

# Appendices



**Appendix-I**  
**(Refer paragraph 3.1.1, at page: 11)**  
**Non-compliance with the provisions of the NDM Guidelines, 2010, by MCs**

Sl. No.	Actionable item	Audit Observation	Compliance by MCs
1	2	3	4
1	As per Para 4.5.2 of the NDM Guidelines, 2010, all ULBs/ States were to prepare an inventory of the existing storm water drainage system on a Geographic information systems (GISs) platform. The inventory was to be both watershed-based and ward-based, with clear mapping of the major, as well as minor, systems.	MCs had not prepared any master plans for storm water management, as of July 2022. DAs prepared the inventory of drains under the jurisdiction of MCs, as a Comprehensive Development Plan (CDP) of drains, which had been identified as primary drains. The secondary and tertiary drains, which were substantially contributing components of drainage systems were not identified and mapped. This rendered the CDP deficient.	The SE, Drainage Division, BMC, noted the audit comments, for future guidance and stated that, due to shortage of manpower and any design cell, the survey works for secondary and tertiary drains could not be made. The EEs, BeMC, RMC and SMC noted the audit comments, however, no reply was furnished by CMC.
2	As per para 4.7.1 of the NDM guidelines, 2010, catchment area was to be the basis for planning and designing the storm water drainage system, in all ULBs.	MCs had not prepared master plans for storm water management. However, CDP of drains was adopted (for the length and width of primary drains only). No catchment area of primary, secondary and tertiary drains were identified by the MCs or by the DAs.	-do-
3	Para 4.12.4.3 (i) & (ii) of the NDM guidelines, 2010, pre-monsoon desilting of all the major drains was to be completed by 31 <sup>st</sup> March each year. Besides, for the pre-monsoon desilting of drains, the periodicity of cleaning drains was to be worked out, based on the local conditions. The roster of cleaning of such drains was to be worked out and strictly followed.	Neither periodic action plans were prepared for desilting of drains before the onset of monsoon, nor any roster of cleaning worked out and followed. The work of desilting of drains, at different stretches, was entrusted to contractors during the monsoon period.	SEs and EEs of the MCs noted the audit comments and stated that desilting of drains was carried out before and during the monsoon period. The reply was not tenable, since Audit noticed that the desilting works had been taken up during and after the monsoon period, in deviation to NDM guidelines.
4	As per para 4.12.4.3 (vi) of the NDM guidelines, 2010, suitable interventions in the drainage, like traps, comminutors and trash racks were to be used, to reduce the amount of solid waste going into the storm water drains.	Though 120 screen bars were installed by MCs, in different locations of the primary drains, they were not cleaned regularly, by the sweeping staff. Due to non-maintenance, most of them were damaged. As a result, solid waste was flowing to water bodies. During JPV, Audit observed that debris and sewage waste were continuously floating in all types of drains.	The SEs and EEs of the MCs noted the audit comments, for future guidance.

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in Municipal Corporations for the year ended 31 March 2022**

<b>Sl. No.</b>	<b>Actionable item</b>	<b>Audit Observation</b>	<b>Compliance by MCs</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
5	Para 4.12 (xii) of the NDM guidelines, 2010, a master plan was to be prepared, to improve the coverage of the sewerage system, so that sewage would not be discharged into storm water drains.	MCs did not prepare any master plans, for storm water drains. Audit observed that no measures had been taken to avoid mixing of sewage into storm water drains, as of July 2022. Instead, the raw sewage was directly discharging into storm water drains, contaminating the flow in the storm water drains.	The SEs and EEs of the MCs noted the audit comments, for future guidance.
6	As per the para 4.13.3.1 of NDM guidelines, 2010, the re-leveling or strengthening / overlay works of all roads were to be carried out, by milling the existing layers of the roads and recycling of materials was to be obtained. As a result, the road levels would not increase.	Overlaying of roads, repeatedly, on the existing surface, by the PWDs and MCs, led to increase in elevation of roads, as compared to the level of houses of nearby streets, over a period of time.	The SEs and EEs of the MCs noted the audit comments, for future guidance.
7	As per para 4.13.4.1 of the NDM guidelines, 2010, inlets were to be provided on the roads, to drain water to the roadside drains. They were to be designed, based on current national and international practices.	Audit observed that variations in the levels of inlets was leading to stagnation of water on the roads. Absence of monitoring led to clogging of the inlets.	The SEs/ EEs of the MCs and the R&B Divisions, noted the audit comments, for future guidance.
8	As per para 4.16 of the NDM guidelines, 2010, every building in an urban area was to have rainwater harvesting as an integral component of the building utility. ULBs were to ensure that this was implemented.	Rooftop Rainwater harvesting was made (April 2022) mandatory for houses situated within urban house limits. Audit observed that no such rooftop rainwater harvesting structures had been recommended in the building plans approved by the MCs.	The SEs and EEs of the MCs noted the audit comments, for future guidance.
9	As per para 4.17.2 of the NDM guidelines, 2010, the concept of rain gardens was to be incorporated, in planning for public parks and on-site storm-water management, for larger colonies and sites that were to be developed. People were encouraged to adopt this concept, even for sites already developed.	Audit observed that no such rain gardens were executed by the five selected MCs.	The SEs and EEs of the MCs noted the audit comments, for future guidance.
10	As per para 4.18.1 of the NDM guidelines, 2010, all urban water bodies were to be protected. Efforts to be made to restore water bodies, by de-silting and taking other measures. Further, efforts were also to be made to revive the water bodies that had been put to other uses. Water bodies were to be an integral part of the storm water system.	All MCs were responsible for the maintenance and development Lakes/ water bodies, under their jurisdictions.  Out of 628 water bodies/ lakes, under the jurisdiction of the MCs, only 35 water bodies had been developed, as of July 2022, while 18 water bodies were not in use.	The SEs and EEs of the MCs noted the audit comments, for future guidance.

<b>Sl. No.</b>	<b>Actionable item</b>	<b>Audit Observation</b>	<b>Compliance by MCs</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
11	As per para 4.19 of the NDM guidelines, 2010, urban storm-water management systems were to include detention and retention facilities, to mitigate the negative impacts of urbanization on storm water drainage.	Audit observed that the five selected MCs had not adopted detention and retention facilities for storm water drains, to mitigate the urban flooding and water logging, in rainy season.	The SEs and EEs of the MCs noted the audit comments, for future guidance.
12	As per Para 4.22.6.2 (i) of the NDM guidelines, 2010, low-lying areas were to be reserved for park and other low-impact human activities, wherever unavoidable, buildings in low-lying areas were to be constructed on stilts above the High Flood Level (HFL)/ Full Tank Level (FTL).	Audit observed that the selected MCs, did not reserve the low lying areas, for construction of parks.	The SEs and EEs of the MCs noted the audit comments, for future guidance.
13	As per Para 4.2.23 of the NDM guidelines, 2010, encroachments on nallahs/ drains/ water courses were to be removed, by providing alternative accommodation to the Below Poverty Line (BPL) people and appropriate rehabilitation packages for other categories of people. The nallahs/ drains/ water courses/ flood plains were to be clearly delineated and boundaries fixed in new developments. There was to be strict enforcement of the relevant bye-laws / regulations, in the new layouts. Any encroachment on the drain was to attract penal action and be treated as a cognizable offence, both against the encroachers and the officials responsible for enforcement of the bye-laws/ regulations.	No penal action were taken, either against the encroachers, or against the officials responsible for enforcement of the bye- laws/ regulations, for their dereliction. Data in respect of encroachments available with the MCs was deficient, as, during JPV, audit observed a large number of encroachments on drains, for which no action had been taken.	The SE, Drainage Division BMC, stated that action would be taken for encroachment free drains, for free flow of storm water, to the downstream. The EEs, BeMC, RMC and SMC noted the audit comments, however, no reply was furnished by CMC.

*(Source: As per provisions of NDM Guidelines, 2010 and information furnished by the selected MCs)*

**Appendix-II**  
**(Refer paragraph 3.1.3.1, at page: 13)**  
**Disused water bodies, under the MCs (as of March 2022)**

*(Areas in acres)*

<b>Sl. No.</b>	<b>Municipal Corporation</b>	<b>Water body/ Location</b>	<b>Plot No.</b>	<b>Ward No.</b>	<b>Areas</b>	<b>Status</b>
1	Bhubaneswar	Ghagudi tank	8536	23	0.230	No water body, at present.
2	Cuttack	Chandini Chowk	2295/ 3239	6	0.004	No tank available at the site
3	Cuttack	Choudhury Bazar	1187	13	0.002	No tank available at the site
4	Cuttack	Choudhury Bazar	807	13	0.007	No tank available at the site
5	Cuttack	Choudhury Bazar	2047	13	0.002	No tank available at the site
6	Cuttack	Buxi Bazar	61	27	0.725	No tank available at the site
7	Cuttack	Buxi Bazar	97	27	0.094	No tank available at the site
8	Cuttack	Mirkamal Patna	385	26	0.040	Had lost characteristics of tank <sup>174</sup>
9	Cuttack	Mirkamal Patna	391	26	0.050	Had lost characteristics of tank
10	Cuttack	Mirkamal Patna	325	26	0.019	Had lost characteristics of tank
11	Cuttack	Mirkamal Patna	307	26	0.006	Had lost characteristics of tank
12	Cuttack	Mirkamal Patna	230	26	0.380	Had lost characteristics of tank
13	Cuttack	Samantasahi	1550	19	0.020	No tank available at the site. A building has been constructed on it.
14	Cuttack	Samantasahi	1458	19	0.056	No tank available at the site. A building has been constructed on it.
15	Cuttack	Samantasahi	1459	19	0.099	No tank is available at the site. A building has been constructed on it.
16	Cuttack	Jobra	706	34	0.032	Filled up and cannot be used.
17	Cuttack	Bisinabar	93	30	0.154	Tank has been filled up and one building is constructed on the land.
18	Cuttack	Jhanjirimangala	1366	23	0.057	No tank available at the site. One building is located on this tank.
<b>Total</b>					<b>1.977</b>	

*(Source: Information furnished by the selected MCs)*

<sup>174</sup> Sl. No. 8 to 12, most of the areas of the tanks were encroached by public.

**Appendix – III**  
**(Refer paragraph 3.1.4, at page: 13)**  
**Details of natural drains, as per CDPs**

Sl. No.	Drain No.	Starting point	Outfall point	Total Length (in km)	Size of drains in CDPs (width x depth)
	Bhubaneswar Municipal Corporation				
1	Drain No. I	Buddha Park	Gangua Nallah	5.830	14.3 m X 2.9 m
2	Drain No. II	MCL Corporation	Mancheswar Railway bridge	0.549	4.9 m X 1.7 m
3	Drain No. III	Gajapati nagar	Gangua Nallah	4.226	9 m X 2.1 m
4	Drain No. IV	Ekamrakanan	Gangua Nallah	9.770	9.2 m X 2.6 m
5	Drain No. V	BED college	Gangua Nallah	3.530	5 m X 2 m
6	Drain No. VI	Jayadev Bhawan	Gangua Nallah	3.127	6.5 m X 1 m
7	Drain No. VII	Basic science college	Gangua Nallah	5.455	7.6 m X 2.2 m
8	Drain No. VIII	Baramunda	Pokhariput	6.689	9 m X 2.3 m
9	Drain No. IX	Ghatikia	Gangua Nallah	15.050	14.83 m X 3.3 m
10	Drain No. X	Mamtaz Ali High school	Gangua Nallah	8.376	10 m X 2.4 m
	<b>Total</b>			<b>62.602</b>	

Sl. No.	Drain No.	Starting point	Outfall point	Total Length in km	Proposed size of drains (width and depth)
	Cuttack Municipal Corporation				
1	MSWC-I	Deuli Sahi, Cuttack	Matagajpur (Kathajodi river)	11.580	Not available in CDP
2	Link drain to MSWC-I	After Bisinabar	Khananagar (Kathajodi river)	1.300	Not available in CDP
3	MSWC-II	NH-5 Near OMP square	Gulguli (Mahanadi River)	5.240	Not available in CDP
	<b>Total</b>			<b>18.120</b>	

*(Source: Information furnished by the selected MCs)*

**Note:** Details of drains and their length and size were not available in the CDPs for Berhampur. The CDPs for Rourkela and Sambalpur had not been finalized (as of March 2022)

**Appendix – IV**  
**(Refer paragraph 3.2.7, at page: 45)**  
**Projects under Smart City Mission during 2015-20**

Sl. No.	Package ID	Project name	Project cost (₹ in crore)	Project period	Schedule date of commencement	Schedule date of completion	Expenditure (₹ in crore)
<b>Project under Bhubaneswar Smart City Mission</b>							
1	0DI-BHU-001	Socially Smart Bhubaneswar	3.48	2015-20	18.11.2016	31.12.2027	7.50
2	0DI-BHU-009	Public bicycle sharing scheme	11.80	2015-20	15.10.2018	15.10.2018	2.81
3	0DI-BHU-010	e-Rickshaw	0.00	2015-20		Ongoing	6.12
4	0DI-BHU-012	School equity centers, rental for construction workers, Project Kutumb, One stop social equity centers	9.71	2015-20	15.04.2017	14.04.2018	1.86
5	0DI-BHU-014	I am Bhubaneswar Initiative	2.56	2015-20	05.11.2016	11.04.2019	3.56
6	0DI-BHU-015	Integrated Public Service centers, Public internet access centers, Saheed Nagar	3.58	2015-20	04.10.2017	04.09.2018	25.00
7	0DI-BHU-017	Waste- Let us recycle	25.00	2015-20	10.03.2017	03.12.2020	82.65
8	0DI-BHU-019	ICOMC Building	83.02	2015-20	01.06.2019	31.05.2021	316.84
9	0DI-BHU-021	Smart solution ICOMC	641.40	2015-20	23.12.2017	22.01.2020	8.50
10	0DI-BHU-022	Project Bhubaneswar urban Knowledge center	8.50	2015-20	05.11.2016	11.04.2019	10.50
11	0DI-BHU-023	Traffic management project (ATSC)	14.69	2015-20	05.01.2017	11.05.2017	0.00
12	0DI-BHU-024	Solar city roof top	20.00	2015-20	09.06.2016	18.10.2018	0.00
13	0DI-BHU-025	Common payment card	19.19	2015-20	14.09.2017	13.09.2025	2.22
14	0DI-BHU-026	Smart parks	2.22	2015-20	20.03.2017	30.11.2017	1.00
15	0DI-BHU-027	Sensory Park	1.20	2015-20	11.05.2018	08.08.2018	2.53
16	0DI-BHU-028	Bhubaneswar one	2.53	2015-20	07.05.2016	31.08.2018	0.00
17	0DI-BHU-029	Mission Awas- Santi Nagar PPP project	55.00	2015-20	-	Yet to be started	0.00
18	0DI-BHU-030	Mission Awas- Satyanagar EPC project	64.48	2015-20	-	Yet to be started	0.00
19	0DI-BHU-031	Mission Awas project Chandrasekharpur PPP project	155.00	2015-20	-	Yet to be started	0.00
20	0DI-BHU-032	Mission Awas project Gadakana EPC contract	79.63	2015-20	-	Yet to be started	0.00
21	0DI-BHU-033	Smart Janapath	100.11	2015-20	04.10.2017	20.11.2019	94.55
22	0DI-BHU-034	Multi-level car parking Raj Mahal square	46.81	2015-20	27.12.2017	26.06.2019	38.86
23	0DI-BHU-035	Multi-level car parking Saheed Nagar	31.02	2015-20	27.12.2017	26.12.2018	29.22
24	0DI-BHU-037	Construction of sewerage system of sewerage district I	0.00	2015-20	27.07.2017	23.08.2020	0.00
25	0DI-BHU-040	Integrated Public service centers at Bapuji Nagar	5.66	2015-20	01.02.2019	31.01.2020	5.66
26	0DI-BHU-041	Drink from tap	25.00	2015-20	-	2015-20	10.00
27	0DI-BHU-042	Digital door numbering	5.00	2015-20	-	Yet to be started	0.00
28	0DI-BHU-043	Development of new road at South side of Lake zone III	11.67	2015-20	-	Yet to be started	0.02
29	0DI-BHU-044	Interior furnishing work of 5 nos of floors of new BMC ICOMC building	32.86	2015-20	-	Ongoing	3.20
30	0DI-BHU-045	Providing & flooring of bamboo fencing at Median of Janapath from Master canteen to Vanivihar	1.00	2015-20	-	Ongoing	1.00
31	0DI-BHU-046	Skill development center	1.00	2015-20	-	Yet to be started	0.00

Sl. No.	Package ID	Project name	Project cost (₹ in crore)	Project period	Schedule date of commencement	Schedule date of completion	Expenditure (₹ in crore)
32	0DI-BHU-047	Mo Seva Kendra	2.00	2015-20		Ongoing	0.12
33	0DI-BHU-048	City surveillance system III	25.00	2015-20	-	Yet to be started	0.00
34	0DI-BHU-049	Development of new road at North side of Lake zone II	11.20	2015-20	-	Yet to be started	0.00
35	0DI-BHU-050	Redesigning of traffic post	1.00	2015-20	-	Yet to be started	0.00
36		Central Region Urban Transport	0.00	2015-20	-	Ongoing	29.32
37		Administrative & Office Expenses	0.00	2015-20	-	Ongoing	62.56
<b>Total</b>			<b>1502.32</b>				<b>745.60</b>

**Projects under Rourkela Smart City Mission**

1	ODI-ROU-030	Rourkela one	137.76	2015-20	28.01.2020	28.01.2022	57.82
2	ODI-ROU-052	Battery Operated e-Rickshaw with charging Station	0.5	2015-20	02.02.2017	03.02.2018	0.4
3	ODI-ROU-059	Biju Pattanaik Indoor Stadium	15.77	2015-20	06.06.2019	16.12.2021	15.77
4	ODI-ROU-071	Citizen Friendly Parks	6.26	2015-20	22.09.2018	27.06.2020	6.26
5	ODI-ROU-074	Upgradation of Markets Panposh Market, Daily Market, wholesale Market	53.59	2015-20	10.12.2019	12.12.2021	36.24
6	ODI-ROU-079	Installation of GPS devices in 30 city Buses	0.06	2015-20	01.11.2017	12.12.2017	0.06
7	ODI-ROU-080	Smart road Phase-I Panposh chowk to Ambedkar Chowk with Carriageway 20.7m ROW footpath Cycle-T	24.8	2015-20	20.08.2019	27.08.2020	16.84
8	ODI-ROU-081	Smart road Phase-2 all other road ROW varying from 5m to 30M carriageway footpath Cycle	120.84	2015-20	25.06.2020	28.06.2022	48.28
9	ODI-ROU-087	Upgradation of Birsa Stadium	157.21	2015-20	30.11.2019	12.02.2021	118.42
10	ODI-ROU-088	Smart bus shelters	2.84	2015-20	13.09.2019	31.03.2020	2.22
11	ODI-ROU-089	Making 27 slums in ADB area of RSCL ODF through CLTS	0.47	2015-20	19.01.2018	28.02.2019	0.47
12	ODI-ROU-090	Surface parking for two and four-wheeler	2.94	2015-20	01.06.2020	28.11.2020	2
13	ODI-ROU-093	Brahmani river front Development	0	2015-20	-	-	0
14	ODI-ROU-094	Development of Big Re-creational Park	23.53	2015-20	29.07.2020	31.12.2022	8
15	ODI-ROU-095	Design Development reactional facilities of DAV Pond	18.11	2015-20	12.10.2020	23.11.2021	9.93
16	ODI-ROU-096	Installation of 3D flex in Rourkela	1.67	2015-20	18.09.2020	28.01.2022	0.33
17	ODI-ROU-098	Beautification of Ring road Traffic Chowk to Hanuman Vatika Chowk	21.71	2015-20	29.09.2020	30.04.2022	16
18	ODI-ROU-099	Vedvyas Tourism at Rourkela	21.59	2015-20	19.10.2020	31.10.2021	8
19	ODI-ROU-100	Redevelopment of Existing Park Open Space of RMC	3.36	2015-20	20.10.2020	13.12.2021	2.22
20	ODI-ROU-103	Redevelopment of VSS Market Chhend	2.28	2015-20	22.11.2020	30.12.2021	2.28
21	ODI-ROU-105	Water Conservation Project	0.5	2015-20	05.08.2020	30.12.2021	0.5
22	ODI-ROU-106	Development of Vending Zone near Raghunath Pali Post Office and Jail Road	3.97	2015-20	04.01.2021	24.12.2021	1.44
23	ODI-ROU-107	RMC Road Beautification	6.6	2015-20	18.12.2020	21.09.2021	2.3
24	ODI-ROU-108	Implementation of Storm Water Management Project at Rourkela	91.2	2015-20	19.05.2021	31.08.2022	40.8
25	ODI-ROU-109	Construction of Science Park	13.83	2015-20	02.03.2022	30.11.2022	0.5

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Sl. No.	Package ID	Project name	Project cost (₹ in crore)	Project period	Schedule date of commencement	Schedule date of completion	Expenditure (₹ in crore)
26	ODI-ROU-110	Design, construction of Decorative Glow Garden & Illumination Works at Hockey Chowk, Rourkela	8.65	2015-20	24.02.2022	22.04.2023	0.91
27	ODI-ROU-111	Design, Development of Land scaping and Hardscaping works at Hockey Chowk Rourkela	7.93	2015-20	24.02.2022	22.02.2023	0
28	ODI-ROU-112	Streetscaping of Road from Chhend Main Road to Chhend - BPUT Road	9.06	2015-20	02.03.2022	30.11.2022	0.68
29	ODI-ROU-113	Street scaping of Hockey chowk to labour chowk Panposh chowk to Ambedkar chowk and Hi-Tech hospital chowk to Shambi chowk	5.89	2015-20	02.03.2022	30.09.2022	0
30	ODI-ROU-114	Street scaping of Mahatab road Koel nagar main road and Madhusudan road	4.71	2015-20	02.03.2022	30.09.2022	0
31	ODI-ROU-115	Development of Koel nagar Market	18.83	2015-20	02.03.2022	30.06.2023	0
32	ODI-ROU-116	Smart Food Court near Basanti Over Bridge	0.95	2015-20	23.03.2021	09.04.2022	0.81
33	ODI-ROU-117	Upgradation of Existing playgrounds at Udit Nagar, Chennd, Koel nagar and Civil Township	10.45	2015-20	01.01.2022	01.01.2023	1.6
34	ODI-ROU-119	Procurement of computer Hardware and peripherals for implementation of e-office	0.18	2015-20	02.06.2021	17.08.2021	0.18
35	ODI-ROU-120	Upgradation of Eight parks in Chennd Colony	3.6	2015-20	20.10.2020	10.08.2021	2.18
36	ODI-ROU-121	Upgradation of Nine parks in civil Township and Basanti Colony	3.82	2015-20	20.10.2020	10.06.2021	3.39
37	ODI-ROU-122	e-Shusrut Project	1.46	2015-20	04.12.2021	30.06.2022	0
38	ODI-ROU-123	Road Median Development Chhend to Tisco Road	4.64	2015-20	30.03.2022	30.09.2022	0
39	ODI-ROU-126	Variable message Signe board	1.57	2015-20	30.03.2022	31.05.2022	1.57
40	ODI-ROU-127	Drinking water facility civil Structure	0.77	2015-20	30.03.2022	31.05.2022	0.77
41	ODI-ROU-128	Drinking water facility Stainless steel	0.79	2015-20	30.03.2022	31.05.2022	0.79
42	ODI-ROU-130	Widening and strengthening of road from ROB 212 to Phase -II Bus parking via Kalinga Vihar Chowk Pradhan park Road	9.46	2015-20	28.02.2022	30.06.2022	9.46
43	ODI-ROU-131	Improvement and upgradation of road from Kanak Manjari Chowk to Airport Rourkela	9.98	2015-20	26.11.2021	31.03.2022	0.98
44	ODI-ROU-132	Improvement of road from BSNL Chowk to Kalinga Bihar Chowk	0.81	2015-20	26.11.2021	31.03.2022	0.81
45	ODI-ROU-133	Surface parking at Traffic Chowk Rourkela	2.83	2015-20	04.09.2021	24.05.2022	1.26
46	ODI-ROU-134	Development of vending zone	5	2015-20	30.01.2022	31.08.2022	5
47	ODI-ROU-135	Procurement of BHELMIS for spraying disinfectant for Covid-19	0.04	2015-20	14.04.2020	02.05.2020	0.04
48	ODI-ROU-136	Procurement of Tractor mounted sprayer for spraying of disinfectant for Covid-19	0.03	2015-20	24.04.2020	15.05.2020	0.03
49	ODI-ROU-137	Spraying of Disinfectant	0.05	2015-20	24.04.2020	30.10.2021	0.05

Sl. No.	Package ID	Project name	Project cost (₹ in crore)	Project period	Schedule date of commencement	Schedule date of completion	Expenditure (₹ in crore)
		through Drone					
50	ODI-ROU-139	Provision of Power supply to Surface parking near BSNL Chowk	0.01	2015-20	18.09.2021	30.11.2021	0.01
51	ODI-ROU-140	Provision for line diversion for Rourkela one Project	0.36	2015-20	15.12.2020	14.01.2022	0.36
52	ODI-ROU-141	Provision of Power supply to Smart Bus Shelter	0.04	2015-20	25.07.2020	24.08.2021	0.04
53	ODI-ROU-142	Provision of Power supply to Netaji Rotary Park-I	0.05	2015-20	30.09.2019	29.10.2019	0.05
54	ODI-ROU-143	Provision of Power supply to Netaji Subash Park	0.03	2015-20	30.09.2019	29.10.2019	0.03
55	ODI-ROU-144	Provision of Power supply to Uditnagar Park	0.04	2015-20	30.09.2019	29.10.2019	0.04
56	ODI-ROU-145	Development of three Anganwadi centers to strengthen early childhood development under ICDS Programme	0.15	2015-20	17.01.2022	16.03.2022	0.03
57	ODI-ROU-146	Baby feeding and diaper changing units at 4 Identified spaces	0.06	2015-20	11.08.2021	10.09.2021	0.06
58	ODI-ROU-147	Splash Pool	0.25	2015-20	30.03.2022	31.05.2022	0.25
59	ODI-ROU-148	Shifting and erection of 11KV & 33 KV line at DAV Pond	0.42	2015-20	24.03.2022	31.05.2022	0.42
60	ODI-ROU-149	Shifting of Water Pipeline near Smart Vending Zone-I	0.19	2015-20	28.03.2022	31.03.2022	0.19
61	ODI-ROU-150	Integrated command control Centre	106.42	2015-20	18.06.2022	31.12.2022	0
<b>Total</b>			<b>950.91</b>				<b>429.07</b>

**(Source:** Information furnished by the selected MCs)

**Appendix – V**

(Refer paragraph 4.1, at page: 55)

**Receipt and expenditure of the selected MCs during FYs 2017-18 to 2021-22**

**(₹ in crore)**

Sl. No.	Municipal Corporations	14th Finance Commission					15th Finance Commission					4 <sup>th</sup> & 5 <sup>th</sup> Devolution funds (tied grants)					State grants for SWD		
		Opening Balance	Receipt	Expenditure	Closing Balance	Opening Balance	Receipt	Expen- diture	Closing Balance	Opening Balance	Receipt	Expenditure	Closing Balance	Opening Balance	Receipt	Expenditure	Closing Balance		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
1	Bhubaneswar	0	136.97	136.97	0	0	267.97	154.97	113.00	0	154.79	94.30	60.49	0	60.00	0	60.00		
2	Cuttack	0	98.69	93.85	4.84	0	193.02	60.33	132.69	0	111.23	70.57	40.66	0	34.00	0.48	33.52		
3	Rourkela	0	50.09	32.86	17.23	0	90.79	43.92	46.87	0	56.45	17.97	38.48	0	2.00	0	2.00		
4	Sambalpur	12.10	54.44	34.11	32.43	0	120.62	28.59	92.03	7.60	61.35	17.30	51.65	0	17.00	2.40	14.60		
5	Berhampur	12.95	67.93	77.62	3.26	0	103.12	25.10	78.02	18.67	67.03	47.98	37.72	0	21.00	1.97	19.03		
	<b>Total</b>	<b>25.05</b>	<b>408.12</b>	<b>375.41</b>	<b>57.76</b>	<b>0</b>	<b>775.52</b>	<b>312.91</b>	<b>462.61</b>	<b>26.27</b>	<b>450.85</b>	<b>248.12</b>	<b>229.00</b>	<b>0</b>	<b>134.00</b>	<b>4.85</b>	<b>129.15</b>		

Sl. No.	Municipal Corporations	4 <sup>th</sup> SFC & 5 <sup>th</sup> SFC					AMRUT					Municipal fund (own revenue)					OIDF loan		
		Opening Balance	Receipt	Expenditure	Closing Balance	Opening Balance	Receipt	Expenditure	Closing Balance	Opening Balance	Receipt	Expenditure	Closing Balance	Opening Balance	Receipt	Expenditure	Closing Balance		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
1	Bhubaneswar	0	128.11	89.02	39.09	0	8.84	8.84	0	95.51	1772.44	1300.38	567.57	0	0	0	0		
2	Cuttack	36.45	627.94	480.99	183.40	0	5.89	5.89	0	12.90	168.60	122.82	58.68	0	0	0	0		
3	Rourkela	0	30.40	10.35	20.05	0	2.90	2.90	0	118.59	499.08	471.53	146.14	0	0	0	0		
4	Sambalpur	6.12	21.55	1.48	26.19	0	0.86	0.86	0	111.58	218.85	291.65	38.78	0.01	5.03	3.66	1.37		
5	Berhampur	11.39	33.33	22.91	21.81	0.08	2.81	2.89	0	286.96	260.68	374.47	173.17	6.17	21.16	25.71	1.62		
	<b>Total</b>	<b>53.96</b>	<b>841.33</b>	<b>604.75</b>	<b>290.54</b>	<b>0.08</b>	<b>21.30</b>	<b>21.38</b>	<b>0</b>	<b>625.54</b>	<b>2,919.65</b>	<b>2,560.85</b>	<b>984.34</b>	<b>6.18</b>	<b>26.19</b>	<b>29.37</b>	<b>2.99</b>		

**Source:** Information furnished by the selected MCs

**Appendix – VI**  
**(Refer paragraph 5.2.2.2, at page: 67)**  
**Non-start of SWD projects of the Berhampur Municipal Corporation**

SI. No.	Project	Project cost (₹ in lakh)	Date of issue of work order	Period given for Completion of Work	Present status/ reason for delay
A	B	C	D	E	F
1	Construction of road and both side drain from Dwarika Nagar end to Trupti Nagar in Ward No.01	17.35	07/01/2022	60 days	Reminder notice issued for execution the work
2	Construction of road and drain Trupti Nagar 2nd line Ward No.1	15.02	04/01/2022	60 days	Reminder notice issued for execution the work
3	Construction of road and drain Trupti Nagar 4th line Ward No.1	15.50	04/01/2022	60 days	Reminder notice issued for execution the work
4	Construction of road and drain at Dandasi sahi Ward No.1	3.69	13/07/2022	60 days	Reminder notice issued for execution the work
5	Construction of road and drain Laxmi Nrusingha Sahi - 10 <sup>th</sup> 11th and 12th line Ward No.2	40.69	13/07/2022	60 days	Not started
6	Construction of road and drain Laxminrusingha sahi - 7th, 8th and 9th line- Ward No.3	49.96	13/07/2022	60 days	Not started
7	Construction of drain at Omm Nagar 1st line in Ward No.02	1.98	14/12/2021	30 days	Not started
8	Construction of Both side Drain at Sahu Colony in Ward No.04	11.89	07/01/2022	60 days	Work not started due to non-shifting of pipeline
9	Improvement road With Cement Concrete Paver Block and Construction of Both Side drain at Ganapathi Nagar 4th Line in Ward No.05	17.15	24/08/2022	60 days	Layout given, work will be started soon.
10	Construction of Drain with cover slab at Minakshi Nagar 1st line in front of mango market 1st gate in Ward No.12	10.49	08/09/2022	60 days	Lay out given. Work to be started soon.
11	Improvement of road and both side RCC drain at Annapurana Nagar 7th	11.35	08/09/2022	60 days	Lay out given. Work to be started soon.

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<b>SI. No.</b>	<b>Project</b>	<b>Project cost (₹ in lakh)</b>	<b>Date of issue of work order</b>	<b>Period given for Completion of Work</b>	<b>Present status/ reason for delay</b>
<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>
	line in Ward No.12				
12	Construction of main drain at Niladri vihar main road (Left hand)	68.50	08/09/2021	60 days	Work not started. No response by the contractor.
13	Construction of Drain at Tulasi nagar 8th line - 9th line and main road in Ward No.05	11.97	13/08/2021	60 days	Work not started. Reminder letters issued. Contractor did not respond.
14	Improvement of Road and Drain at Sana Harijan Sahi in Ward No.21	5.21	30/08/2022	60 days	Layout given. Work will be started soon
15	Improvement of road with cement concrete paver block at Bada Dhoba sahi, Mochi sahi and CC Road drain cover at Jayamangal Nagar in Ward No.21	9.74	11/01/2022	60 days	Work not started
16	Construction of both side drain at Khodasingi Bada Sahi	19.90			Work not started
<b>Total</b>		<b>310.39</b>			
<b>Non-execution due to encroachment</b>					
1	Improvement of Road and Construction of Drain, Culvert at Raghupati Nagar 1st. Line and Construction of Drain at Raghupati Nagar third line in ward No.03	21.58	04/01/2022	60 days	Drain work stopped due to site dispute.
2	Improvement of Road and RCC Drain at Annapurna nagar 4th line Extension in Ward No.14	27.31	13/01/2022	60 days	Work in progress (delay due to encroachment issue and dispute relating to land demarcation)
3	Construction of CC drain at Subash Nagar 1st line, 2nd line and 3rd line	20.00	10/11/2021	60 days	Work stopped due to site dispute. Joint demarcation to be done. Letter issued to the Tahsildar.
	<b>Total</b>	<b>68.89</b>			

(Source: Information furnished by BeMC)

**Appendix-VII**

(Refer paragraph 5.3.1, at page: 75)

**Sewerage generated, collected, treated and untreated waste discharged to water bodies (as of March 2022)**

Sl. No.	Municipal Corporation	Water supply	Sewerage generated, as per CPHEEO Sewerage Manual <i>(80 per cent of Col. 3)</i>	Sewerage collected through sewer lines	Percentage of sewerage collection	Sewerage uncollected and discharged to water bodies <i>(Col. 4 – 5)</i>	Quantity in MLD)			Percentage of treated sewage discharged to water bodies		
							From collected sewage, quantity treated in STPs	Quantity reused from treated Sewerage	Quantity discharged to water bodies from treated Sewerage (Col. 9 – 10)			
<i>I</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>	<i>9</i>	<i>10</i>	<i>11</i>	<i>12</i>	<i>13</i>
1	Bhubaneswar	270.64	216.51	29.75	13.74	186.76	86.26	29.75	5.80	19.50	23.95	80.50
2	Cuttack	209.00	167.20	20.62	12.33	146.58	87.67	20.62	2.00	9.70	18.62	90.30
3	Sambalpur	76.76	61.41	0	0	61.41	100	0.00	0	0.00	0.00	0
4	Rourkela	61.90	49.52	2.60	5.25	46.92	94.75	2.60	0	0	2.60	100
5	Berhampur	80.00	64.00	0	0	64.00	100	0.00	0	0	0.00	0
<b>Total</b>	<b>698.30</b>	<b>558.64</b>	<b>52.97</b>	<b>9.48</b>	<b>505.67</b>	<b>90.52</b>	<b>52.97</b>	<b>7.80</b>	<b>14.72</b>	<b>45.17</b>	<b>85.28</b>	

*(Source: Information furnished by EIC, Public Health, Odisha)*

### Appendix- VIII

(Refer paragraph 6.2.1, at page: 93)

Environmental compensation not levied for non-compliance to Water Act, 1974												
Sl. No.	Location of STP	Water supply to cities, as per EIC, PH (O), during March 2022	Waste generated @ 80 percent of water supply in MLD ( 80 percent of col. 3)	Installed capacity of STP (in MLD)	GAP (Col. 4 - 5)	Sewerage collected through sewer lines (in MLD)	Sewerage uncollected in MLD and discharged to water bodies (Col. 4 - 7)	Target date for completion	Environmental compensation from	Non-completion date	Delay in days (Col. 11 - 10)	Environment compensation (₹ in lakh) #
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>
1	Bhubaneswar	270.64	216.51	183.50	33.01	29.75	186.76	31/03/2020	01/04/2020	31/03/2022	729	44,980.38
2	Cuttack	209	167.20	85.00	82.20	20.62	146.58	31/03/2020	01/04/2020	31/03/2022	729	36,287.90
3	Sambalpur	76.76	61.41	40.00	21.41	0	61.41	31/03/2020	01/04/2020	31/03/2022	729	14,974.39
4	Rourkela	61.90	49.52	40.00	9.52	2.60	46.92	31/03/2020	01/04/2020	31/03/2022	729	11,321.83
5	Berhampur	80.00	64.00	0.00	64.00	0	64.00	31/03/2020	01/04/2020	31/03/2022	729	16,336.00
<b>Total</b>		<b>698.30</b>	<b>558.64</b>		<b>210.14</b>	<b>52.97</b>	<b>505.67</b>					<b>1,23,900.49</b>

(Source: Information furnished by OWSSB and EIC, Public health, Odisha)

# [Col. 17.5 x (Col. 4 - 5) + 55.5 x (Col. 4 - 7) + 0.2 x (Col. 12+0.05\*(Col. 4 - 7) x Col.12]

As per CPCB Norms: Formula as per CPCB for EC (lacs Rs) = 17.5 (total sewerage generation - installed treatment capacity) + 55.5(total sewerage generation - operational capacity) X N + Marginal cost of environmental externality X (total sewerage generation - operational capacity) X N where N is the number of days delayed, for sewerage systems

**Appendix- IX**

**(Refer paragraph 6.4, at page: 94)**  
**Delay in completion of works, and non- levy of liquidated damage, for default in execution by the contractors**

S.I. No.	MCS/ Unit	Name of the works	Estimated cost put to tender (₹ in Lakh)	Agreement cost (₹ in lakh)	Date of commencement	Stipulated date for completion	Upto date Expenditure (₹ in lakh)	Delay up to date of completion/ last date of Audit	Delay in days	Liquidated damage (₹ in lakh)	Status
1	2	3	4	5	6	7	8	9	10	11	12
1	BMC	Construction of RCC drain which culvert at Siddheswar Nagar in Ward No. 63	71.31	65.54	14-08-2018	13-02-2019	71.29	18-01-2020	339	7.13	Completed
2	BMC	Construction of drain with culverts from Radha Krishna Nagar to Main Drain No.1 in Damma Village	272.11	249.75	12-05-2020	11-11-2020	195.61	17-09-2022	675	27.21	Not completed
3	BMC	Construction of RCC Drain with cover slab at Aurobindo Nagar from plot No. 330 to Drain No. 1C near Damana Road in Ward No 9	84.96	72.22	12-11-2020	26-12-2020	36.29	30-10-2021	308	8.50	Completed,
4	OWSSB	Construction of sewerage system for Bhubaneswar city in sewerage District-I	17,808.51	20,671.63	27-07-2017	26-07-2020	13,868.24	19-08-2022	754	1,780.85	Not completed
5	OWSSB	Construction of sewerage system for Bhubaneswar city in sewerage District-II	12,569.99	17,308.00	27-10-2017	26-10-2020	11,660.73	19-08-2022	662	1,257.00	Not completed
6	OWSSB	Construction of sewerage system for Bhubaneswar city in sewerage District-III	37,604.05	34,537.23	27-07-2017	26-07-2020	20,365.04	19-08-2022	754	3,760.41	Not completed
7	OWSSB	Construction of sewerage system for Bhubaneswar city in sewerage District-IV	6,715.58	6,223.00	09-02-2018	08-02-2020	49,767.57	30-03-2022	781	671.56	Not completed
8	OWSSB	Construction of STP & Pumping stations in Bhubaneswar Sewerage District -VI and Cuttack Sewerage District I, II and III	22,052.98	31,998.72	22-07-2013	21-07-2016	26,806.96	30-07-2022	2200	2,205.30	Not completed
9	CMC	Re-construction of drain from Badambadi U.G.M.E School to Badambadi PHD Office at New Colony Main Road in Ward No.44	16.30	16.30	06-04-2018	05-07-2018	18.01	25-02-2019	235	1.63	Completed
10	CMC	Rc-construction of drain with covering Precast slab at (I) Baidyanath Mishra Lane Samadhi patna(II) Inside of Muradkhan Patna Harijan Sahi Sweeper Colony with Road and (III) In front of	20.62	22.06	10-04-2018	09-07-2018	24.71	30-09-2019	448	2.06	Completed

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Sl. No.	MCS/ Unit	Name of the works	Estimated cost put to tender (₹ in Lakh)	Agreement cost (₹in lakh)	Date of commencement	Stipulated date for completion	Upto date Expenditure (₹ in lakh)	Delay up to date of completion/ last date of Audit	Delay in days	Liquidated damage (₹ in lakh)	Status
1	2	3	4	5	6	7	8	9	10	11	12
11	CMC	Akash Saloon in Ward No-41	13.80	14.35	10-04-2018	09-07-2018	15.72	30-10-2019	478	1.38	Completed
12	CMC	Re-construction of drain with covering Pre-cost slab from (I) working women's Hostel to Bulu Sarangi resident of Gamhadia new colony (II) from Jadu Jena resident to Subosh Das resident of Uchha Sahi with CC road (III) From Arjuna Bhola resident to Shakti Hospital Lane convert and (IV) from Anwar Kachi resident to S. K. Anwar resident of Keshar Pur in Ward No. 33	24.57	26.17	11-04-2018	10-06-2018	26.45	30-09-2019	477	2.46	Completed
13	CMC	Re-construction of Drain with covering Precast slab from (I) Grahacharya House to bisinabar Park (II) Nakei Padia to Bisinabar Park (III) Bisinabar School backside (IV) Kedar Khuntia House to Mangaia Patra Lane at Tala sahi with road (V) at advocate P. K. Sarangi Lane at Shakti Nagar and Trilochan Mohanty Lane of Das Sahi (VI) drain from Bishram Nagar Plot No 60 of Ashoka Arora to Plot No. 68 of Premalata Nanda resident and road from Acharya Babu House to Dasa Sahi Main road Maa Mangala Lane and (VIII) Road from Ambika Niwas to Bishram Nagar Main road and by lanes in Ward No.37	33.66	31.24	11-04-2018	10-06-2018	34.27	30-07-2019	415	3.37	Completed
14	CMC	Re-construction of drain with covering Pre-cost slabs from OSL Lane and Shakti Nagar area in Ward No. 37. Under CMC (Node details of zone 513, 33, 34, 33A, 32 and 25.A-05)	14.28	15.12	17-11-2018	16-01-2019	13.03	30-09-2019	257	1.43	Completed
15	CMC	Construction of Drain behind the Bombey Heat Point to Paras Plaza (Balance Portion)	29.96	29.36	21-12-2021	20-03-2022	23.53	25-11-2022	250	3.00	Not completed

Sl. No.	MCS/ Unit	Name of the works	Estimated cost put to tender (₹ in Lakh)	Agreement cost (₹in lakh)	Date of commencement	Stipulated date for completion	Upto date Expenditure (₹ in lakh)	Delay up to date of completion/ last date of Audit	Delay in days	Liquidated damage (₹ in lakh)	Status
1	2	3	4	5	6	7	8	9	10	11	12
16	CMC	Construction Of Main Drain from Baimundi Nagar to Petanallah via Bandha Chhaka and Baula Chhaka at Bidanasi in Ward No.1	633.98	570.52	29-11-2021	28-10-2022	287.61	25-11-2022	28	63.40	Not completed
17	SMC	Reclamation of water bodies under Sambalpur Municipal Corporation (three water bodies i.e. Sidi Bandha, Bada Bandha, and Puti Bandha) under OUIDF	383.61	345.32	14/12/2018	13-06-2020	198.15	16-11-2022	886	38.36	Not completed
18	SMC	Renovation of Dhama Road Tank, Sambalpur	35.93	30.55	19/05/2016	18-07-2016	27.56	16-11-2022	2,312	3.59	Not completed
19	SMC	Special repair to Church Chowk to Golbazar Chowk via Lastalia House Road such as construction of RCC drain from 02/100 km	33.8	33.8	01-05-2020	31-07-2020	15.89	16-11-2022	838	3.38	Not completed
20	SMC	Special Repair to Dehuripli to Gurunank School road such as construction of RCC drain from 1/0 to 2/000 km (in Patches for the year 2019-20)	64.23	64.23	24-05-2020	23-08-2020	52.28	16-11-2022	815	6.42	Not completed
21	SMC	Balance portion of Storm Water drain from NH 6 towards the back side of RMC in ward no 14 under SMC Sambalpur	19.99	16.99	12-11-2018	11-02-2019	6.82	16-11-2022	1,374	2.00	Not completed
22	SMC	Construction of RCC drain inside Kamali Bazar, Sambalpur in ward no 23 under SMC, Sambalpur	20	19.34	16-12-2016	15-03-2017	8.51	16-11-2022	2,072	2.00	Not completed
23	RMC	Proposed Drain development in Civil township at Rourkela for AAAA 7-8, UUU 7-8, TTTT 15-16, CCCC 16-30	48.07	36.48	11-05-2022	25-06-2022	19.35	13-12-2022	171	4.81	Not completed
24	RMC	Proposed Drain Development in Civil Township at Rourkela (X1 - X17, Y19 - Y20, Z12 - Z11 / 13)	40.44	30.69	11-05-2022	25-06-2022	22.43	13-12-2022	171	4.04	Not completed
25	RMC	Proposed Drain Development in Civil Township at Rourkela (AA 1- AA15, Z1-Z22, V1-V22)	37.46	28.43	11-05-2022	25-06-2022	22.32	13-12-2022	171	3.75	Not completed
26	RMC	Construction of storm water drain from Jhirpani road culvert to Jagannath Temple A block, Kochnagar .	36.11	30.7	18-04-2021	17-03-2022	34.37	28-04-2022	42	3.61	Completed

**Performance Audit Report on Storm Water Drainage and Sewerage Management Systems in Municipal Corporations for the year ended 31 March 2022**

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Sl. No.	MCS/ Unit	Name of the works	Estimated cost put to tender (₹ in Lakh)	Agreement cost (₹in lakh)	Date of commencement	Stipulated date for completion	Upto date Expenditure (₹ in lakh)	Delay up to date of completion/ last date of Audit	Delay in days	Liquidated damage (₹ in lakh)	Status
1	2	3	4	5	6	7	8	9	10	11	12
27	RMC	Construction of drain at Plot No. L/79 to 84, L/85 to 90 and L/91 to 98 at Chhend, Ward No.15	12.01	9.12	06-06-2022	06-08-2022	6.92	01-11-2022	87	1.20	Completed
28	RMC	Renovation and construction of road and drain at Bandha Munda area in ward No.24	16.04	14.3	24-06-2022	23-08-2022	8.68	13-12-2022	112	1.60	Not completed
29	RMC	Construction of Storm Water Drain backside of Qr. No. GM-01, Kalinga Vihar	89.67	84.67	20-06-2022	19-09-2022	75.25	17-11-2022	59	8.97	Completed
30	RMC	Improvement of both CC roads and drains of Basanti Colony of FL, M, E, AE area D/1 Block RMC	30.8	26.17	27-12-2021	09-02-2022	14.73	13-12-2022	307	3.08	Not completed
31	RMC	Proposed Drains of Basanti Colony of LCL, CM, CE, BM, BL, near (B), Rourkela	60.76	54.25	15-03-2022	29-04-2022	39.65	13-12-2022	228	6.08	Not completed
32	RMC	Proposed Drains of Basanti colony of AM and AL area (A), Rourkela	60.29	58.83	15-03-2022	29-04-2022	17.6	13-12-2022	228	6.03	Not completed
33	RMC	Construction of drain at HIG/B-1 to B/40, Phase-II, Kalinga Vihar	24.62	18.68	08-02-2021	07-07-2021	13.23	25-09-2021	80	2.46	Completed
34	RMC	Proposed BT, C,C Road &Drains of Basanti Colony of E, DM, GM, EM, DL area (G), Rourkela	66.53	59.4	25-12-2021	10-02-2022	51.89	13-12-2022	306	6.65	Not completed
35	RMC	Proposed Drains of Basanti Colony of FM, FL, FE, F/AE area (C)	64.78	57.83	18-03-2022	02-05-2022	27.83	13-12-2022	225	6.48	Not completed
36	BeMC	Construction of RCC drain & culvert at Chanakya Nagar Khala street Main Road in ward No.36	19.34	18.76	29-09-2021	06-05-2022	18.07	08-07-2022	63	1.93	Completed
37	BeMC	Construction of RCC drain at LIG-212/stage -1 near park and LIG-220 2nd Extn (Right side) in ward No.14	10.6	9.01	03-06-2021	23-08-2021	7.86	25-10-2021	63	1.06	Completed
38	BeMC	Construction of drain culvert and road at Nruslingha Nagar main road with extension line in ward No. 14	24.17	22.95	10-11-2021	30-04-2022	18.37	20-05-2022	20	2.42	Completed
39	BeMC	Construction of drain and culvert at Radhamani Nagar Housing board with extension line connecting to main drain	17.09	16.28	12-11-2021	24-04-2022	11.37	25-05-2022	31	1.71	Completed
40	BeMC	Construction of RCC Road and culvert from Gosani Nuagaon new police station to backside ARAY Building via	18.22	16.65	27-08-2021	12-02-2022	10.83	03-06-2022	111	1.82	Completed

Sl. No.	MCS/ Unit	Name of the works	Estimated cost put to tender (₹ in Lakh)	Agreement cost (₹ in lakh)	Date of commencement	Stipulated date for completion	Upto date Expenditure (₹ in lakh)	Delay up to date of completion/ last date of Audit	Delay in days	Liquidated damage (₹ in lakh)	Status
1	2	3	4	5	6	7	8	9	10	11	12
41	BeMC	RJ office in Ward No. 27 Construction of road and drain at Khajia sahi 6th line in ward No. 17	18.28	17.37	22-10-2021	20-05-2022	6.41	20-08-2022	92	1.83	Completed
42	BeMC	Construction for CC road and drain and culvert at Laxmi Narayan Nagar in Ward No. 37	37.89	32.21	26-03-2021	25-12-2021	37.88	28-02-2022	65	3.79	Completed
43	BeMC	Construction of CC road and drain at Mayuree Vihar in Ward No. 26	31.21	26.53	20-04-2021	25-10-2021	25.94	31-12-2021	67	3.12	Completed
44	BeMC	Construction of drain at Suraj Vihar 4th line in Ward No. 05	21.22	21.21	13-08-2021	01-06-2022	20.33	06-07-2022	35	2.12	Completed
45	BeMC	Construction of RCC drain Culvert and roadside of Royal Pharmacy College in Ward No. 26	15.3	13.65	10-01-2022	09-03-2022	8.28	13-11-2022	249	1.53	Not completed
46	RSCL	Construction of Madhusudanpalli-Malgodown road drain and Railway colony-Jspat Hotel drain in Rourkela	912.21	937.29	03-08-2021	02-08-2022	623.85	03-12-2022	123	91.22	Not completed
47	RSCL	Construction of Government college drain -Basanti colony -Sarana chowk drain in Rourkela	888.26	912.69	03-08-2021	02-08-2022	753.99	03-12-2022	123	88.83	Not completed
48	RSCL	Construction of Gopabandhupalli-Gandhi Road Bisra chowk road -Nala Road drain in Rourkela	909.07	934.06	03-08-2021	02-08-2022	532.49	03-12-2022	123	90.91	Not completed
		<b>Total</b>	<b>1,02,034.66</b>	<b>1,15,849.65</b>			<b>1,25,954.19</b>			<b>10,203.47</b>	

*(Source: Information furnished by the selected MCS/OWSSB)*

### Appendix-X

**(Refer paragraph 6.5, at page: 94)**

#### **Water quality of rivers and water bodies, during January-July 2022**

*(mg/l)*

River/ Nallah	Biochemical Oxygen Demand (Admissible limit $\leq 3$ )	Dissolved Oxygen Demand (Admissible $\geq 5$ )	Chemical Oxygen Demand (Admissible limit $\leq 50$ )	Total Coliform (Admissible limit $\leq 5,000$ )	Faecal Coliform (Admissible limit $\leq 2,500$ )	Total Suspended Solids (Admissible limit $\leq 100$ )
<i>I</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>
Kathajodi downstream	3.50	7.7	18.50	38,786	21,656	22
Kathajodi, Matagajpur	2.2	7.2	17.3	13,969	7,125	18
Mahanadi, Jobra railway bridge, Cuttack	60	0.3	138	1,60,000	1,60,000	69
Daya River, BBSR Down stream	4.40	3.8	20.90	1,04,857	76,114	43
Gangua River, near Rajadhani College	7.90	0.8	44.90	1,40,571	1,28,558	35
Gangua River, near Palasuni	9.00	1.1	57.00	11,716	1,00,314	113
Gangua River, near Samantarapur	10.10	0.8	58.00	1,39,571	1,37,614	91
Gangua River, near Vadimula	6.10	3.1	32.00	1,35,143	1,25,429	35
Brahmani River, at Panposh Down stream	4.40	5.7	24.00	24,000	6,600	36
Brahmani River, Rourkela Down stream	3.90	6.4	20.30	18,329	5,486	34
Brahmani River, Rourkela far down stream	2.60	8.4	13.70	1,323	433	25
Guradih nallah, before confluence with the Brahmani River, Rourkela	6.1	4.5	32.00	73,000	31,986	39

*(Source: As per Water quality test reports of the SPCB)*

**Appendix-XI**  
**(Refer paragraph 6.11, at page: 100)**

**SLB performance indicators and achievements on SWDs and Sewerage Management, by the MCs**

Sl. No.	Performance Indicators	Definition	Benchmark (in per cent)	Achievement of MCs for SWD as of December 2022 (in percentage)				
				BMC	CMC	BeMC	SMC	RMC
<b>Sewerage management</b>								
1	Coverage of toilets	Extent of citizens have access to a toilet	100	37	60	38	70	46
2	Coverage of sewage network services	(a) Extent of the underground sewerage (or sewerage collection) network has reached out to individual properties across the service area	100	81	85	0	27	84
		(b) Number of household connections to the sewerage network	100	27	20	0	0	3
3	Collection efficiency of sewage network	Quantum of wastewater collected as a percentage of normative sewerage generation	100	14	12	0	0	5
4	Adequacy of sewage treatment capacity	Capacity available for treatment and utilized	100	16	24	0	0	7
5	Quality of sewage treatment	Wastewater sample tested against the parameters	100	10	08	0	0	10
6	Extent of reuse and recycling of sewage	Percentage of wastewater received at the STPs that is recycled or reused after appropriate treatment for various purpose	20	12	9	0	0	0
7	Extent of cost recovery in sewage management	Extent of cost recovery is expressed as wastewater revenues as wastewater expenses for the corresponding time period	100	0	0	0	0	0
8	Efficiency in collection of sewage charges	Collection of sewerage charges from the households for sewerage connections	90	33	0	0	0	0
<b>Storm water Drainages</b>								
1	Coverage of storm water drainage network	Road length covered by the storm water drainage network	100	70	65	40	0	85
2	Incidence of water logging/flooding (number)	Number of times water logging is reported in a year	0	2	8	0	0	3

**(Source:** Information furnished by the selected MCs/ OWSSB and WATCO)

