

IN THE UNITED STATES DISTRICT COURT  
FOR THE SOUTHERN DISTRICT OF INDIANA

UNITED STATES OF AMERICA,	)	
	)	
and	)	
	)	
THE STATE OF INDIANA,	)	SEB-TAB
	)	No. 1:06-cv-01456-DEH-JMS
Plaintiffs,	)	
	)	
v.	)	
	)	
THE CITY OF INDIANAPOLIS,	)	
INDIANA, A Municipal	)	
Corporation,	)	
	)	
Defendant.	)	
_____	)	

**SECOND AMENDMENT TO 2006 CONSENT DECREE**

WHEREAS, this Court approved and entered a Consent Decree in this matter on December 19, 2006 (“2006 Consent Decree”). That Consent Decree required the City of Indianapolis (“City” or “Indianapolis”), among other things, to construct 31 Combined Sewer Overflow (“CSO”) Control Measures and perform other activities, in accordance with the Descriptions, Design Criteria, and dates for Completion of the Bidding Process and Achievement of Full Operation of the 31 CSO Control Measures. The control measures were set forth in Table 7-5 of Section 7 of the City’s Long Term Control Plan (“LTCP”), attached to the 2006 Consent Decree as Exhibit 1 (hereinafter “Exhibit 1”).

WHEREAS, on April 23, 2009, the Court approved and entered a First Amendment to the 2006 Decree, which modified CSO Control Measure 16 to require the City, in lieu of constructing a shallow inter-plant connector sewer, to undertake construction of a conveyance and storage tunnel that would be constructed approximately 200 feet below ground (the “Deep

Rock Tunnel Connector” or “DRTC”). When completed, the DRTC will provide several improvements over the shallow inter-plant connector sewer. First, the Tunnel will significantly increase the system’s storage capacity and thereby improve the City’s ability to control CSOs, whereas the shallow inter-plant connector was primarily a conveyance mechanism. In that regard, the DRTC would provide a minimum storage volume of 54 million gallons, and a minimum peak conveyance and dewatering capacity of 150 million gallons per day (“MGD”) of CSO flow to the Southport Advanced Water Treatment facility (“AWT”), thus improving the City’s ability to control CSOs. Further, the DRTC would enable the City to capture discharges from CSO Outfall 008 three and one-half years earlier than had been possible under the 2006 Consent Decree. The early capture of CSO 008 was expected to result in the capture of an estimated 1 billion gallons of additional CSO volume over the life of the CSO control program. Historically, CSO Outfall 008 has been the outfall in Indianapolis with one of the greatest annual volumes of untreated CSO discharge.

WHEREAS, the First Amendment to the 2006 Consent Decree resulted from a comprehensive engineering review, conducted by the City beginning in 2008, of the City’s 2006 LTCP and the 31 Control Measures (“CM”) described in Exhibit 1. In that review, the City employed detailed hydraulic modeling, additional treatment plant operating and stress test data, and preliminary design and cost evaluations.

WHEREAS, the City undertook an additional engineering review of the LTCP using advanced modeling capabilities and in May 2009, presented to EPA and IDEM additional proposed modifications to the LTCP, denominated as a comprehensive “Enhancement Plan.” After lengthy, in-depth, negotiations, the City, EPA and IDEM agreed on the terms of a “Modified Enhancement Plan” under which 14 of the original 31 Control Measures would be

modified, two of the original Control Measures would be eliminated, and one Control Measure (No. 32) would be added.

WHEREAS, in furtherance of the Modified Enhancement Plan, the 2006 Consent Decree, as amended in 2009, is further amended for the reasons, and in the manner, discussed below:

**1. Collection System and Tunnels**

**a. Control Measures 15, 16 and 20**

The City's 2009 redesign of Control Measure 16, *i.e.*, the replacement of the shallow interplant connector sewer with the DRTC, as approved in Amendment No. 1, allowed the City to revise its overall strategy of capture and treatment of CSOs.

The DRTC will allow the City to capture the flows from CSO 008 and combined sewer flows from the west side of the White River in the deep tunnel system rather than separately in shallow sewers, and maximize the City's management of the system's combined storage and treatment capacity. The DRTC will also enable the City to harmonize the timing of flows and loads between the Belmont and Southport AWT facilities, optimize the overall tunnel system (as well as the size of many of the components of the two AWT facilities), balance the storage and treatment capacities of the system, and insure early capture of CSO flows. This balancing will also allow the City to design an expanded tunnel system consisting of the DRTC, Fall Creek, White River, Pleasant Run, and Lower Pogues Run Tunnels, which will function in a more holistic manner. As expanded, the entire tunnel system volume will achieve a storage capacity of 250 MG, while the Southport AWT's treatment capacity will increase from 150 MGD to 250 MGD, peak wet weather flow. Additionally, the design of the DRTC pump station flow was modified to require a peak pumping rate of 90 MGD.

Through its re-analysis of the system, the City determined that the DRTC can be extended one additional mile north from its originally-planned north termination point, which would allow for the early capture of CSO 118 (also one of the largest CSOs in the system) in addition to the early capture of CSO 008, discussed above. Incorporating this one mile-long extension into the DRTC project required that the bid date for the Connector project be postponed from May 31, 2011 to the end of 2011, and that the schedule for Achievement of Full Operation of the Connector project be extended from May 31, 2016 to the end of 2017, as provided in this Second Amendment to the 2006 Consent Decree.

CSO 008 will now be captured two (2) years earlier than scheduled under the 2006 Consent Decree, and CSO 118 will be captured four (4) years earlier than scheduled under the 2006 Consent Decree. The overall result of these improvements to the DRTC Project, in conjunction with the remainder of the improvements in the Modified Enhancement Plan, will be the capture of approximately 3.5 billion gallons more CSO volume than would have been achieved under the original LTCP. Thus, any deferral of environmental benefits that may result from the extension of the schedule for the Deep Rock Tunnel Connector will be more than balanced by the accelerated capture of CSOs 008 and 118. The changes to the DRTC project are reflected in the modifications to Control Measure 16. See Tables below.

**b. Control Measures 18 and 29**

As in the case of the shallow interceptor sewer that formerly constituted Control Measure 16, the City's re-analysis of the LTCP resulted in a determination that it would be more cost effective to not replace the projects to convert the existing Pogues Run box into a storage facility (Control Measure 18) and to construct the interceptor sewer comprising Control Measure 29, ~~but~~ ~~to instead extend~~ with an extension of the deep tunnel system up the Lower Pogues Run

watershed and Lower Pleasant Run watershed to capture certain CSOs. The Lower Pogues Run box conversion project would have presented both operational challenges and a high risk of flooding in downtown Indianapolis. Extending the deep tunnel system up the Lower Pogues Run and Lower Pleasant Run will allow the City to eliminate the Lower Pogues Run box conversion project entirely.

Construction of the extended deep tunnel segment up the Lower Pogues Run watershed will require an additional nine years (from 2012 to 2021) to achieve full operation of that portion of the system; however, the efficiencies of the tunnel extension, and the elimination of the problems that would have resulted from converting the Pogues Run Box far outweigh any environmental benefits that might be lost by extending a part of the compliance schedule. In any event, the City has determined that the schedule extension required for construction of the extended tunnel segment will not jeopardize the City's ability to comply with the schedule for completion of the deep tunnel system that will serve Lower Pleasant Run. The changes to these two projects are reflected in the modifications to Control Measures 18 and 29. See Tables below.

**c. Control Measure 30**

The City, EPA and IDEM agreed that several aspects of Control Measure 30, the Eagle Creek watershed project, should be modified. In particular, the City discovered an alternative route for the originally-proposed Belmont West Cutoff to the Eagle Creek Interceptor - the City will now use the Belmont North Relief Interceptor (a project that was not part of the LTCP) to convey flows to that portion of the Belmont Interceptor system leading to the Belmont AWT. This change will allow the City to modify the flows in the Eagle Creek overflow collector system. See Tables below.

**d. Control Measure 31**

The City's detailed modeling efforts allowed the Parties to agree on ranges for the storage volumes and flow rates of the facilities for the Upper Pogues Run improvements to replace the "approximate" values that had been in the original Table 7-5. See Tables below.

**2. Southport AWT (Control Measures 22, 23, 24, 26, 27, and 28)**

The peak wet weather treatment capacity of the Southport AWT facility will be increased to 250 MGD, and additional changes will be made to the Control Measures pertaining to the facility's headworks and its primary treatment, secondary treatment and disinfection systems.

The planned modification of the DRTC project (discussed above in regard to Control Measure 16) will allow the City to take better advantage of the existing infrastructure at the Southport AWT; existing facilities will be refurbished, enhanced and expanded slightly to allow the facility to provide 250 MGD of secondary treatment capacity for wet weather flows. The changes to the Southport AWT are reflected in the modifications to Control Measures 22, 23, 24 and 26. See Tables below.

In addition, the City determined through more detailed modeling that Control Measure 27 (new pump station for additional dewatering of captured CSO), and Control Measure 28 (enhanced high rate clarification treatment), could be eliminated, because those additional treatment projects will no longer be necessary to allow the City to provide 250 MGD of secondary treatment capacity for wet weather flows. See Tables below.

**3. Belmont AWT**

**a. Control Measure 25**

The changes to the Belmont AWT design include modification of the influent peak wet weather flow rates to maximize the utilization of the existing wet weather storage and

equalization basins that were built as early action projects, and rerouting of the existing Wet Weather Pump Station to the existing Wet Weather Storage Basin No. 1. See Tables below.

**b. Control Measure 32 (New)**

The City is designing a new Control Measure 32, to be comprised of two new projects to be added to the LTCP. The first project consists of construction of a Primary Effluent Pump Station, which will be able to transfer up to 35 MGD of excess primary effluent flows from the Belmont AWT to the Southport AWT facility during both dry and wet weather conditions to balance flows and loads at the two AWT facilities. The second project will consist of a new Plant Drain Pump Station, which will convey up to 20 MGD of plant drain flows to primary treatment during wet weather, and will effectively increase the raw pumping capacity of the Belmont AWT's influent screw pumps to 330 MGD. See Tables below.

**c. Control Measures 17 and 21.**

The City will modify the treatment process for the Belmont Wet Weather Secondary Expansion by substituting an Air Nitrification System/Oxygen Nitrification System process for the original Trickling Filter/Secondary Clarifier process. That change will allow the City to eliminate a separate wet weather outfall, consolidate all the flows in a single treatment process train, and modify the disinfection system. These changes are detailed in Control Measures 17 and 21. See Tables below.

WHEREAS, the 2010 modifications to Exhibit 1 are set forth in the following tables. The text of both the original and modified, or new, endnotes are set forth following the tables.

**1. 2010 Modification of CSO Control Measure No. 15**

(Table 7-5; Exhibit 1, with 2010 modifications)

	CSO Control Measure <sup>1</sup>		Description	Design Criteria	Performance Criteria	Critical Milestones <sup>3</sup>
Original 2006	15	Fall Creek Tunnel, Collector Pipes and Watershed Projects	Deep storage tunnel, consolidation sewers, elimination of CSO 103, dam removal, aeration <sup>8</sup>	Provide a storage volume of 110 MG	When incorporated with the rest of the Fall Creek watershed, achieve 97 percent capture and 2 overflow events <sup>6</sup>	Bid Year – 2006 Achievement of Full Operation - 2025
2010 Modification	15	Fall Creek Tunnel, Collector Pipes and Watershed Projects	Deep storage tunnel, consolidation sewers, elimination of CSO 103 and dam removal aeration <sup>8</sup>	Provide a <i>total effective</i> <sup>11</sup> storage volume of 250 MG in the Fall Creek, White River, Pogues Run, Pleasant Run and DRTC tunnel system <sup>10</sup>	When incorporated with the rest of the Fall Creek watershed, achieve 97 percent capture and 2 overflow events on Fall Creek Watershed <sup>6</sup>	Bid Year – 2006 Achievement of Full Operation - 2025

**2. 2010 Modification of CSO Control Measure No. 16**

(Table 7-5; Exhibit 1, with 2010 modifications)

	CSO Control Measure <sup>1</sup>		Description	Design Criteria	Performance Criteria	Critical Milestones <sup>3</sup>
First Amendment (2009)	16	Deep Rock Tunnel Connector, Deep Tunnel Pumping Station and Screening Facilities, and Connection of CSO 008 to the Deep Rock Tunnel Connector	Deep rock tunnel originating near CSO 117 and terminating near the headworks of the Southport facility <sup>8</sup> deep tunnel pumping station and screening facilities located near the Southport treatment facility, and structures necessary to tie CSO 008 flows into the Deep Rock Tunnel Connector	Provide a minimum storage volume of 54 MG within the entire Tunnel Connector project and a minimum peak conveyance and dewatering capacity of 150 MGD CSO flow to Southport	Maximize delivery of flow from White River Tunnel to Southport AWT Plant. Optimize capture of CSO 008 and CSO 117	Bid Year - May 31, 2011 Achievement of Full Operation - May 31, 2016
2010 Modification	16	Deep Rock Tunnel Connector, Deep Tunnel Pumping Station and Screening Facilities, and Connection of CSO 008, <u>CSO 117</u> and <u>CSO 118</u> to the Deep Rock Tunnel Connector	Deep rock tunnel originating near <u>CSO 118</u> and terminating near the headworks of the Southport facility <sup>8</sup> deep tunnel pumping station and screening facilities located near the Southport treatment facility, and structures necessary to tie CSO 008, <u>CSO 117</u> and <u>CSO 118</u> flows into the Deep Rock Tunnel Connector	Provide a minimum <i>total effective</i> <sup>11</sup> storage volume of 54-MG- <del>within the entire Tunnel Connector project and</del> <u>250 MG in the Fall Creek, White River, Pogues Run, Pleasant Run and DRTC tunnel system</u> <sup>10</sup> <del>with a minimum peak conveyance and</del> dewatering capacity of <u>150-MGD 90 MGD</u> CSO flow to Southport	Maximize delivery of flow from White River Tunnel to Southport AWT Plant. Optimize capture of CSO 008, and CSO 117, and <u>CSO 118.</u>	Bid Year - May-31, 2011 Achievement of Full Operation - May-31, 2016 2017



**3. Modification of CSO Control Measure No. 17**

(Table 7-5; Exhibit 1, with 2010 modifications)

	CSO Control Measure <sup>1</sup>		Description	Design Criteria	Performance Criteria	Critical Milestones <sup>3</sup>
Original (2006)	17	Belmont AWT - Wet-Weather Treatment (Trickling Filters/Solids Contact: New aeration tanks and intermediate clarifiers)	Provide secondary biological treatment of the Belmont PE Bypass	Provide parallel peak biological treatment rate of 150 MGD	When incorporated with the rest of the Belmont improvements, facility complies with current NPDES permit	Bid Year – 2009 Achievement of Full Operation - 2012
2010 Modification	17	Belmont AWT - Wet-Weather Treatment (Trickling-Filters/Solids-Contact: New aeration tanks and intermediate-clarifiers) (New aeration tanks)	Provide secondary biological treatment of the Belmont PE Bypass	Provide parallel- <i>in series</i> peak biological treatment rate of 150- <del>MGD</del> 300 MGD	When incorporated with the rest of the Belmont improvements, facility complies with current NPDES permit	Bid Year – 2009 Achievement of Full Operation - 2012

**4. Modification of CSO Control Measure No. 18**

(Table 7-5; Exhibit 1, with 2010 modifications)

	CSO Control Measure <sup>1</sup>		Description	Design Criteria	Performance Criteria	Critical Milestones <sup>3</sup>
Original (2006)	18	Lower Pogues Run Improvements – Continued	Conversion of existing Pogues Run Box into CSO storage facility ranging from 1.5 to 10 MG and interceptor	Diversion of CSO to White River Tunnel	When incorporated with the rest of the Pogues Run and White River watersheds, achieve 95 percent capture and 4 overflow events <sup>4</sup>	Bid Year - 2010 Achievement of Full Operation - 2012
2010 Modification	18	Lower Pogues Run Improvements-Continued	Deep Storage Tunnel and consolidation sewers <sup>5</sup>	<i>Provide a total effective<sup>1</sup> storage volume of 250 MG in the Fall Creek, White River, Pogues Run, Pleasant Run and DRTC tunnel system<sup>10</sup></i>	When incorporated with the rest of the Pogues Run and White River watersheds, achieve 95 percent capture and 4 overflow events <sup>4</sup>	Bid Year - 2010-2011 Achievement of Full Operation - 2012 2021

**5. Modification of CSO Control Measure No. 20**

(Table 7-5; Exhibit 1, with 2010 modifications)

	CSO Control Measure <sup>1</sup>		Description	Design Criteria	Performance Criteria	Critical Milestones <sup>3</sup>
Original (2006)	20	White River Tunnel (Central Tunnel and Pump Station) and Watershed Projects	Central tunnel and pump station, consolidation sewers, sewer separation, dam modifications, and aeration <sup>8</sup>	Provide storage volume of 114 MG	When incorporated with the rest of the White River watershed, achieve 95 percent capture and 4 overflow events <sup>6</sup>	Bid Year – 2010 Achievement of Full Operation – 2021
2010 Modification	20	White River Tunnel (Central Tunnel) and Watershed Projects	Central tunnel, consolidation sewers, sewer separation and dam modifications <sup>9</sup>	Provide a total effective <sup>11</sup> storage volume of 250 MG in the Fall Creek, White River, Pogues Run, Pleasant Run and DRTX tunnel system <sup>10</sup>	When incorporated with the rest of the White River watershed, achieve 95 percent capture and 4 overflow events <sup>6</sup>	Bid Year – 2010 Achievement of Full Operation – 2021

**6. Modification to CSO Control Measure No. 21**

(Table 7-5; Exhibit 1, with 2010 modifications)

	CSO Control Measure <sup>1</sup>		Description	Design Criteria	Performance Criteria	Critical Milestones <sup>3</sup>
Original (2006)	21	Belmont AWT – Wet Weather Chlorination/Dechlorination (Chlorine Disinfection Tank and Re-establish Existing Outfall)	New wet-weather disinfection system and new discharge to White River	Additional peak disinfection treatment rate of 150 MGD	When incorporated with the rest of the Belmont improvements, facility complies with current NPDES permit	Bid Year – 2010 Achievement of Full Operation – 2012
2010 Modification	21	Belmont AWT – Wet Weather Chlorination/Dechlorination (Chlorine Disinfection Tank and Re-establish Existing Outfall)	New wet-weather disinfection system and new discharge to White River	<del>Additional peak disinfection treatment rate of 150 MGD</del> <u>Additional peak disinfection treatment rate of 150 MGD for a total of 300 MGD peak disinfection treatment capacity consistent with applicable disinfection requirements of current NPDES permit<sup>12</sup></u>	When incorporated with the rest of the Belmont improvements, facility complies with current NPDES permit	Bid Year – 2010 Achievement of Full Operation – 2012

**7. Modification to CSO Control Measure No. 22**

(Table 7-5; Exhibit 1, with 2010 modifications)

	CSO Control Measure <sup>1</sup>		Description	Design Criteria	Performance Criteria	Critical Milestones <sup>3</sup>
Original (2006)	22	Southport Advanced Wastewater Treatment Plant Improvements – Air Nitrification System (ANS) Expansion	Expansion of ANS from 30 MGD to 150 MGD, fine bubble aeration, new blowers, new final clarifiers, and new process/yard piping	When incorporated with the rest of the Southport Improvements, provide total peak treatment rate of 300 MGD. Provide maximum pumping rate of 350 MGD	When incorporated with the rest of the Southport improvements, facility complies with current NPDES permit	Bid Year – 2010 Achievement of Full Operation - 2016
2010 Modification	22	Southport Advanced Wastewater Treatment Plant Improvements - Air Nitrification System (ANS) – <u>Secondary Treatment System Expansion</u>	<del>Expansion of ANS from 30 MGD to 150 MGD, fine bubble aeration, new blowers, new final clarifiers, and new process/yard piping</del> <u>Expansion of Secondary Treatment System from 150 MGD to 250 MGD</u>	When incorporated with the rest of the Southport Improvements, provide total peak treatment rate of <del>300</del> <u>300</u> MGD. <del>secondary and disinfection treatment rate of 250 MGD</del> <u>secondary and disinfection treatment rate of 250 MGD consistent with applicable disinfection requirements of current NPDES permit</u> . Provide maximum pumping rate of <del>350</del> <u>350</u> MGD. <sup>2</sup>	When incorporated with the rest of the Southport improvements, facility complies with current NPDES permit	Bid Year – <del>2010</del> <u>2012</u> Achievement of Full Operation - <del>2016</del> <u>2017</u>

**8. Modification to CSO Control Measure No. 23**

(Table 7-5; Exhibit 1, with 2010 modifications)

	CSO Control Measure <sup>1</sup>		Description	Design Criteria	Performance Criteria	Critical Milestones <sup>3</sup>
Original (2006)	23	Southport Advanced Wastewater Treatment Plant Improvements – Wet Weather Disinfection	New disinfection facility, pump station, 25 MG equalization basin with aerators, and new process/yard piping .	When incorporated with the rest of the Southport Improvements, provide total peak treatment rate of 300 MGD. Provide maximum pumping rate of 350 MGD	When incorporated with the rest of the Southport improvements, facility complies with current NPDES permit	Bid Year – 2011 Achievement of Full Operation - 2016
2010 Modification	23	Southport Advanced Wastewater Treatment Plant Improvements – Wet Weather Disinfection	New disinfection facility, <del>pump station, 25 MG equalization basin with aerators,</del> <u>and new process/yard piping</u>	When incorporated with the rest of the Southport Improvements, provide <del>total peak rate of 300 MGD,</del> <u>secondary and disinfection treatment rate of 250 MGD consistent with applicable disinfection requirements of current NPDES permit.</u> Provide maximum pumping rate of <del>350</del> <u>325</u> MGD <sup>12</sup>	When incorporated with the rest of the Southport improvements, facility complies with current NPDES permit	Bid Year – <del>2011-2012</del> Achievement of Full Operation - <del>2016-2017</del>

**9. Modification to CSO Control Measure No. 24**

(Table 7-5; Exhibit 1, with 2010 modifications)

	CSO Control Measure <sup>1</sup>		Description	Design Criteria	Performance Criteria	Critical Milestones <sup>3</sup>
Original (2006)	24	Southport Advanced Wastewater Treatment Plant Improvements -- Primary Clarifier Expansion	Expansion of primary clarification facility, and new process/yard piping	When incorporated with the rest of the Southport Improvements, provide peak primary treatment capacity of 300 MGD. Provide maximum pumping rate of 350 MGD	When incorporated with the rest of the Southport improvements, facility complies with current NPDES permit	Bid Year -- 2012 Achievement of Full Operation - 2017
2010 Modification	24	Southport Advanced Wastewater Treatment Plant Improvements -- Primary Clarifier Expansion	<i>Expansion</i> <i>Enhancement of</i> primary clarification facility, and new process/yard piping	When incorporated with the rest of the Southport Improvements, provide peak primary treatment capacity of <del>300 MGD</del> <i>as required to support secondary treatment design, and peak secondary and disinfection treatment capacity of 250 MGD</i> consistent with applicable disinfection requirements of current NPDES permit. Provide maximum pumping rate of <del>350</del> <i>315</i> MGD <sup>12</sup>	When incorporated with the rest of the Southport improvements, facility complies with current NPDES permit	Bid Year -- 2012 Achievement of Full Operation - 2017

**10. Modification to CSO Control Measure No. 25**

(Table 7-5; Exhibit 1, with 2010 modifications)

	CSO Control Measure <sup>1</sup>		Description	Design Criteria	Performance Criteria	Critical Milestones <sup>3</sup>
Original (2006)	25	Belmont Advanced Wastewater Treatment Plant Improvements – Headworks and Grit Removal including Screens	Rehabilitation of the original headworks, new process/yard piping and supplemental disinfection from existing equalization basins	When incorporated with the rest of the Belmont Improvements, provide total peak primary and biological treatment rate of 300 MGD. Provide peak pumping rate of 450 MGD. Additional Disinfection of equalization outflow up to a peak rate of 150 MGD	When incorporated with the rest of the Belmont improvements, facility complies with current NPDES permit	Bid Year – 2015 Achievement of Full Operation – 2019
2010 Modification	25	Belmont Advanced Wastewater Treatment Plant Improvements - Headworks and Grit Removal including Screens <u>Raw Wastewater Pumping Capacity Expansion</u>	<u>Re-routing of the existing Wet Weather Pump Station (WWPS) to the existing wet weather storage basin (WWSB No. 1)</u>	When incorporated with the rest of the Belmont Improvements, provide total peak primary and biological treatment rate of 300 MGD. Provide peak pumping rate of 450 <del>330</del> MGD <sup>12</sup> . Additional Disinfection of equalization outflow up to a peak rate of 150 MGD	When incorporated with the rest of the Belmont improvements, facility complies with current NPDES permit	Bid Year – <del>2015</del> <u>2011</u> Achievement of Full Operation – <del>2019</del> <u>2012</u>

**11. Modification to CSO Control Measure No. 26**

(Table 7-5; Exhibit 1, with 2010 modifications)

	CSO Control Measure <sup>1</sup>		Description	Design Criteria	Performance Criteria	Critical Milestones <sup>1</sup>
Original (2006)	26	Southport Advanced Wastewater Treatment Plant Improvements -- Headworks	Expansion of headworks, screening, grit removal, and new process/yard piping	When incorporated with the rest of the Southport Improvements, provide total peak treatment rate of 300 MGD. Provide peak pumping rate of 350 MGD	When incorporated with the rest of the Southport improvements, facility complies with current NPDES permit	Bid Year - 2015 Achievement of Full Operation - 2018
2010 Modification	26	Southport Advanced Wastewater Treatment Plant Improvements -- Headworks	Expansion of headworks, screening, grit removal, and new process/yard piping	When incorporated with the rest of the Southport Improvements, provide total peak secondary and disinfection treatment rate of <del>300</del> <u>250</u> MGD <u>consistent with applicable disinfection requirements of current NPDES permit</u> . Provide peak pumping rate of <del>350</del> <u>345</u> MGD <sup>12</sup>	When incorporated with the rest of the Southport improvements, facility complies with current NPDES permit	Bid Year -- <del>2015-</del> <u>2012</u> Achievement of Full Operation -- <del>2017</del> <u>2017</u>

**12. Modification to CSO Control Measure No. 27**

(Table 7-5; Exhibit 1, with 2010 modifications)

	CSO Control Measure <sup>1</sup>		Description	Design Criteria	Performance Criteria	Critical Milestones <sup>1</sup>
Original (2009 Modification)	27	Southport Advanced Waste-water Treatment Plant Improvements -- CSO Pump Station	New pump station for additional dewatering of captured CSO from the Deep Rock Tunnel Connector (fka Interplant Connection)	Additional 75 MGD for routing to Enhanced High Rate Clarifiers (EHRC)	When incorporated with the rest of the Southport improvements, facility complies with current NPDES permit	Bid Year - 2022 Achievement of Full Operation - 2025
2010 Modification	27 <sup>9</sup>	Deleted	Deleted	Deleted	Deleted	Deleted

**13. Modification to CSO Control Measure No. 28**

(Table 7-5; Exhibit 1, with 2010 modifications)

	CSO Control Measure <sup>1</sup>		Description	Design Criteria	Performance Criteria	Critical Milestones <sup>3</sup>
Original (2009 Modification n)	28	Southport Advanced Wastewater Treatment Plant Improvements – EHRC Facility <sup>7</sup>	New enhanced high rate clarifiers, and new process/yard piping	Additional 75 MGD EHRC treatment for dewatering of captured CSO from the Deep Rock Tunnel Connector (fka Interplant Connection)	When incorporated with the rest of the Southport improvements, facility complies with current NPDES permit	Bid Year – 2022 Achievement of Full Operation – 2025
2010 Modification n	28 <sup>7&amp;v</sup>	Deleted	Deleted	Deleted	Deleted	Deleted

**14. Modification to CSO Control Measure No. 29**

(Table 7-5; Exhibit 1, with 2010 modifications)

	CSO Control Measure <sup>1</sup>		Description	Design Criteria	Performance Criteria	Critical Milestones <sup>3</sup>
Original (2006)	29	Pleasant Run Overflow Collector Pipe (CSO Collector Pipe)	Collection interceptor and sewer separation. Collection interceptor is approximately 46,000 feet of pipe <sup>8</sup>	Provide approximate instantaneous peak flow rate of 125 MGD at the downstream end	When incorporated with the rest of the Pleasant Run watershed, achieve 95 percent capture and 4 overflow events <sup>6</sup>	Bid Year – 2010 Achievement of Full Operation – 2025
2010 Modification	29	Pleasant Run Deep Tunnel and Overflow Collector Pipe	<u>Deep tunnel, connection sewers, collection interceptor and sewer separation. Tunnel connects to area of White River and DRTC Tunnels and extends to the area of CSO 08.4<sup>8</sup></u>	<u>Provide a total effective<sup>11</sup> storage volume of 250 MG in the Fall Creek, White River, Pogues Run, Pleasant Run and DRTC tunnel system<sup>10</sup></u>	When incorporated with the rest of the Pleasant Run watershed, achieve 95 percent capture and 4 overflow events <sup>6</sup>	Bid Year – 2010 Achievement of Full Operation – 2025



**15. Modification to CSO Control Measure No. 30**

(Table 7-5; Exhibit 1, with 2010 modifications)

	CSO Control Measure <sup>1</sup>		Description	Design Criteria	Performance Criteria	Critical Milestones <sup>3</sup>
Original (2006)	30	Eagle Creek Overflow Collector Pipe (CSO Collector Pipe and Belmont West Cutoff)	Collection interceptor and relief interceptor. Collection interceptor and relief interceptor are approximately 40,000 feet of pipes	Provide approximate instantaneous peak flow rate of 50 MGD at the downstream end	When incorporated with the rest of the Eagle Creek and White River watersheds, achieve 95 percent capture and 4 overflow events <sup>5</sup>	Bid Year – 2013 Achievement of Full Operation - 2018
2010 Modification	30	Eagle Creek Overflow Collector Pipe (CSO Collector Pipe and Belmont West Cutoff <u>via the Belmont North Relief Interceptor System</u> )	<del>Collection interceptor and relief interceptor. Collection interceptor and relief interceptor are approximately 40,000 feet of pipes</del> <u>system and relief interceptor to achieve Performance Criteria<sup>2</sup></u>	<u>Provide instantaneous peak flowrate of 38 MGD in the Belmont North Relief Interceptor System. Provide instantaneous peak flowrate of 25 to 50 MGD at the downstream end of the Eagle Creek Overflow Collector Pipe.</u>	When incorporated with the rest of the Eagle Creek and White River watersheds, achieve 95 percent capture and 4 overflow events <sup>5</sup>	Bid Year – 2013 Achievement of Full Operation - 2018

**16. Modification to CSO Control Measure No. 31**

(Table 7-5; Exhibit 1, with 2010 modifications)

	CSO Control Measure <sup>1</sup>		Description	Design Criteria	Performance Criteria	Critical Milestones <sup>3</sup>
Original (2006)	31	Upper Pogues Run Improvements	Off-line storage facility, collection interceptor. Collection interceptor is approximately 9000 feet of pipes	Provide approximate instantaneous peak flowrate of 65 MGD. Provide approximate storage volume of 9.5 MG	When incorporated with the rest of the Pogues Run watershed, achieve 95 percent capture and 4 overflow events <sup>6</sup>	Bid Year – 2017 Achievement of Full Operation – 2021
2010 Modification	31	Upper Pogues Run Improvements	Off-line storage facility, collection <u>interceptor to achieve Performance Criteria<sup>2</sup></u> . <del>Collection interceptor is approximately 9000 feet of pipes</del>	Provide instantaneous peak flowrate of <del>65 MGD</del> <u>40 to 80 MGD</u> . Provide approximate storage volume of <del>9.5 MGD</del> <u>1 to 3 MG</u>	When incorporated with the rest of the Pogues Run watershed, achieve 95 percent capture and 4 overflow events <sup>6</sup>	Bid Year – 2017 Achievement of Full Operation – 2021

**17. New CSO Control Measure No. 32**

(Table 7-5; Exhibit 1, with 2010 modifications)

	CSO Control Measure <sup>1</sup>		Description	Design Criteria	Performance Criteria	Critical Milestones <sup>2</sup>
Control Measure	32	Belmont Advanced Wastewater Treatment (AWT) Plant Improvements	Rerouting of in-plant recycle flows from the headworks to primary treatment via the Plant Drain Pump Station (PDPS). Diversion of the primary effluent from Belmont AWT to Southport AWT via the Primary Effluent Pump Station (PEPS).	When incorporated with the rest of the Belmont AWT improvements, provide total peak primary and secondary treatment rate of 300 MGD. Provide peak headworks pumping rate of 330 MGD.	When incorporated with the rest of the Belmont improvements, facility complies with current NPDES permit	Bid Year – 2008 Achievement of Full Operation – 2009

**18. Modifications to Footnotes**

Exhibit 1 has a number of explanatory “footnotes,” several of which have been added, modified or deleted, as set forth below (additions/revisions are italicized and underlined; deletions are stricken):

<sup>1</sup> Upon full implementation, the CSO Control Measures listed in Table 7-5 are expected to result in *at least the Performance Criteria of 95 percent* capture and 4 CSO events on the White River, Pleasant Run, Pogues Run, and Eagle Creek and 97 percent capture and 2 CSO events on Fall Creek, as evaluated in accordance with footnote 6. Either a revision to Indiana's current water quality standards or some other legal mechanism is necessary to authorize overflows due to storms exceeding those levels of control. In Section 9 of the LTCP, the City of Indianapolis is requesting a revision to the applicable water quality criteria consistent with this level of control through the establishment of a CSO wet weather limited use sub category supported by a Use Attainability Analysis (“UAA”). The design and construction of CSO Control Measures 1 through 14 (“Phase I” Projects) are not dependent upon the level of control ultimately determined, and therefore the City will implement CSO Control Measures 1 through 14 according to the terms and schedule set forth in this Table. IDEM and U.S. EPA acknowledge that the City is scheduled to start investing heavily in CSO Control Measures 15 through ~~3232~~, which are level of control-dependent, in the years following approval of the City’s LTCP. Accordingly, all parties intend that the UAA process be completed within five years of LTCP approval. If the

UAA process is not completed within five years, IDEM and U.S. EPA agree that, under certain circumstances, the City can seek a modification of the implementation schedule.

~~<sup>2</sup> The Description and Design Criteria are based upon LTCP level planning estimates and may be subject to revision during facility planning and design. One of the conditions of Descriptions and Design Criteria, applicable to all of the facilities set forth in this Table 7-5 is that the specific facility will be designed in accordance with good engineering practices to ensure that corresponding facility-specific, watershed wide, and systemwide Performance Criteria will be achieved. Footnote 2 deleted.~~

<sup>3</sup> The term "Bid Year" means "Completion of the Bidding Process."

<sup>4</sup> The CSO control measure is not expected to achieve 95 or 97 percent capture on its own and will work in conjunction with other CSO control measures at the specified CSO outfalls to achieve the performance criteria.

<sup>5</sup> Consistent Operation: Performs as designed on a regular basis. Failure to perform correctly is infrequent.

<sup>6</sup> CSO Control Measures will be designed *in accordance with the Design Criteria set forth in Table 7-5, and they shall also to achieve at least the* Performance Criteria of 97 percent capture for the Fall Creek watershed and 95 percent capture for other CSO receiving waters, and 2 CSO events for the Fall Creek watershed and 4 CSO events for each of the other CSO receiving waters in a "typical year." "Typical year" performance, and achievement of Performance Criteria, shall be assessed in accordance with Section 8.4 (Post Construction Monitoring) using the average annual statistics generated by the collection system model for the representative five-year simulation period of 1996 to 2000 (or another five-year simulation period subsequently proposed by the City and approved by IDEM and U.S. EPA).

~~<sup>7</sup> The Southport EHRC facility will be constructed only if required to achieve the performance criteria for the Fall Creek and White River watersheds. Footnote 7 deleted.~~

<sup>8</sup> The collection interceptor may be installed as multiple interceptors with the combined capacity as described in the Design Criteria.

~~<sup>9</sup> Control Measures 27 and 28 deleted.~~

<sup>10</sup> Control Measures 15, 16, 18, 20 and 29 have a combined Design Criteria of 250 MG of 'effective' (as defined below) storage in the Fall Creek, White River, Pogues Run, Pleasant Run and DRTC Tunnel System. This total effective available system storage of 250 MG includes adits and deaeration chambers, which are tunnel connections from drop shafts to the mainline tunnels.

<sup>11</sup> 'Effective' as identified for Control Measures 15, 16, 18, 20 and 29 is defined as the storage volume that will be designed and operated to ensure 250 MG of wet-weather flow may be reliably stored in the tunnel system provided Indianapolis has received sufficient precipitation to capture 250 MG of wet-weather flow in a single event or two or more sequential events.

<sup>12</sup> Control Measures 21, 22, 23, 24, 25 and 26 have flowrates as noted within the Design Criteria for each Control Measure. Control Measures 22, 23, 24 and 26 have a secondary treatment capacity of 250 MGD and a disinfection capacity of 250 MGD (consistent with applicable disinfection requirements of the City's current NPDES permit), which includes in-plant return flows. Control Measures 21 and 25 have a secondary treatment capacity of 300 MGD and a disinfection capacity of 300 MGD (consistent with applicable disinfection requirements of the City's current NPDES permit), which includes in-plant return flows.

The new Exhibit 1 (Table 7-5), as modified by this Second Amendment to 2006 Consent Decree, is attached hereto as Exhibit 1. All references in the 2006 Consent Decree to "Exhibit 1" shall be to this new Exhibit 1.

The Court finds there is no just reason for delay and therefore enters this Second Amendment to 2006 Consent Decree.

SO ORDERED

Date: 01/27/2011

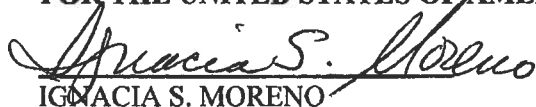


SARAH EVANS BARKER, JUDGE  
United States District Court  
Southern District of Indiana

The UNDERSIGNED PARTY hereby consents to the Second Amendment to 2006 Consent Decree in the matter of United States and State of Indiana v. City of Indianapolis, No. 1:06-cv-1456.

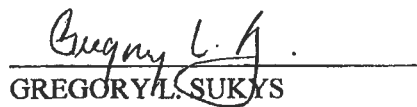
**FOR THE UNITED STATES OF AMERICA**

Date: 11/2/10



IGNACIA S. MORENO  
Assistant Attorney General  
Environment and Natural Resources Division

Date: 11/8/2010

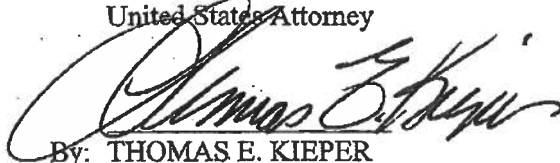


GREGORY L. SUKYS  
Senior Attorney  
Environmental Enforcement Section  
United States Department of Justice  
P.O. Box 7611  
Ben Franklin Station  
Washington, D.C. 20044-7611  
Phone: (202) 514-2068/616-6584 (FAX)

The UNDERSIGNED PARTY hereby consents to the Second Amendment to 2006 Consent Decree in the matter of United States and State of Indiana v. City of Indianapolis, No. 1:06-cv-1456.

JOSEPH H. HOGSETT  
United States Attorney

Date: 11/1/10



By: THOMAS E. KIEPER  
Assistant United States Attorney  
Southern District of Indiana  
10 West Market Street, Suite 2100  
Indianapolis, Indiana 46204  
(317) 229-2415/(419) 259-6360 (FAX)


The UNDERSIGNED PARTY hereby consents to the Second Amendment to 2006 Consent Decree in the matter of United States and State of Indiana v. City of Indianapolis, No. 1:06-cv-1456.

**FOR THE UNITED STATES ENVIRONMENTAL  
PROTECTION AGENCY**

Date:

10/7/10

*for*

  
\_\_\_\_\_  
MARK POLLINS  
Director, Water Enforcement Division  
U.S. Environmental Protection Agency  
1200 Pennsylvania Ave., NW  
Washington, DC 20460

The UNDERSIGNED PARTY hereby consents to the Second Amendment to 2006 Consent Decree in the matter of United States and State of Indiana v. City of Indianapolis, No. 1:06-cv-1456.

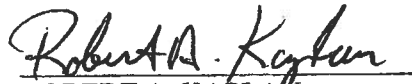
**FOR THE UNITED STATES ENVIRONMENTAL  
PROTECTION AGENCY**

Date: 9/20/10



SUSAN HEDMAN  
Regional Administrator  
U.S. EPA Region 5

Date: 9/16/10



ROBERT A. KAPLAN  
Regional Counsel  
U.S. EPA Region 5  
77 W. Jackson Blvd.  
Chicago, Illinois 60604



The UNDERSIGNED PARTY hereby consents to the Second Amendment to 2006 Consent Decree in the matter of United States and State of Indiana v. City of Indianapolis, No. 1:06-cv-1456

**FOR THE STATE OF INDIANA**

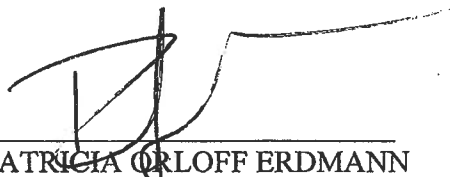
GREGORY F. ZOELLER  
Attorney General of Indiana

Date: SEPTEMBER 13, 2010



THOMAS W. EASTERLY  
Commissioner  
Indiana Department of Environmental  
Management  
100 North Senate Avenue  
IGCN 1301  
Indianapolis, Indiana 46204

Date: September 10, 2010



PATRICIA ORLOFF ERDMANN  
Chief Counsel for Litigation  
Office of the Indiana Attorney General  
302 W. Washington Street, IGCS-5th Floor  
Indianapolis, Indiana 46204

The UNDERSIGNED PARTY hereby consents to the Second Amendment to 2006 Consent Decree in the matter of United States and State of Indiana v. City of Indianapolis, No. 1:06-cv-1456

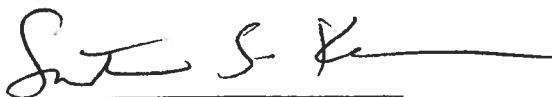
**FOR THE CITY OF INDIANAPOLIS, INDIANA**

Date: 9/7/10



DAVID R. SHERMAN  
Director  
Department of Public Works  
City of Indianapolis  
200 East Washington Street  
Suite 2460  
Indianapolis, Indiana 46204

Date: 9/17/10



SAMANTHA KARN  
Corporation Counsel  
City of Indianapolis  
200 East Washington Street  
Suite 1601  
Indianapolis, Indiana 46204