zone	: 75	Industrial Zone	: 70
Commercial Zone	: 65	Commercial Zone	: 55
Residential Zone	: 55	Residential Zone	: 45
Silence Zone	: 50	Silence Zone	: 40

From the data it has been observed that except few occasions, the ambient noise level at most of the locations exceeded the prescribed standards irrespective of silence, commercial and residential zones.



Report on Ambient Air Quality and Noise Level Monitoring before and during Durga Puja Festival-2020

During Durga Puja festival lots of activities takes place that may have negative impacts on air environment. Considering the circumstances in perspectives and apprehending possible impacts on ambient air quality and noise levels, the Pollution Control Board, Assam has carried out air quality monitoring at different location across the State to assess the level of air quality deterioration if any due to the festival.

Ambient Air Quality:

The Ambient Air Quality status of few selected locations of Assam during Durga Puja festival for the year 2020 is presented below:

**Ambient Air Monitoring before and during Durga Puja, 2020
at selected location at selected City/Towns of Assam**

Monitoring Location	Parameters monitored								
	Before Puja on 08.10.2020			During Puja on 23.10.2020			During Puja on 26.10.2020		
	SO ₂	NO ₂	PM ₁₀	SO ₂	NO ₂	PM ₁₀	SO ₂	NO ₂	PM ₁₀
Bamunimaidam, Guwahati	7	12	58	7	13	40	8	13	37
Santipur, Guwahati	6	12	80	7	11	49	7	13	73
Khanapara, Guwahati	8	12	58	7	13	33	8	13	36
Borguri, Tinsukia	6	11	23	5	11	16	5	11	18
Margherita	6	11	23	5	11	16	5	11	18
RO, Dibrugarh	4	10	16	5	10	21	6	12	32
Shreepuria, Tinsukia	5	12	37	5	10	17	5	10	16
Lakhimpur	6	13	40	6	13	46	7	13	44
Janiganj, Silchar	6	11	43	6	10	44	7	12	51
RLO Silchar	7	11	36	6	8	38	8	11	41
ONGC Colony, Sivasagar	7	14	61	5	11	23	5	11	39
RLO, Sivasagar	6	12	47	6	12	30	6	12	31
Lakhimpur	6	14	59	6	27	52	7	14	44
NAAQ Standards	80	80	100	80	80	100	80	80	100
All values (24 hourly Avg.) are in µg/m ³ .									

From the data it has been observed that the concentration of parameters of SO₂, NO₂ and PM₁₀ before and during Durga Puja Festival were well within the prescribed standards. This is probably due to the restriction imposed for celebration of Durga Puja due to the pandemic Covid-19.



Ambient Noise Level:

The Ambient Noise Level status of few selected locations of Assam before and during Durga Puja festival for the year 2020 is presented below:

**Ambient Noise Level at selected locations of Assam
before and during Durga Puja, 2020**

City/ Town	Monitoring Location	Parameters monitored		
		Before Puja on 08.10.2020	During Puja on 23.10.2020	During Puja on 26.10.2020
Guwahati	Ulubari (R)	69.3	74.2	71.9
	Latasil (S)	68.2	72.9	69.6
	Jonali (R)	71.4	72.8	70.2
	Ganeshguri (C)	75.1	74.3	72.8
	Bharalumukh (R)	73.2	73.1	72.8
	Maligaon (C)	73.0	73.0	72.5
	Pandu (C)	64.8	67.2	67.5
Sivasagar	Melachakar (R)	54.0	48.3	54.2
	Central Market (C)	54.7	53.3	57.7
	Shiva Dol (S)	50.9	45.7	47.9
Bongaigaon	Barpara (R)	49.3	54.7	45.1
	Paul Bazar (C)	50.0	53.1	55.1
	Civil Hospital (S)	43.6	55.8	46.0
Dibrugarh	HS Road (R)	66.8	61.6	60.9
	DU (S)	60.3	66.1	66.7
	Milan nagar (C)	61.8	65.4	64.6
Silchar	GC College (S)	48.0	60.8	50.6
	Tarapur (C)	63.1	74.3	65.9
	Ambicapatty (R)	56.3	61.8	58.6
Tezpur	Chowkbazar (C)	71.3	70.2	71.0
	Civil Hospital (S)	64.6	67.5	68.4
	Mazgaon (R)	56.4	60.8	63.4
Monitoring were carried out from 18:00 Hrs. to 24:00 Hrs.				

Noise standard in dB(A)			
During day time (in between 6AM and 10 PM)		During night time (in between 10PM and 6 AM)	
Industrial Zone	: 75	Industrial Zone	: 70
Commercial Zone	: 65	Commercial Zone	: 55
Residential Zone	: 55	Residential Zone	: 45
Silence Zone	: 50	Silence Zone	: 40

From the data it has been observed that except few occasions, the ambient noise level at most of the locations exceeded the prescribed standards irrespective of silence, commercial and residential zones.

Report on Ambient Air Quality and Noise Level Monitoring before and during Durga Puja Festival-2021



During Durga Puja festival lots of activities takes place that may have negative impacts on air environment. Considering the circumstances in perspectives and apprehending possible impacts on ambient air quality and noise levels, the Pollution Control Board, Assam has carried out air quality monitoring at different location across the State to assess the level of air quality deterioration if any due to the festival.

Ambient Air Quality:

The Ambient Air Quality status of few selected locations of Assam during Durga Puja festival for the year 2021 is presented below:

Ambient Air Monitoring before and during Durga Puja, 2021 at selected location at selected city/ towns of Assam

Monitoring Location	Parameters monitored								
	Before Puja on 28.09.2021			During Puja on 12.10.2021			During Puja on 15.10.2021		
	SO ₂	NO ₂	PM ₁₀	SO ₂	NO ₂	PM ₁₀	SO ₂	NO ₂	PM ₁₀
Bamunimaidam, Guwahati	6	14	56	7	20	84	8	20	77
Santipur, Guwahati	7	14	72	6	13	99	7	14	57
Khanapara, Guwahati	7	14	78	6	13	75	7	13	56
Margherita	5	9	19	9	11	28	6	12	43
RO, Dibrugarh	6	12	48	6	11	35	6	13	44
Shreepuria, Tinsukia	5	10	28	6	13	51	6	13	53
Sivdham, Tinsukia	7	12	49	5	12	41	5	11	49
Borguri, Tinsukia	7	15	65	6	11	38	6	12	44
Lakhimpur	7	16	39	6	14	39	6	15	44
Janiganj, Silchar	6	11	43	9	11	45	8	10	41
RLO Silchar	7	10	42	9	12	44	7	10	41
Kathal Road, Silchar	7	10	41	8	11	43	7	9	39
ONGC Colony, Sivasagar	6	12	39	6	12	34	6	13	53
Office Building, RLO, Sivasagar	7	13	44	6	12	40	6	13	55
Tezpur	7	14	26	8	14	160	7	15	151
Water Resources Div. Off. Campus, Nagaon	6	13	89	6	14	79	6	13	70
Nagaon RO, Nagaon (NCAP)	7	14	48	7	14	67	6	13	62
Nowgaon Girls College, Nagaon (NCAP)	6	13	59	7	13	72	7	13	47
Joint director of Health Services, Bongaigaon	4	10	31	5	12	41	5	13	48
Oil India Ltd. Campus, Bongaigaon	5	11	35	6	13	45	6	13	51
Indo-Bhutan, Baksa	6	14	20	7	15	49	7	14	64
Nalbari College	7	16	106	6	14	86	6	14	144
RO, Golaghat	6	11	48	6	12	42	5	11	39
NAAQ Standards	80	80	100	80	80	100	80	80	100

• All values (24 hourly Avg.) are in $\mu\text{g}/\text{m}^3$.

From the data it has been observed that the concentration of parameters of SO₂, NO₂ and PM₁₀ before and during Durga Puja Festival were well within the prescribed standards. This is probably due to the restriction imposed for celebration of Durga Puja due to the pandemic Covid-19.



Ambient Noise Level:

The Ambient Noise Level status of few selected locations of Assam before and during Durga Puja festival for the year 2021 is presented below:

**Ambient Noise Level at selected locations of Assam
before and during Durga Puja, 2021**

City/ Town	Monitoring Location	Parameters monitored		
		Before Puja on 28.09.2021	During Puja on 12.10.2021	During Puja on 15.10.2021
Guwahati	Ganeshguri (R)	69.7	73.6	74.4
	Bharalumukh (C)	59.0	74.8	71.1
	Pandu (C)	66.7	72.4	74.7
Sivasagar	Melachakar (R)	57.1	57.5	55.3
	Central Market (C)	65.3	69.0	58.5
	Shiva Dol (S)	49.0	56.3	47.7
Bongaigaon	Barpara (R)	50.5	51.2	49.1
	Mayapuri (C)	64.1	63.9	60.5
	Civil Hospital (S)	45.6	52.8	50.6
Nagaon	Near BP Civil Hospital (S)	62.1	64.5	64.4
	Milanpur Area, Nagaon (R)	59.1	61.8	61.7
	Haibargaon Bazar Area (C)	76.3	77.8	79.9
Silchar	GC College (S)	47.9	60.8	49.9
	Tarapur (C)	63.1	74.2	66.3
	Ambicapatty (R)	55.9	61.3	59.9
Tezpur	Chowkbazar (C)	64.1	71.2	-
	Civil Hospital (S)	61.5	67.9	-
	Mazgaon (R)	54.4	61.5	-
Monitoring were carried out from 18:00 Hrs. to 24:00 Hrs.				

Noise standard in dB(A)			
During day time (in between 6AM and 10 PM)		During night time (in between 10PM and 6 AM)	
Industrial Zone	: 75	Industrial Zone	: 70
Commercial Zone	: 65	Commercial Zone	: 55
Residential Zone	: 55	Residential Zone	: 45
Silence Zone	: 50	Silence Zone	: 40

From the data it has been observed that except few occasions, the ambient noise level at most of the locations exceeded the prescribed standards irrespective of silence, commercial and residential zones.

Report on Ambient Air Quality and Noise Level Monitoring before and during Durga Puja Festival-2022



During Durga Puja festival lots of activities takes place that may have negative impacts on air environment. Considering the circumstances in perspectives and apprehending possible impacts on ambient air quality and noise levels, the Pollution Control Board, Assam has carried out ambient air quality monitoring at different location across the State to assess the level of air quality deterioration if any due to the festival.

Ambient Air Quality:

The Ambient Air Quality status of few selected locations of Assam during Durga Puja festival for the year 2022 is presented below:

Ambient Air Monitoring before and during Durga Puja, 2022 at selected location at selected city/ towns of Assam

Monitoring Location	Parameters Monitored (Units are in $\mu\text{g}/\text{m}^3$)											
	Before Durga Puja on 20.09.2022				During Durga Puja on 02.10.2022				After Durga Puja on 05.10.2022			
	NO ₂	SO ₂	PM ₁₀	PM _{2.5}	NO ₂	SO ₂	PM ₁₀	PM _{2.5}	NO ₂	SO ₂	PM ₁₀	PM _{2.5}
Bamunimaidam, Guwahati	6	14	50	17	6	15	44	39	6	14	20	14
Khanapara, Guwahati	9	17	97	-	7	12	142	-	7	15	74	-
Santipur, Guwahati	7	14	35	23	7	14	89	47	7	13	45	32
Barpara, Bongaigaon	5	8	56	26	7	14	64	31	9	12	68	33
OIL Campus, Bongaigaon	4	7	47	23	7	10	59	30	7	11	66	32
WRD Off. Campus, Nagaon	6	13	61	50	7	15	55	39	6	15	40	21
Milanpur, Nagaon	6	14	42	-	6	15	61	-	7	15	37	-
Nowgaon Girls College, Nagaon	6	14	50	-	6	14	51	-	7	16	41	-
Nalbari College, Nalbari	6	14	64	54	7	15	67	17	6	14	74	38
Nalbari Power House	6	14	61	24	6	13	72	22	6	15	74	12
RO, Golaghat	5	10	17	11	5	10	34	16	5	10	38	20
RO Dibrugarh	5	10	53	26	6	12	42	22	4	9	15	8
Margherita	5	11	31	16	5	10	27	14	3	6	15	8
Borguri, Tinsukia	5	10	28	14	6	11	57	30	5	10	33	15
Shivdham, Tinsukia	5	9	28	12	4	10	23	8	4	8	15	9
Shreepuria, Tinsukia	4	10	18	10	8	15	56	25	5	10	26	11
RO, Tezpur	7	15	30	16	7	14	50		7	13	34	
Bazar Patti, Lakhimpur	9	12	17	14	8	13	28	16	7	14	29	8
DarangaBaksa	6	13	28	-	6	15	57	-	7	14	59	-
Drilling Office, ONGC, Sivasagar	4	9	20	10	5	10	42	14	5	10	33	16
Melachakar, Sivasagar	5	10	23	12	6	11	42	15	11	8	12	6
Rudrasagar, Sivasagar	6	11	29	15	6	8	15	10	5	11	18	11
Janiganj, Silchar	8	10	50	23	8	11	52	20	8	11	57	23
RLO, Silchar	5	5	29	13	7	11	35	12	7	10	37	18
Kathal road, Silchar	8	9	55	28	7	10	53	26	8	10	63	32
NAAQ Standards	80	80	100	60	80	80	100	60	80	80	100	60

From the data it has been observed that the concentration of parameters of SO₂ and NO₂ before and during Durga Puja festival were well within the prescribed standards. The concentration of PM₁₀ and PM_{2.5} were also within the prescribed standard except one location viz. Khanapara where the values of PM₁₀ and PM_{2.5} exceeded during Durga Puja..



Ambient Noise Level:

The Ambient Noise Level status of few selected locations of Assam before and during Durga Puja festival for the year 2021 is presented below:

**Ambient Noise Level at selected locations of Assam
before and during Durga Puja, 2022**

Area	Location	Zone	Ambient Noise Level Leq (in dBA)		
			Before Durga Puja on 20.09.2022	During Durga Puja on 02.10.2022	After Durga Puja on 05.10.2022
Guwahati	Ganeshguri (Near NEDFI)	Commercial	69.4	66.0	60.6
	Bharalumukh	Residential	56.0	78.6	60.9
	Pandu	Commercial	53.2	70.1	62.9
Bongaigaon	Barpara	Residential	49.4	53.1	57.1
	Mayapuri	Commercial	68.6	68.8	69.2
	Civil Hospital	Silent	44.9	48.4	46.1
Dibrugarh	H.S Road	Residential	65.1	78.7	75.7
	Dibrugarh University	Silent	69.2	79.8	74.5
	Milan Nagar	Commercial	57.1	71.1	68.0
Jivasagar	Melachakar	Residential	56.8	58.0	55.6
	Central Market	Commercial	62.8	65.2	62.5
	Sivadol Near DC Office	Silent	52.4	58.2	55.2
Silchar	GC College	Silent	47.9	60.8	49.9
	Tarapur	Commercial	63.2	74.3	66.3
	Ambicapatty	Residential	55.9	61.3	58.9
Nagaon	Near BP Civil Hospital	Silent	66.2	70.6	69.2
	Haiborgaon Bazar Area	Commercial	60.2	63.6	54.1
	Milanpur, Nagaon	Residential	68.5	73.1	67.2
Monitoring were carried out from 18:00 Hrs. to 24:00 Hrs.					

Noise standard in dB(A)			
During day time (in between 6AM and 10 PM)		During night time (in between 10PM and 6 AM)	
Industrial Zone	: 75	Industrial Zone	: 70
Commercial Zone	: 65	Commercial Zone	: 55
Residential Zone	: 55	Residential Zone	: 45
Silence Zone	: 50	Silence Zone	: 40

From the data it has been observed that except few occasions, the ambient noise level at most of the locations exceeded the prescribed standards irrespective of silence, commercial and residential zones.