

Data on Air, Water quality, noise and vibration

We measure regularly the atmosphere, the water, the noise, the vibration, and manage them to observe laws and regulations.

Name of factories and companies	Item	Type		Unit	Regulation value		Voluntary standard value	Average	MAX
					Low/Local regulation	Agreement with the city			
Head Office/ Factory	Atmosphere	Soot and dust	Boiler (No.12)	mg/Nm ³	50	—	40	2	2
			Firing furnace (PR-2)	mg/Nm ³	150	—	120	6.5	7
		NOx	Boiler (No.12)	ppm	150	—	120	53	53
			Firing furnace (PR-2)	ppm	180	—	144	106	160
	Drain (sewer)	pH		—	5.0~9.0	—	5.4~8.6	6.9	7.3
		SS		mg/l	600	—	480	23.3	49
		BOD		mg/l	600	—	480	15.0	50
		n-hexane extract		mg/l	30	—	24	2.1	7.6
		Cyanogen		mg/l	1	—	0.8	0.22	0.4
		Total chromium		mg/l	2	—	1.6	0.05	0.08
		Hexavalent chromium		mg/l	0.5	—	0.4	<0.04	<0.04
		Zinc		mg/l	2	—	1.6	0.42	0.81
		Lead		mg/l	0.1	—	0.08	<0.02	<0.02
		Nitrogen		mg/l	120	—	96	22.43	37
		Phosphor		mg/l	16	—	12.8	0.42	0.78
		Fluorine		mg/l	8	—	6.4	0.29	0.5
	Boron		mg/l	10	—	8	<1	<1	
	Noise	Morning	R spot	dB	70	—	68	59.1	59.1
			T spot	dB	65	—	63	66.1	66.1
		Daytime	R spot	dB	70	—	68	59.2	59.2
			T spot	dB	65	—	63	61.0	61.0
		Evening	R spot	dB	70	—	68	62.3	62.3
			T spot	dB	65	—	63	65.6	65.6
		Night	R spot	dB	65	—	64	62.2	62.2
			T spot	dB	55	—	54	61.9	61.9
	Vibration	Daytime	R spot	dB	70	—	65	40.0	40.0
T spot			dB	70	—	65	40.0	40.0	
Night		R spot	dB	65	—	60	40.0	40.0	
		T spot	dB	65	—	60	40.0	40.0	

* 1 : These values apply to the background noise level. The background noise level is the noise when machines, and so on, are not operating. It is affected by traffic noise, noise from adjacent factories, and so on.

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Name of factories and companies	Item	Type		Unit	Regulation value		Voluntary standard value	Average	MAX
					Low/Local regulation	Agreement with the city			
Komaki Factory	Atmosphere	Soot and dust	Boiler (No.1-5)	mg/Nm ³	200	200	160	2.0	2.0
			Firing furnace (No.9-10)	mg/Nm ³	200	200	160	5.0	7.0
		NOx	Boiler (No.1-5)	ppm	250	–	200	16.0	16.0
			Firing furnace (No.9-10)	ppm	200	–	160	73.5	82.0
		SOx	Boiler (No.1-5)	Nm ³ /h	8.379	–	6.703	<0.2	<0.2
			Firing furnace (No.9-10)	Nm ³ /h	8.379	–	6.703	<2	<2
	Drain (public water area)	pH	East	–	6.0~8.0	6.0~8.0	6.2~7.8	7.4	7.5
			West					7.3	7.4
			North					7.2	7.3
		SS	East	mg/l	30	–	24	2.9	5.0
			West					1.1	2.0
			North					4.1	9.0
		BOD	East	mg/l	25	–	20	3.9	8.2
			West					1.1	2.2
			North					0.9	2.0
		COD	East	mg/l	–	–	–	4.5	7.2
			West					3.5	4.3
			North					3.9	4.6
		COD(total)	Komaki Factory total	kg/day	166.32	–	166.32	9.5	20.1
		n-hexane extract	East	mg/l	5	5	4	<0.5	0.8
			West					<0.5	0.9
			North					<0.5	<0.5
		Cyanogen	East	mg/l	0.5	0.5	0.4	<0.1	<0.1
			West					<0.1	<0.1
			North					<0.1	<0.1
		Total chromium	East	mg/l	2	1	0.8	<0.04	<0.04
			West					<0.04	<0.04
			North					<0.04	<0.04
		Copper	East	mg/l	1	1	0.8	0.05	0.09
			West					0.07	0.08
			North					0.03	0.11
		Zinc	East	mg/l	1.8	1.8	1.6	0.09	0.15
			West					0.03	0.05
			North					0.07	0.12
		Lead	East	mg/l	0.1	–	0.08	<0.02	<0.02
			West					<0.02	<0.02
			North					<0.02	<0.02
		Nitrogen	East	mg/l	120	–	60	7.3	10.0
			West					3.3	7.9
			North					7.2	14.0
		Nitrogen(total)	Komaki Factory total	kg/day	122.51	–	122.51	12.6	28.9
		Phosphorus	East	mg/l	16	–	8	0.48	0.78
			West					0.85	1.2
			North					0.92	1.5
		Phosphorus(total)	Komaki Factory total	kg/day	12.256	–	12.256	1.1	3.2
		Nickel	East	mg/l	–	–	–	0.2	0.4
			West					<0.1	<0.1
			North					<0.1	<0.1
		Manganese	East	mg/l	10	–	8	<0.1	<0.1
			West					<0.1	<0.1
North			<0.1					<0.1	
Fluorine		East	mg/l	8	–	6.4	0.6	0.8	
		West					1.2	1.4	
		North					0.3	0.6	
Boron	East	mg/l	10	–	8	1.1	2.0		
	West					<1	<1		
	North					<1	<1		
Noise	Morning	Fifth spot	dB	65	–	63	44.5	44.5	
	Daytime	Fifth spot	dB	70	–	68	45.0	45.0	
	Evening	Fifth spot	dB	65	–	63	44.0	44.0	
	Night	Fifth spot	dB	60	–	58	46.1	46.1	
Vibration	Daytime	Fifth spot	dB	70	–	70	≤40	≤40	
	Night	Fifth spot	dB	65	–	65	≤40	≤40	

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					Low/Local regulation	Agreement with the city			
Miyanojo Factory	Atmosphere	Soot and dust	Absorption heater/chiller	mg/Nm ³	300	–	240	N/A	N/A
			3T water boiler	mg/Nm ³	100	–	80	<0.006	<0.006
		NOx	Absorption heater/chiller	ppm	180	–	144	N/A	N/A
			3T water boiler	ppm	150	–	120	68.0	68.0
	Drain (public water area)	pH		–	6.0~8.0	6.0~8.0	6.5~7.8	7.3	7.5
		SS		mg/l	35	35	28	6.2	11.0
		BOD		mg/l	20	20	16	2.9	6.0
		COD		mg/l	160	–	128	8.0	9.0
		n-hexane extract		mg/l	5	≤5	4	<2.5	<2.5
		Cyanogen		mg/l	1	–	0.8	<0.05	<0.05
		Hexavalent chromium		mg/l	0.5	–	0.4	<0.05	<0.05
		Copper		mg/l	3	–	2.4	<0.05	<0.05
		Zinc		mg/l	2	–	1.4	<0.05	<0.05
		Lead		mg/l	0.1	–	0.08	<0.01	<0.01
		Fluorine		mg/l	8	–	6.4	<0.2	0.2
	Boron		mg/l	10	–	8	2.8	6.4	
	Coli bacteria		counts/cm ³	3000	–	2400	0	0	
	Noise	Morning		dB	60	–	55	44.5	45.9
		Daytime		dB	65	–	60	52.9	54.2
		Evening		dB	60	–	55	47.4	51.8
Night			dB	50	–	50	45.5	46.6	
Vibration	Daytime		dB	60	–	52	29.5	29.5	
	Night		dB	55	–	48	30.5	30.5	
Ise Factory	Atmosphere	Soot and dust	Firing furnace	mg/Nm ³	250	–	100	<5	<5
					–	5.8~8.6	–	6.0~8.4	7.4
	Drain (public water area)	SS		mg/l	90	–	45	2.7	10.0
		BOD		mg/l	25	–	20	1.7	6.0
		COD		mg/l	25	–	20	4.3	10.0
		COD(total)		kg/day	3.4	–	3.4	0.1	0.2
		n-hexane extract		mg/l	30	–	15	<1	<1
		Total chromium		mg/l	2	–	1	<0.04	<0.04
		Copper		mg/l	1	–	0.5	<0.02	<0.02
		Zinc		mg/l	2	–	1	0.054	0.071
		Lead		mg/l	0.1	–	0.05	<0.01	<0.01
		鉄		mg/l	10	–	5	0.11	0.34
		Phenols		mg/l	1	–	0.5	0.0	0.0
		Nitrogen		mg/l	120	–	60	7.7	17.0
		Nitrogen(total)		kg/day	4.1	–	4.1	0.2	0.4
		Phosphorus		mg/l	16	–	8	0.76	2.0
		Phosphorus(tota)		kg/day	0.39	–	0.39	0.02	0.04
	Manganese		mg/l	10	–	5	0.4	2.3	
	Coli bacteria		counts/cm ³	3000	–	1500	26	70	
	Noise	Morning	East	dB	55	–	55	43.2	43.2
Daytime		East	dB	60	–	58	44.3	44.3	
Evening		East	dB	55	–	55	45.7	45.7	
Night		East	dB	50	–	50	45.5	45.5	
Vibration	Daytime (all directions)		dB	65	–	60	<50	<50	
	Night (all directions)		dB	60	–	55	<50	<50	

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				Low/Local regulation	Agreement with the city				
Takenami Factory	Drain (public water area)	pH	—	5.8~8.6	5.8~8.6	5.8~8.6	7.3	7.7	
		SS	mg/l	200	200	100	5.3	12.0	
		BOD	mg/l	160	160	130	13.3	35.0	
		COD	mg/l	160	160	80	5.6	12.0	
		n-hexane extract	mg/l	5	—	4	<0.5	<0.5	
		Nitrogen	mg/l	120	—	120	4.3	7.7	
		Phosphorus	mg/l	16	—	16	0.22	0.80	
	Coli bacteria	counts/cm ³	3000	—	2000	2.8	11		
	Noise	Morning	Fourth spot	dB	50	50	50	42.5	42.5
		Daytime	Fourth spot	dB	55	55	55	44.0	45.0
		Evening	Fourth spot	dB	50	50	50	42.8	43.0
		Night	Fourth spot	dB	45	45	45	42.0	42.0
	Vibration	Daytime	Fourth spot	dB	55	55	55	18.2	18.2
Night		Fourth spot	dB	50	50	50	15.0	15.0	
NTK Ceramic Co., Ltd. (Iijima Factory)	Atmosphere	Soot and dust	mg/Nm ³	Firing furnace: YA-5,6	250	—	250	<5	<5
				Firing furnace: YA-7,8	—	—	—	—	<5
				Absorption heater/chiller: FGL	100	—	100	<5	<5
				Absorption heater/chiller: FGDL	—	—	—	—	<5
	NOx	ppm	Firing furnace: YA-5,6	180	—	180	<10	<10	
			Firing furnace: YA-7,8	—	—	—	—	<10	
			Absorption heater/chiller: FGL	150	—	150	19.0	24.0	
	Absorption heater/chiller: FGDL	—	—	—	—	34.0			
	Drain (public water area)	pH	—	5.8~8.6	5.8~8.6	6.0~8.0	7.3	7.3	
		SS	mg/l	50	50	50	2.7	17.0	
BOD		mg/l	30	30	25	1.5	2.7		
COD		mg/l	30	30	30	3.2	8.2		
n-hexane extract		mg/l	5	5	5	<1	<1		
Cyanogen		mg/l	0.5	0.5	0.2	<0.01	<0.01		
Copper		mg/l	2	2	2	0.1	0.1		
Zinc		mg/l	3	3	3	<0.05	<0.05		
Lead		mg/l	0.1	0.1	0.1	<0.05	<0.05		
Fluorine		mg/l	15	15	15	0.4	0.6		
Boron		mg/l	50	50	50	0.8	1.1		
Phenols		mg/l	5	5	5	<0.02	<0.02		
Ammonia		mg/l	500	500	500	13.0	18.0		
Coli bacteria	counts/cm ³	3000	3000	3000	2.8	8			
Noise	Morning	First spot	dB	65	65	65	50.2	50.2	
	Daytime	First spot	dB	65	65	65	48.5	48.5	
	Evening	First spot	dB	65	65	65	45.5	45.5	
	Night	First spot	dB	55	55	55	47.0	47.0	
Atmosphere	Soot and dust	Firing furnace(NN-1)	mg/Nm ³	50	50	20	5.0	5.0	
	SOx	Firing furnace(NN-1)	Nm ³ /h	—	0	—	0.0	0.0	
Drain (public water area)	pH	Factory 1&2	—	5.8~8.6	5.8~8.6	6.2~8.6	7.6	7.8	
		Factory 3	—	—	—	—	7.3	7.7	
	SS	Factory 1&2	mg/l	50	50	35	4.8	16.0	
		Factory 3	mg/l	—	—	—	1.7	3.0	
	BOD	Factory 1&2	mg/l	15	15	13	2.7	6.4	
		Factory 3	mg/l	—	—	—	4.5	7.4	
	COD	Factory 1&2	mg/l	40	40	30	7.7	24.0	
		Factory 3	mg/l	—	—	—	9.1	19.0	
	n-hexane extract	Factory 1&2	mg/l	5	5	4	<0.5	<0.5	
		Factory 3	mg/l	—	—	—	<0.5	<0.5	
Nitrogen	Factory 1&2	mg/l	10	10	—	4.3	7.6		
	Factory 3	mg/l	—	—	—	4.2	8.3		
Phosphorus	Factory 1&2	mg/l	3	3	2.5	0.08	0.36		
	Factory 3	mg/l	—	—	—	0.22	1.5		
Coli bacteria	Factory 1&2	counts/cm ³	3000	3000	1000	219.5	840		
	Factory 3	counts/cm ³	—	—	—	16.3	180		
Noise	Morning	Fourth spot	dB	60	60	58	45.0	47.0	
	Daytime	Fourth spot	dB	65	65	63	50.0	51.0	
	Evening	Fourth spot	dB	60	60	58	48.0	50.0	
	Night	Fourth spot	dB	50	50	50	46.0	48.0	
Vibration	Daytime	Fourth spot	dB	65	—	63	20.4	20.4	
	Night	Fourth spot	dB	60	—	58	19.9	19.9	

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Name of factories and companies	Item	Type	Unit	Regulation value		Voluntary standard value	Average	MAX	
				Low/Local regulation	Agreement with the city				
NTK Ceramic Co., Ltd. (Kani Factory)	Atmosphere	Soot and dust	mg/Nm ³	100	-	90	5.0	5.0	
		NOx	ppm	150	-	135	130.0	130.0	
	Drain (sewer)	pH	-	5.8~8.6	-	5.9~8.5	7.2	7.2	
		SS	mg/l	200	-	180	1.0	1.0	
		BOD	mg/l	160	-	144	0.5	0.5	
		COD	mg/l	160	-	30	2.7	2.7	
	Noise	n-hexane extract	mg/l	5	-	4.5	1.0	1.0	
		Morning	First spot	dB	50	-	50	46.5	46.5
		Daytime	First spot	dB	60	-	60	47.1	47.1
		Evening	First spot	dB	50	-	50	46.8	46.8
Night	First spot	dB	45	-	45	44.3	44.3		
Nansei Ceramic Co., Ltd.	Drain (public water area)	pH	-	-	-	5.8~8.6	6.7	7.1	
		SS	mg/l	-	-	90	0.7	1.0	
		BOD	mg/l	20	20	20	<1	<1	
		COD	mg/l	-	-	40	<1	<1	
		n-hexane extract	mg/l	-	-	1	<1	<1	
		Lead	mg/l	-	-	0.1	<0.01	<0.01	
		Nitrogen	mg/l	-	-	100	0.3	0.4	
	Noise	Phosphorus	mg/l	-	-	16	<0.05	<0.05	
		Coli bacteria	counts/cm ³	-	-	1000	1.0	3	
		Morning	North	dB	55	-	55	53.0	53.8
		Daytime	North	dB	60	-	60	56.8	57.3
		Evening	North	dB	55	-	55	53.9	54.2
		Night	North	dB	50	-	50	47.4	47.9
Kamioka Ceramic Co., Ltd.	Drain (public water area)	pH	①	-	5.8~8.6	-	6.2~8.2	7.6	7.9
			②	-	5.8~8.6	-	6.2~8.2	7.4	7.7
			③	-	5.8~8.6	-	6.2~8.2	7.6	7.9
		SS	①	mg/l	200	-	50	3.0	4.2
			②	mg/l	200	-	50	18.0	26.0
			③	mg/l	200	-	50	7.8	14.0
		BOD	①	mg/l	160	-	40	0.8	1.1
			②	mg/l	160	-	40	21.0	30
			③	mg/l	160	-	40	1.9	3.2
		COD	①	mg/l	160	-	40	1.0	1.5
			②	mg/l	160	-	40	24.0	36.0
			③	mg/l	160	-	40	4.4	6.1
	n-hexane extract	①	mg/l	5	-	2.5	<0.5	<0.5	
		②	mg/l	5	-	2.5	<0.5	<0.5	
		③	mg/l	5	-	2.5	0.6	0.7	
	Coli bacteria	①	mg/l	3000	-	300	<30	<30	
		②	mg/l	3000	-	300	34	38	
		③	mg/l	3000	-	300	<30	<30	
	Noise	Morning	Fourth spot	dB	60	-	60	39.0	39.0
		Daytime	Fourth spot	dB	65	-	65	45.0	45.0
Evening		Fourth spot	dB	60	-	60	43.0	43.0	
Night		Fourth spot	dB	50	-	50	42.0	42.0	
Nittoku Seisakusho Co., Ltd. (Head Office Factory)	Drain (sewer)	pH	① Office building	-	5.0以上	-	5.8~9.0	7.4	7.4
			② Head factory	-	5.0以上	-	5.8~9.0	7.0	7.0
			③ West factory	-	5.0以上	-	5.8~9.0	7.2	7.2
		SS	① Office building	mg/l	-	-	500	1	1
			② Head factory	mg/l	-	-	500	36	36
			③ West factory	mg/l	-	-	500	3	3
		BOD	① Office building	mg/l	-	-	500	0.9	0.9
			② Head factory	mg/l	-	-	500	7.2	7.2
			③ West factory	mg/l	-	-	500	7.2	7.2
	n-hexane extract	① Office building	mg/l	50	-	50	-	-	
		② Head factory	mg/l	50	-	50	<0.5	<0.5	
		③ West factory	mg/l	50	-	50	6.6	6.6	
	Noise	Morning	Second spot	dB	60	-	60	61	61
Daytime		Second spot	dB	65	-	65	61	61	
Evening		Second spot	dB	60	-	60	60	60	
Vibration	Daytime	Second spot	dB	-	-	-	<45	<45	
	Night	Second spot	dB	-	-	-	<45	<45	

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Nittoku Seisakusho Co., Ltd. (Oguchi Factory)	Drain (public water area)	pH	Oguchi ①	-	5.8~8.6	-	6.0~8.4	7.8	7.8
			Oguchi ②					7.1	7.1
		SS	Oguchi ①	mg/l	30	-	-	1.0	1.0
			Oguchi ②					4.0	4.0
		BOD	Oguchi ①	mg/l	25	-	20	0.5	0.5
			Oguchi ②					1.1	1.1
	n-hexane extract	Oguchi ①	mg/l	5	-	5	1.0	1.0	
		Oguchi ②					1.0	1.0	
	Noise	Morning	First spot	dB	55	55	55	50.0	50.0
		Daytime	First spot	dB	60	60	60	58.0	58.0
		Evening	First spot	dB	55	55	55	53.0	53.0
		Night	First spot	dB	50	50	50	46.0	46.0
	Vibration	Daytime	First spot	dB	-	60	-	51.0	51.0
		Night	First spot	dB	-	55	-	50.0	50.0
Nittoku Seisakusho Co., Ltd. (Satsuma Factory)	Drain (public water area)	pH		-	5.8~8.6	-	6.0~8.4	6.3	6.3
		SS		mg/l	-	-	200	40.0	40.0
		BOD		mg/l	-	-	160	41.0	41.0
		n-hexane extract		mg/l	5	-	5	2.5	2.5
		Coli bacteria		counts/cm ³	3000	-	3000	89	89
	Noise	Morning	First spot	dB	60	-	60	45.5	45.5
		Daytime	First spot	dB	65	-	65	44.8	44.8
		Evening	First spot	dB	60	-	60	43.1	43.1
		Night	First spot	dB	50	-	50	47.2	47.2
	Vibration	Daytime	First spot	dB	65	-	60	46.0	46.0
		Night	First spot	dB	60	-	55	47.0	47.0
Nichiwa Kiki Co., Ltd.	Drain (sewer)	pH		-	5.0~	-	6.0~8.0	6.6	6.7
		n-hexane extract		mg/l	50	-	40	4.3	14.0
	Noise	Daytime	Cooling tower north side	dB	65	-	63	60.9	60.9
Tono Ceramic Co., Ltd.	Atmosphere	Soot and dust		mg/Nm ³	-	-	200	20.0	26.0
		NOx		ppm	-	-	400	100.0	150.0
	Drain (public water area)	pH		-	-	-	5.8~8.6	7.5	7.5
		SS		mg/l	-	-	200	1.0	1.0
		BOD		mg/l	-	-	160	0.8	0.8
		n-hexane extract		mg/l	-	-	5	0.5	0.5
	Noise	Morning		dB	50	-	50	46.0	47.0
		Daytime		dB	60	-	60	54.0	58.0
		Evening		dB	50	-	50	46.0	47.0
		Night		dB	45	-	45	44.0	44.0
Ceramic Sensor Co., Ltd.	Atmosphere	Soot and dust		mg/Nm ³	200	200	200	0.002	0.002
		NOx		ppm	-	-	-	36.0	65.0
	Drain (public water area)	pH		-	6.0~8.0	6.0~8.0	6.0~8.0	7.3	7.7
		SS		mg/l	18	18	18	3.6	8.0
		BOD		mg/l	18	18	18	3.9	6.2
		COD		mg/l	18	18	18	9.9	14.0
		n-hexane extract		mg/l	2	2	2	1.0	1.0
		Nitrogen		mg/l	30	30	30	10.0	26.0
		Phosphorus		mg/l	4	-	4	0.2	0.6
		Fluorine		mg/l	8	-	8	2.9	5.2
	Boron		mg/l	10	-	10	2.3	5.6	
	Noise	Daytime		dB	70	70	70	56.2	60.1
		Night		dB	60	60	60	55.0	59.4
	Tokai Taima Kogu Co., Ltd.	Noise	Morning	east	dB	60	-	60	43.4
Daytime			east	dB	65	-	65	45.1	45.1
Evening			east	dB	60	-	60	44.1	44.1
Night			east	dB	50	-	50	40.5	40.5
Vibration		Daytime	east	dB	65	-	65	48.0	48.0
		Night	east	dB	60	-	60	48.0	48.0