

ENVIRONMENTAL PROTECTION DIVISION
DEPARTMENT OF NATURAL RESOURCES
STATE OF GEORGIA

RE: City of Valdosta
Post Office Box 1125
Valdosta, GA 31603
Lowndes County

EPD-WP- 8904

CONSENT ORDER

WHEREAS, the City of Valdosta (hereinafter, "Respondent") operates the Withlacoochee and Mud Creek Water Pollution Control Plants (hereinafter, "WPCP") located in Lowndes County, Georgia; and

WHEREAS, the Respondent was issued National Pollutant Discharge Elimination System (hereinafter, "NPDES") Permit Nos. GA0020222 and GA0033235 (hereinafter, "Permits") by the Director of the Georgia Department of Natural Resources, Georgia Environmental Protection Division (hereinafter, "Director" and "Division") for its Withlacoochee and Mud Creek WPCPs; and

Authority

WHEREAS, under the "Georgia Water Quality Control Act of 1964" as amended O.C.G.A. § 12-5-20 et seq. (hereinafter, "Water Quality Act"), the General Assembly of Georgia designated the Director of the Division to administer the provisions of the Water Quality Act; and

WHEREAS, the Rules for Water Quality Control, Chapter 391-3-6, as amended (hereinafter, "Water Quality Rules") authorized under O.C.G.A. § 12-5-23 of the Water Quality Act, were established and became effective; and

WHEREAS, O.C.G.A. § 12-5-23 of the Water Quality Act, assigns the Director the authority to issue permits stipulating in each permit the conditions or limitations under which such permit was issued and the authority to issue orders as may be necessary to enforce compliance with the provisions of the Act and all rules and regulations promulgated thereunder; and

WHEREAS, Section 391-3-6-.03(5)(c) of the Water Quality Rules requires that all waters be free from material related to municipal, industrial or other discharges which produce turbidity, color, odor, or other objectionable conditions which interfere with legitimate water uses; and

WHEREAS, Section 391-3-6-.03(5)(e) of the Water Quality Rules requires that all waters be free from toxic, corrosive, acidic and caustic substances discharged from municipalities, industries or other sources, such as non-point sources, in amounts, concentrations or combinations which are harmful to humans, animals or aquatic life; and

WHEREAS, Section 391-3-6-.05(3)(c) of the Water Quality Rules requires that a monitoring program be established on waters affected by a major spill, with such monitoring being at the expense of the Publicly Owned Treatment Works for at least one year, at a frequency to be determined by the Division; and

WHEREAS, Sections 391-3-6-.05(3)(f) and (g) of the Water Quality Rules require that notices of spills and major spills shall be provided to local health departments in the area affected by the incident, and that signs shall be posted in points of public access to the affected waterway; and

History

WHEREAS, on December 4, 2013, Consent Order No. EPD-WQ-5478 (hereinafter, “Order 5478”) was executed between the Respondent and the Division to address numerous spills from the Respondent’s sanitary sewer system and permit limitation violations; and

WHEREAS, Order 5478 included a plan for the relocation of the Withlacoochee WPCP and its influent force main after its flooding in 2009 and 2013, with scheduled completion dates of August 2017 and July 2016, respectively, and both were completed by the expected date; and

WHEREAS, Order 5478 also included a Supplemental Environmental Project (hereinafter, “SEP”) for the evaluation and repair/rehabilitation of the Respondent’s sanitary sewer collection system to reduce spill frequency and volume, with a scheduled completion date of December 31, 2018; and

WHEREAS, in their annual compliance report for Order 5478, dated December 27, 2018, the Respondent stated that excessive rain had delayed work on the SEP, and requested to extend the deadlines of the order to accommodate additional work at the Withlacoochee WPCP, including the design and construction of additional storage basins (Attachment E); and

WHEREAS, on April 10, 2014, a Notice of Violation (hereinafter, “NOV”) was issued to the Respondent by the Division for unpermitted discharges from the Respondent’s sanitary sewer collection system to waters of the State from August 1, 2013 to April 7, 2014, totaling approximately 4.6 million gallons, and Permit effluent limitation violations from the Withlacoochee and Mud Creek WPCPs from July 1, 2013 to March 31, 2014; and

WHEREAS, in a response to the April 2014 NOV, dated May 19, 2014, the Respondent indicated that the spills were a result of high groundwater tables, river and localized flooding which resulted in extensive inflow and infiltration (hereinafter, “I/I”) to the system, and that the

force main replacement project would eliminate the liability from the city's system (Attachment D); and

WHEREAS, on November 1, 2016, a modification of NPDES permit No. GA0020222 for the Respondent's Mud Creek WPCP went into effect, containing a higher monitoring frequency for total phosphorus than the previous permit; and

WHEREAS, from December 2, 2018 to December 15, 2018, the collection system for the Withlacoochee WPCP was inundated with flow due to heavy rains and severe weather, and the Respondent reported numerous unpermitted discharges from its sanitary sewer collection system to waters of the State as a result of the wet weather, totaling over 2,255,000 gallons (Attachment A.1); and

WHEREAS, from December 2, 2018 to December 17, 2018, the Withlacoochee WPCP was inundated with flow due to heavy rains and severe weather, and the Respondent reported an estimated total 21,814,000 gallons of raw sewage and rainwater discharged to the Withlacoochee River from the Withlacoochee WPCP's equalization basin as a result of the wet weather (Attachment A.2); and

WHEREAS, the Respondent had previously established a stream quality monitoring program at the state line between Georgia and Florida, independent of permit or state requirements, and has since reduced the frequency of their program from once per week to once per quarter due to financial constraints, and several requests have been submitted by entities in Florida and Georgia for the Respondent to increase their sampling frequency; and

WHEREAS, several requests have been submitted by entities in Florida to receive timely notifications of spills from the Respondent's systems which cross or have the potential to cross state borders; and

WHEREAS, on February 19, 2019, a NOV was issued to the Respondent by the Division, stating the Division's intent to revise Order 5478 or create a new Order addressing unpermitted discharges from the Respondent's sanitary sewer collection system to waters of the State and permit violations from the Withlacoochee and Mud Creek WPCPs from April 8, 2014, to December 31, 2018; and

WHEREAS, in a meeting held between the Division and the Respondent on April 8, 2019, the Respondent indicated that smoke testing had revealed approximately one-thousand five-hundred (1500) cleanout caps had been removed by residents in order to reduce flooding on private properties, as well as pipes which had been constructed to conduct stormwater from private retention ponds to the sanitary sewer collection system, exacerbating I/I flow during the storms of December 2018; and

WHEREAS, in the same meeting on April 8, 2019, the Respondent also indicated that procedures had been established to ensure that downstream entities in Florida are notified of spills from the Respondent's systems at the same date as the Division is notified; and

WHEREAS, in a written response to the February 2019 NOV dated March 19, 2019, the Respondent provided a list of ongoing and planned projects to address the causes of these spills (Attachment F), and;

WHEREAS, on December 9, 2019, the Respondent reported a spill totaling 7.59 million gallons of raw sewage at 1810 Norman Drive into Sugar Creek, which feeds the Withlacoochee River; and

WHEREAS, the spill was the result of a component left unplugged during maintenance on the nearby Remerton Lift Station, performed on Tuesday December 3, 2019, by Electric Machine Control, Inc. (EMC); and

WHEREAS, the Respondent did not notice the error by EMC during its daily routine inspections of the lift station, nor did the Withlacoochee WPCP report the observed dropoff of approximately 50% in flow until six (6) days later, on Monday December 9, 2019; and

WHEREAS, while performing a visual inspection of the stream and river banks downstream of the spill on Tuesday December 10, 2019, the Respondent identified multiple dead fish in the Withlacoochee River and contacted the Fisheries Management Section of the Georgia Department of Natural Resources' Wildlife Resources Division to perform a Fish Kill Investigation (Attachment C); and

WHEREAS, in a phone call between representatives of the Respondent and the Division on December 13, 2019, the Respondent provided updates to the list of ongoing and planned projects; and

WHEREAS, the Respondent on October 2, 2019, submitted a Design Development Report (DDR) and Plans and Specifications for an additional 7.26 million gallon equalization basin to be constructed at the Withlacoochee WPCP as a temporary measure to mitigate the impact of stormflows and I/I; and

WHEREAS, the Division approved the DDR on December 11, 2019 and the Plans & Specs on December 13, 2019; and

WHEREAS, a meeting was held between the Division and the Respondent on February 27, 2020 and a follow-up letter was sent to the Division on March 5, 2020, wherein the Respondent proposed the implementation of two SEPs to offset a portion of the monetary penalties in this Consent Order (Attachment J); and

WHEREAS, the proposed SEPs have been reviewed and approved; and

Violations

WHEREAS, the spills from the sanitary sewer system and WPCP to waters of the State from April 8, 2014 through December 31, 2019 (Attachment A) are violations of the Water Quality Act and the Water Quality Rules; and

WHEREAS, for fourteen (14) months following the modification of NPDES Permit No. GA0020222, the Mud Creek WPCP failed to observe the increased sampling frequency for Total Phosphorus, and has since reported five additional sampling and procedural violations (Attachment B.3) which are violations of Part 1.A.2 of NPDES Permit No. GA0020222; and

WHEREAS, the Department of Natural Resources' Wildlife Division finds the fish kill in Sugar Creek and Withlacoochee River to have resulted in a fish kill of an estimated 1,536 fish (Attachment C) which is a violation of the Water Quality Act and the Water Quality Rules; and

WHEREAS, from April 8, 2014 through November 30, 2019, additional narrative and effluent permit violations have been reported at the Withlacoochee and Mud Creek WPCPs (Attachment B), which are violations of Part 1.A.2 and 1.B of NPDES Permits No. GA0020222 and GA0033235; and

Civil Penalties

WHEREAS, O.C.G.A. § 12-5-52 provides that any person violating any provision of the Act or any permit condition or limitation established pursuant to the Act or, negligently or intentionally, failing or refusing to comply with any final order of the Director shall be liable for a civil penalty of not more than \$50,000.00 per day for each day during which such violation continues provided, however, that a separate and later incident creating a violation within a 12 month period shall be liable for a civil penalty not to exceed \$100,000.00 per day for each day during which such violation continues; and

Conditions

WHEREAS, the Director has determined that it is in the public interest to resolve all allegations raised above by entering into this Order without the necessity of litigation and adjudication of the issues.

NOW THEREFORE, by agreement of the parties, before the taking of any testimony and without adjudicating the merits of the parties' positions in this matter, in order to resolve the violations alleged herein, the Director hereby ORDERS and the Respondent AGREES to do the following:

1. Within sixty (60) days of the execution date of this Order, pay to the Georgia Department of Natural Resources \$122,000.00, for the violations documented in this Order.
2. Within one hundred and eighty (180) days of the execution date of this Order, the Respondent shall develop and submit for Division's review and approval a Capacity, Management, Operation, and Maintenance (CMOM) Program including the components identified below. The CMOM Program shall be implemented upon approval.
 - a. A sewer mapping program that depicts all gravity sewer lines, force mains, air release valves, manholes, pump stations, permanent flow meters, pipe sizes, and major appurtenances. This sewer mapping program shall include a schedule for initial mapping completion by no later than two years from the effective date of this Order. The program shall also include a schedule to update the maps as needed, but no less frequently than once per year.

- b. A sewer assessment program that provides schedules for the continual analysis of sewer infrastructure. The program shall provide for the entire sewer system to be assessed at least once by no later than two years from the effective date of this Order. The program shall also provide for a complete re-assessment of the system no less frequently than every five years after the initial assessment.
- c. An infrastructure rehabilitation program that includes all entities identified in the sewer mapping program. A rehab of the entire collection system must be completed within five years from the effective date of this Order. Rehabilitation shall include pipe repairs and pipe lining consistent with that already identified in Conditions 14 and 17 below.
- d. An update to the existing Standard Operating Procedures (SOPs) for emergency actions regarding spill reporting, notification, sampling, and recordkeeping, consistent with the requirements in Conditions 6, 7, and 8 below. This SOP must also include the collection and reporting of GPS coordinates for all spills. This SOP must be submitted to the Division for review and approval within 30 days of the effective date of this Order.
- e. A wet weather emergency plan that includes at minimum procedures to be taken prior to rain events in order to prevent sewer overflows, such as preventative inspections of creek crossings and equalization basins. The plan must be submitted to the Division for review and approval within 30 days of the effective date of this Order.
- f. A Pump Station Operations Program that includes at a minimum a Pump Station Preventive Maintenance and Inspection Program to address pump

station operations to be conducted on a routine, scheduled basis. The program shall define SOPs to be followed at each pump station such as observing wet well conditions and grease accumulation, checking electrical components, checking SCADA components, checking alarms and stand-by power, reading and recording information from elapsed time meters, pump start counters, and/or system pressure, re-setting as necessary to improve system performance, and identifying maintenance needs. The program shall also establish schedules, routes, priorities, standardized forms, and reporting procedures.

- g. A routine inspection program for the Respondent's creek crossing pipes. The program shall provide for all approximately 250 creek crossings to be assessed at least once by no later than December 31, 2020, with assistance from drone crews. The program shall also provide for a complete re-assessment of all creek crossings no less frequently than every five years after the initial assessment.
- h. The continued implementation of the Respondent's existing Fats, Oils, and Grease (FOG) Control Program.
- i. A copy of the Respondent's existing hydraulic model for the Withlacoochee and Mud Creek WPCPs with schedules that provide for continuous updating and calibrating of the model as new data is provided by the sewer mapping program in Condition 2.a above, the sewer assessment program in Condition 2.b above, and the Supervisory Control and Data Acquisition (SCADA) installations in Condition 15 below, which shall be used to track the effectiveness of I/I reduction efforts. The first update shall be made no later than December 31, 2020.

- j. A corrosion control program that includes the development and implementation of site-specific corrosion control measures and monitoring programs to address corrosion caused by hydrogen sulfide. At minimum, the Respondent shall utilize the in-house manhole rehabilitation team established December 10, 2019, to implement an ongoing in-house manhole rehabilitation program to keep up with the rate of manhole deterioration in the collection system by September 30, 2020.
- k. The Respondent shall select and enforce the legal authority necessary to regulate the volume of flow entering the collection system, including residential and commercial customers, satellite communities, and industrial users. The legal authority may take the form of sewer use ordinances, contracts, service agreements, and/or other legally binding documents. See Attachment I for optional guidance.
 - 1. The Respondent shall assign at least one employee as a designated CMOM coordinator to facilitate the work of technical staff and/or consultants assigned to the implementation of the above conditions to ensure compliance.
- 3. Within thirty (30) days of the execution date of this Order, establish a check-in sheet at each lift station which operators must sign to validate that the lift station was checked on that day and establish procedures to have the sheets reviewed regularly by a manager. This requirement must be included in the CMOM Program.
- 4. Within sixty (60) days of the execution date of this Order, submit to the Division detailed implementation schedules for both SEPs (Attachment J, Item 1) to spend a minimum of \$260,000 total on additional water quality data collection and an education

and marketing campaign within four (4) years of the execution date of this Order. A report of progress, activities and expenditures for these projects will be included in the semiannual report required in Condition 19.

5. Within sixty (60) days of the execution date of this Order, revise SOPs and perform operator training at both WPCPs to ensure that discrepancies in influent flow are reported to a manager within a timely manner. The Respondent shall document in writing the responsibilities of employees (by position) charged with monitoring plant systems. This requirement must be included in the CMOM Program.
6. Within thirty (30) days of the execution date of this Order, update spill reporting procedures to report all spills which cross or have the potential to cross state boundaries to the relevant downstream Florida authorities (i.e. Health Departments, local governments, etc.) on the same date as the spill reports are provided to the Division, including identical information. This requirement must be included in the CMOM Program.
 - a. The Respondent shall update its "North Florida" mailing list (Attachment H.1) to include the contacts identified by EPA and Florida (Attachment H.2) and submit it to Georgia EPD. The Respondent shall update this list as needed, but no less frequently than once per year.
 - b. The Respondent shall expand its existing offer to "Sign up for E-News" on its website to include an option to receive spill notifications at the same time as press releases are published.
7. Within thirty (30) days of the execution date of this Order, update spill response procedures to notify the public of all major and non-major spills with postings at boat

ramps and other public access points downstream from the spill. In addition to the requirements laid out in Section 391-3-6-.05(3)(g) of the Water Quality Rules, the spatial and temporal extent of postings shall be determined by the Respondent based on spill volume, streamflow, and estimated time of travel. The Respondent shall submit its calculations justifying the posting locations within twenty-four hours of becoming aware of the spill event so the Division may concur with the extent of postings.

8. Within thirty (30) days of the execution date of this Order, update major spill sampling procedures. In the event of a major spill, the Respondent shall monitor and sample once daily for seven days and once weekly for the next four weeks for a total of five weeks, for dissolved oxygen, pH, temperature, fecal coliform, and e-coli. Monitoring and sampling shall be performed on both the impacted waterway and the Withlacoochee River, if the two are not synonymous. Monitoring and sampling shall be performed upstream and downstream of the spill site on the impacted waterway, as well as upstream and downstream of the joining of the impacted waterway to the Withlacoochee River. Grab samples shall be collected from the main portion of the stream/river-flow and analyzed for fecal coliform and e-coli within six (6) hours of sample collection.
 - a. The Respondent shall post all the results of biological monitoring required after major spills to its website and to the Georgia EPD Adopt-A-Stream website within one business day of receipt of the results.
 - b. The Respondent shall provide all data in the form of an Excel spreadsheet to the Division's Watershed Compliance Program. This includes a 7-day geometric mean calculated using the samples collected during the first week

and two separate 30-day geometric means calculated from the samples collected during weeks 1-4 and weeks 2-5.

- c. As the sampling requirements above coincide with a portion of the sampling requirements in Section 391-3-6-.05(3)(c) of the Water Quality Rules for waters affected for a major spill, the Respondent may also use the first four weeks of sampling under this Condition for their stream monitoring program.
9. Within sixty (60) days of the execution date of this Order, submit to the Division for approval a schedule for completion for the construction of an additional equalization basin at the Withlacoochee WPCP, with a completion date no later than January 1, 2021, to become part of this Order upon approval.
10. Within sixty (60) days of the execution date of this Order, evaluate all SOPs and Chain of Custody forms at the Withlacoochee and Mud Creek WPCPs to determine if any remaining potential for sampling and procedural violations exists, and correct them with staff training as necessary.
11. Within sixty (60) days of the execution date of this Order, establish a weekly sampling program on the Withlacoochee River at US Highway 84 and GA Highway 133, to continue for at least a year. Grab samples shall be collected from the main portion of the river-flow on the same day each week and shall be analyzed for fecal coliform and e-coli within six (6) hours of collection. The Respondent shall provide all data on a semiannual basis in the form of an Excel spreadsheet to both the Division's Watershed Compliance Program and the Watershed Planning and Monitoring Program at 2 Martin Luther King, Jr. Drive, Suite 1152, Atlanta, GA 30334. The Division will review the data and will notify the Respondent when sampling may cease.

12. Within ninety (90) days of the execution date of this Order, develop a public education and inspection program to address the illegal removal of cleanout caps and piping of stormwater from private property into the sanitary sewer collection system, as well as an ordinance to provide enforcement mechanisms. This requirement must be included in the CMOM Program.
13. Within one hundred and eighty (180) days of the execution date of this Order, establish a permanent water quality monitoring station on the Withlacoochee River at UA Highway 84, downstream of the outfall of the Withlacoochee WPCP. The station shall monitor dissolved oxygen, pH, temperature, and turbidity at 15-minute intervals. The Respondent shall also sample at this location for fecal coliform and e-coli weekly. The monitoring results shall be posted to a public website in real time, and the biological results shall be posted upon receipt.
14. Complete Phase 9 of the Cured-In-Place Pipe (CIPP) lining project to rehabilitate two thousand (2,000) linear feet of sewer main within thirty (30) days of the execution date of this Order. Identify additional CIPP phases based on data received from the collection system assessments, SCADA installations, and flow monitoring systems beginning within one year of completion of the collection system assessment. Integrate those phases into the Respondent's Capital Improvement Plan and provide the updated Capital Improvement Plan to the Division for review and approval. This requirement must be included in the CMOM Program.
15. Complete the planned installation of SCADA and flow monitoring systems at all 34 existing lift stations, the wastewater plants, and manholes near ponds and streams or with a recurrent history of spills by September 30, 2020.

16. Utilize the data provided by creek crossing inspections to prioritize the rehabilitation or re-routing of creek crossings based on stability and accessibility to reduce I/I, with the highest priority being given to the least stable. Submit a rehabilitation schedule including the above information to the Division by March 30, 2021, to become part of this Order upon approval.
17. Complete all three (3) high priority sewer line rehabilitation projects as described in Table D-9 of the Respondent's Utilities Department's 5-Year Capital Improvement Plan (Attachment G), previously known as the SEP, within thirty (30) days of the execution date of this Order. Upon completion of a comprehensive I/I project utilizing manhole level monitoring technology, evaluate, prioritize, and/or modify the need to complete the five (5) second phase/follow-on projects and submit a modified schedule to the Division for approval by the end of June 2021.
18. Complete the installation of fixed generators and/or backup pumps at the remaining 18 lift stations which do not have backups by the end of September 2023, purchasing generators and/or backup pumps at a rate of at least 6 per year.
19. Within thirty (30) days of the semiannual periods ending June 30 and December 31 of each year, submit a semi-annual progress report for all above conditions until the Division concurs on their completion, as well as the data required in Condition 10 above.

Addresses. Correspondence and other submissions to be made to the Division shall be addressed to: Watershed Compliance Program, Georgia Environmental Protection Division, 2 MLK Jr. Drive, SE, Suite 1152, Atlanta, Georgia, 30334.

Correspondence to Respondent shall be addressed to: Mayor Scott James Matheson, City of Valdosta, Post Office Box 1125, Valdosta, Georgia, 31603-1125.

Permit Compliance. This Order does not relieve the Respondent of any obligations or requirements of the Permit except as specifically authorized herein; which authorization shall be strictly construed.

Public Notice and Comment. This Order is subject to public notice and comment upon final approval by the Director.

Time of Essence. Time is of the essence of this Order. Upon it becoming effective, the Respondent shall promptly commence its undertakings required herein and shall diligently pursue the accomplishment thereof.

Required Submissions. Upon the submission of any plan, report, or schedule, or any modified plan, report or schedule, required by this Order, the Division shall review the submission to determine its sufficiency. The Division shall notify the Respondent in writing whether the submission is approved or disapproved.

If the Division determines that the submission is disapproved, it shall provide the Respondent with a written notice of the deficiencies of the submission. The Respondent shall have thirty (30) days from the issuance of the Division's notice of deficiency to modify the submission to correct the deficiencies and resubmit it to the Division. The failure of the Respondent to provide the Division with an ultimately approved submission on or before the specified due date, may, in the sole discretion of the Director, be deemed a violation of this Order. Upon approval by the Division, all submissions required by the terms of this Order are incorporated by reference into,

and made a part of, this Order. Except as may be provided by this Order, noncompliance with the contents of such approved submissions shall be deemed noncompliance with this Order.

Division approval of any submission required by this Order is not intended as, nor shall such approval be construed as, certification by the Division that compliance with relevant state and federal laws, regulations, and permits will thereby be achieved, and such approval by the Division shall not provide the Respondent with a defense to an enforcement action taken by the Director pursuant to violations of the same. Division approval of any submission is strictly limited to the technical aspects of the submission and is not intended as, nor shall it be construed as, approval or acceptance of any statements, assertions, or representations of fact, of opinion, or of a legal nature that are contained in the document.

Force Majeure. Failure to complete a condition mandated by this Order within the time period specified may be excused and not subject the Respondent to further enforcement action if the failure is the result of a force majeure event as identified below and the Respondent complies the requirements set forth below. The Respondent shall have the burden of proving to the Division that it was rendered unable, wholly or in part, by Force Majeure to carry out its obligations.

The term “Force Majeure” as used herein shall be limited to the following: Act of God; strike, lockout, or other labor or industrial disturbance not caused by an unfair labor practice by the Respondent; act of the public enemy; war; blockade; public riot; fire; storm; flood; explosion; failure to secure timely and necessary federal, state, or local approvals or permits, provided such approvals or permits have been timely and diligently sought; or other delay caused by unforeseeable circumstances beyond the reasonable control of the Respondent, its employees, agents, consultants, or contractors, as determined by the Division in its sole discretion. Force

Majeure does not include financial inability to perform an obligation required by this Order or a failure to achieve compliance applicable regulatory permits.

The Respondent shall notify the Division verbally within 48 hours (or no later than the beginning of the next business day if the expiration of the 48 hours occurs on a weekend or holiday) from the time the Respondent learns, or in the exercise of reasonable diligence should have learned, of any Force Majeure circumstances that may reasonably be expected to cause a schedule or performance delay. Within 10 days of such time, the Respondent shall submit to the Division a written notice of as to the anticipated length (if known) and cause of any delay due to Force Majeure. Failure to so notify the Division shall constitute a waiver of any claim to Force Majeure.

The Respondent and the Division agree to negotiate informally and in good faith to identify delays resulting from Forces Majeure. The Respondent shall comply with the Division's determination as to the appropriate time period to be excused by Force Majeure, which shall be communicated to the Respondent in writing. In the event that any circumstance or series of circumstances cause the schedule to extend over thirty (30) calendar days, the Respondent and the Division shall meet formally to assess the overall schedule impact and attempt to mitigate same. Any Force Majeure or Forces Majeure that cause the schedule to extend over sixty (60) consecutive days shall be noticed to the citizens of the City of Valdosta, Lowndes County, in a form to be determined by the Division.

If the Division determines that Force Majeure has occurred, the affected time for performance specified in this Order shall be extended for a period of time equal to the delay resulting from such Force Majeure. The Respondent shall exercise due diligence and adopt all reasonable measures to avoid or minimize any delay.

Additional Conditions. This Order does not waive the Director's right to take further enforcement action against the Respondent, or imply that the Director will not take such action, either for (1) the violations alleged herein if the Respondent fails to fully comply with the conditions of this Order, or (2) violations not alleged herein based on any other relevant requirements of this Order, the law, rules, and permit(s). Issuance of this Order does not waive the Director's right to use the violations alleged herein, upon sufficient evidence, to show past violations in any subsequent enforcement proceeding.

This Order is executed and entered solely for the purpose of resolving and disposing of the alleged violations set forth herein and does not constitute a finding, adjudication, or evidence of a violation of any law, rule, or regulation by the Respondent, and, by consenting to this Order, the Respondent does not admit to any factual allegation contained herein or to any violations of State laws. In addition, this Order is not intended to create and it shall not be construed or otherwise deemed to recognize or create any claim, right, liability, estoppel, or waiver of rights in favor of any third-party or parties.

By agreement of the parties, this Order shall have the same force and binding effect as a Final Order of the Director, and shall become final and effective immediately upon its execution by the Director. The parties further agree that this Order shall not be appealable by the Respondent, and the Respondent hereby waives its right to initiate any administrative or judicial hearing on the terms and conditions of this Order.

Consent Order No. WQ-EPD-5478 is terminated upon the execution of this Order.

Unless modified or terminated by a subsequent order, or otherwise specified in writing by the Director, this Order shall be deemed satisfied and terminated upon full, complete, and timely performance of each and every condition set forth herein.

It is so ORDERED, CONSENTED, and AGREED to this _____ day of _____, 2020.

RICHARD E. DUNN
Director, Environmental Protection Division

FOR RESPONDENT: City of Valdosta

BY: W.D.

NAME: W. Darryl Muse (printed)

TITLE: Utility Director

DATE: 4.13.20

GEORGIA ENVIRONMENTAL PROTECTION DIVISION
WATERSHED COMPLIANCE PROGRAM
2 MLK, JR. DR. S.E., SUITE 1152
ATLANTA, GEORGIA 30334

City of Valdosta

ATTACHMENT A

Sanitary Sewer System Spills
April 8, 2014 to December 31, 2019

ATTACHMENT A

City of Valdosta Sanitary Sewer Collection System Spills

April 8, 2014 to December 31, 2019

NPDES Permit Nos. GA0033235 and GA0020222

Citation: Rule 391-3-6-.03(5)(a-c) ; OCGA: 12-5-29(a)

A.1 - Spills After Withlacoochee Relocation and Collection System Rehabilitation/Replacement

| Date | Location | Gallons | Primary Cause | Waterway Impacted |
|-----------------------------|-------------------------------------|---------|----------------------------------|-------------------|
| 2016-06-06 | 700 Block of Gil Harbin Blvd | 425 | Debris | Dukes Bay Canal |
| 2016-08-02 | 3700 Block of Knight's Academy Road | 1,500 | Pipe failure | Cherry Creek |
| 2016-08-04 | 900 Block of Madison Avenue | 3,300 | Grease | Knights Creek |
| 2016-09-04 | 1300 Block of North Ashley Street | 5,675 | Equipment failure | One Mile Branch |
| 2016-10-11 | 2200 Block of Park Lane | 7,360 | Pipe failure | Sugar Creek |
| 2016-10-19 | 1100 Block of North Lee Street | 1,500 | Grease | One Mile Branch |
| 2017-01-22 | 1200 Block of Wainwright Drive | 9,800 | Wet Weather | One Mile Branch |
| 2017-01-22 | 1600 Block of James P. Rogers Drive | 57,500 | Wet Weather | Mud Creek |
| 2017-01-22 | 800 Block of Gornto Road | 9,725 | Wet Weather | Two Mile Branch |
| 2017-10-12 | 400 Block of Connell Road | 3,475 | Debris | Two Mile Branch |
| 2018-03-03 | 2500 Block of Marathon Drive | 2,625 | Grease | Knights Creek |
| 2018-03-22 | 4100 Block of Bemiss Road | 1,500 | 3 rd Party Contractor | Cherry Creek |
| 2018-12-02 to 2018-12-03 | 1800 Block of E Park Avenue | 15,575 | Wet weather | Knights Creek |
| 2018-12-02 to 2018-12-03 | 700 Block of Lamar Street | 54,525 | Wet weather | One Mile Branch |
| 2018-12-02 to 2018-12-03 | William/College Street | 299,850 | Wet weather | One Mile Branch |
| 2018-12-02 to 2018-12-03 | 800 Block of Gornto Road | 244,650 | Wet weather | Two Mile Branch |
| 2018-12-03 | 1100 Block of Ponderosa | 13,125 | Wet weather | One Mile Branch |
| 2018-12-03 | 1200 Block of Ponderosa | 52,500 | Wet weather | One Mile Branch |
| 2018-12-03 | N Forrest/E Brookwood | 45,300 | Wet weather | One Mile Branch |
| 2018-12-03 | 3600 Block of Lake Laurie Road | 21,500 | Wet weather | Cherry Creek |
| 2018-12-03 | 1400 Block of Lola | 56,625 | Wet weather | One Mile Branch |
| 2018-12-03 | Lee/East Jane Street | 64,400 | Wet weather | One Mile Branch |
| 2018-12-03 | Troup/East Ann Street | 31,545 | Wet weather | One Mile Branch |

ATTACHMENT A

City of Valdosta Sanitary Sewer Collection System Spills

April 8, 2014 to December 31, 2019

NPDES Permit Nos. GA0033235 and GA0020222

Citation: Rule 391-3-6-.03(5)(a-c) ; OCGA: 12-5-29(a)

A.1 Cont. - Spills After Withlacoochee Relocation and Collection System Rehabilitation/Replacement

| Date | Location | Gallons | Primary Cause | Waterway Impacted |
|-----------------------------|---------------------------------|-----------|---|-------------------|
| 2018-12-03 | Mack Drive Pump Station | 162,800 | Wet weather | One Mile Branch |
| 2018-12-03 | 1300 Block of Lee Street | 290,475 | Wet weather | One Mile Branch |
| 2018-12-03 | 1200 Block of Wainwright Street | 166,725 | Wet weather | One Mile Branch |
| 2018-12-03 to 2018-12-04 | Samuel/Holiday | 242,325 | Wet weather | Dukes Bay Canal |
| 2018-12-03 to 2018-12-04 | 400 Block of Mildred Street | 210,000 | Wet weather | Knights Creek |
| 2018-12-14 | N. Oak St/Smith Briar | 41,700 | Wet weather | Three Mile Branch |
| 2018-12-14 to 2018-12-15 | 1603 Azalea Drive | 39,470 | Wet weather | Two Mile Branch |
| 2018-12-14 to 2018-12-15 | 817 Gornto Road | 27,500 | Wet weather | Two Mile Branch |
| 2018-12-14 to 2018-12-15 | 408 Mildred Street | 123,375 | Wet weather | Knights Creek |
| 2018-12-14 to 2018-12-15 | 1208 Wainwright Drive | 51,800 | Wet weather | One Mile Branch |
| 2019-08-03 | 1400 Iola Drive | 2,250 | Vandalism | One Mile Branch |
| 2019-08-21 | 3353 Plantation Drive | 1,350 | Pipe failure | Stillhouse Branch |
| 2019-12-04 to 2019-12-09 | 1810 Norman Drive | 7,592,910 | Contractor Error // Improper Maintenance | Sugar Creek |

A.2 - Spills at Wastewater Treatment Plants (WWTPs)

| Date | Location | Gallons | Primary Cause | Waterway Impacted |
|-----------------------------|---------------------------------|------------|-----------------------|---------------------|
| 2017-01-22 | Withlacoochee WWTP ¹ | 2,200,000 | Equipment Malfunction | Withlacoochee River |
| 2018-06-26 | Withlacoochee WWTP ² | 300,000 | Equipment Malfunction | Withlacoochee River |
| 2018-08-13 | Mud Creek WWTP ³ | 135,000 | Equipment Malfunction | Knight's Creek |
| 2018-12-02 to 2018-12-06 | Withlacoochee WWTP ⁴ | 20,000,000 | Wet Weather/ I & I | Withlacoochee River |
| 2018-12-15 to 2018-12-17 | Withlacoochee WWTP ⁵ | 1,814,000 | Wet Weather/ I & I | Withlacoochee River |

¹ City had purchased a new equalization basin which began to leak during heavy rain. Basin was still under warranty and was replaced at no cost.

² Bar screen at the headworks of the Withlacoochee Wastewater Treatment Plant malfunctioned during peak storm flow on June 26th. Operator was able to correct the issue, but influent spilled onto plant property and into nearby waterways.

ATTACHMENT A

City of Valdosta Sanitary Sewer Collection System Spills

April 8, 2014 to December 31, 2019

NPDES Permit Nos. GA0033235 and GA0020222

Citation: Rule 391-3-6-.03(5)(a-c) ; OCGA: 12-5-29(a)

³ Clogged effluent screen on a secondary clarifier combined with excessive flow from a rain event caused water level in the clarifiers to drain into the scum pit, overflowing into a nearby retention pond draining to Knight's Creek.

⁴ City and surrounding area received approximately 11 inches of rain during the weekend of December 1.

⁵ City and surrounding area received approximately 3-4 inches of rain during the weekend of December 15, in addition to the previous rain events.

A.3 - Spills During Declared Natural Disasters

| Date | Location | Gallons | Primary Cause | Waterway Impacted |
|------------|---|---------|------------------|---------------------|
| 2016-09-02 | 1900 Block of East Park Avenue (Pump Station) | 55,000 | Natural Disaster | Mud Creek |
| 2016-09-02 | 2400 Block of Gornto Road | 55,800 | Natural Disaster | Withlacoochee River |
| 2016-09-02 | 3100 Block of Falling Leaf | 7,380 | Natural Disaster | Knights Creek |
| 2016-09-02 | 1300 Block of North Ashley Street | 114,750 | Natural Disaster | One Mile Branch |
| 2016-09-02 | 1300 Block of Brookwood and North Lee | 45,00 | Natural Disaster | One Mile Branch |
| 2016-09-02 | Hwy 94 Lift Station | 1,300 | Natural Disaster | Withlacoochee River |
| 2016-09-02 | 4100 Block of Bemiss Road | 2,000 | Natural Disaster | Cherry Creek |
| 2016-09-02 | 800 Block of Gornto Road | 1,150 | Natural Disaster | Two Mile Branch |
| 2016-09-02 | 1300 Block of North Lee Street | 76,500 | Natural Disaster | One Mile Branch |
| 2016-09-02 | 500 Block of Mack Drive | 51,900 | Natural Disaster | Two Mile Branch |
| 2016-09-02 | 2400 Block of Gornto Road | 117,000 | Natural Disaster | Withlacoochee River |
| 2016-09-02 | Golf Course | 40,425 | Natural Disaster | Retention Pond |
| 2017-9-11* | 4100 Block of Bemiss Road* | 900* | Power Failure* | Cherry Creek |

* Widespread power outages due to Tropical Storm Irma and generator failure resulted in a loss of power at one of the pump stations. This occurred during the 7-day State of Emergency declared by Governor Nathan Deal.

GEORGIA ENVIRONMENTAL PROTECTION DIVISION
WATERSHED COMPLIANCE PROGRAM
2 MLK, JR. DR. S.E., SUITE 1152
ATLANTA, GEORGIA 30334

City of Valdosta

ATTACHMENT B

Permit Violations

NPDES Permits No. GA0033235 and GA0020222

April 8, 2014 to December 31, 2019

ATTACHMENT B

City of Valdosta

Permit Violations

April 8, 2014 to December 31, 2019

NDPES Permits No. GA0033235 and GA0020222

B.1 - Withlacoochee Effluent Permit Limitation Violations - After Relocation

| Parameter | Date | Permit Limit | Value | Citation |
|---|----------------|--------------|--------|--------------------|
| Total Residual Chlorine, mg/L | August 2018 | 0.018 | 0.020 | GA0033235 Part I.B |
| Monthly Average Biochemical Oxygen Demand (BOD), mg/L | September 2018 | 4.0 | 4.5 | GA0033235 Part I.B |
| Monthly Average Flow, MGD | December 2018 | 8.0 | 8.5 | GA0033235 Part I.B |
| Weekly Average Total Suspended Solids, kg/d | December 2018 | 1137.0 | 1323.0 | GA0033235 Part I.B |
| Weekly Average BOD, mg/L | September 2019 | 4.0 | 4.6 | GA0033235 Part I.B |
| Weekly Average BOD, mg/L | October 2019 | 4.0 | 4.4 | GA0033235 Part I.B |

B.2 - Mud Creek Effluent Permit Limitation Violations

| Parameter | Date | Permit Limit | Value | Citation |
|--|-------------------|--------------|-------|----------------------|
| Fecal Coliform, per 100 mL | February 2017 | 400 | 753 | GA0020222 Part I.B.1 |
| Effluent Flow Monthly Average, MGD | August 2018 | 3.22 | 3.66 | GA0020222 Part I.B.1 |
| Effluent Flow Weekly Maximum, MGD | August 4, 2018 | 4.03 | 4.84 | GA0020222 Part I.B.1 |
| Effluent Flow Weekly Maximum, MGD | August 12, 2018 | 4.03 | 4.15 | GA0020222 Part I.B.1 |
| Effluent Flow Monthly Average, MGD | December 2018 | 3.22 | 4.37 | GA0020222 Part I.B.1 |
| Effluent Flow Weekly Maximum, MGD | December 2, 2018 | 4.03 | 5.61 | GA0020222 Part I.B.1 |
| Effluent Flow Weekly Maximum, MGD | December 16, 2018 | 4.03 | 4.38 | GA0020222 Part I.B.1 |
| Effluent Flow Weekly Maximum, MGD | December 23, 2018 | 4.03 | 5.61 | GA0020222 Part I.B.1 |
| Ammonia Weekly Average Concentration, mg/L | April 13, 2019 | 2.25 | 2.91 | GA0020222 Part I.B.1 |
| Ammonia Weekly Average Loading, kg/d | April 30, 2019 | 23 | 24.2 | GA0020222 Part I.B.1 |

B.3 - Mud Creek and Withlacoochee Sampling and Procedural Violations

| Violation | Date | Citation | Notes |
|---|-------------------|----------------------|-----------------------------------|
| Failure to Sample Total Kjeldahl Nitrogen | May 2015 | GA0033235 Part I.A.1 | Higher Frequency in new Permit |
| Failure to Sample Total Kjeldahl Nitrogen | June 2015 | GA0033235 Part I.A.1 | |
| Failure to Sample Total Kjeldahl Nitrogen | June 2015 | GA0020222 Part I.A.1 | |
| Failure to Sample Total Phosphorus 3/week | November 2016 | GA0020222 Part I.A.1 | |
| Failure to Sample Total Phosphorus 3/week | December 2016 | GA0020222 Part I.A.1 | |
| Failure to Sample Total Phosphorus 3/week | January 2017 | GA0020222 Part I.A.1 | |
| Failure to Sample Total Phosphorus 3/week | February 2017 | GA0020222 Part I.A.1 | |
| Failure to Sample Total Phosphorus 3/week | March 2017 | GA0020222 Part I.A.1 | |
| Failure to Sample Total Phosphorus 3/week | April 2017 | GA0020222 Part I.A.1 | |
| Failure to Sample Total Phosphorus 3/week | May 2017 | GA0020222 Part I.A.1 | |
| Failure to Sample Total Phosphorus 3/week | June 2017 | GA0020222 Part I.A.1 | |
| Failure to Sample Total Phosphorus 3/week | July 2017 | GA0020222 Part I.A.1 | |
| Failure to Sample Total Phosphorus 3/week | August 2017 | GA0020222 Part I.A.1 | |
| Failure to Sample Total Phosphorus 3/week | September 2017 | GA0020222 Part I.A.1 | |
| Failure to Sample Total Phosphorus 3/week | October 2017 | GA0020222 Part I.A.1 | |
| Failure to Sample Total Phosphorus 3/week | November 2017 | GA0020222 Part I.A.1 | |
| Failure to Sample Total Phosphorus 3/week | December 2017 | GA0020222 Part I.A.1 | |
| Failure to Sample Daily Dissolved Oxygen | November 17, 2017 | GA0020222 Part I.A.1 | |

ATTACHMENT B

City of Valdosta

Permit Violations

April 8, 2014 to December 31, 2019

NDPES Permits No. GA0033235 and GA0020222

Mud Creek and Withlacoochee Sampling and Procedural Violations Cont.

| Violation | Date | Permit | Notes |
|--|---------------------|----------------------|---------------------------------------|
| Late Submittal of Monthly DMR Report | December 2017 | GA0033235 Part I.C.2 | Mixup of Samples Unacceptable D.O. |
| Improper Analysis of BOD | March 20 + 21, 2018 | GA0020222 Part I.A.1 | |
| Improper Analysis of BOD | June 26 + 29, 2018 | GA0020222 Part I.A.1 | |
| Failure to Sample Conductivity 1/week | July 2, 2018 | GA0020222 Part I.A.1 | |
| Failure to Analyze Total Kjeldahl Nitrogen | December 2018 | GA0020222 Part I.A.1 | |
| Failure to Analyze Total Zinc | December 2018 | GA0020222 Part I.A.1 | |

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City of Valdosta

ATTACHMENT C

Department of Natural Resources

Wildlife Division

Fish Kill Investigation

December 18, 2019

FISH KILL INVESTIGATION

Sugar Creek and Withlacoochee River
Valdosta, Georgia (Lowndes County)

By

Donald Harrison

Georgia Department of Natural Resources
Wildlife Resources Division
Fisheries Management Section – Waycross Office
Waycross, GA

December 18, 2019

Notification and Investigation Details

On Tuesday, December 10, 2019, at 15:30, Scott Fowler, the Environmental Manager for the City of Valdosta (ph. 229-251-6528), contacted the Waycross Fisheries Office to report some dead fish in the Withlacoochee River near Valdosta, GA. The call was forwarded to Donald Harrison (Fisheries Biologist III). Mr. Fowler informed Mr. Harrison that Edward Strohl (Valdosta City worker) had seen some dead fish (approximately 20-25 bass and bream) in the Withlacoochee River at the GA Hwy 133 bridge. Mr. Fowler stated that the city had been doing some work at a manhole a good distance away in town but was not sure the dead fish were related or just coincidence. Mr. Fowler also stated that he had contacted EPD staff in Albany and they informed him to notify the Wildlife Resources Division-Fisheries Management Section (WRD-FM) of the dead fish. Mr. Harrison informed him that WRD-FM staff would come take a look that afternoon and try to determine whether the reason for the dead fish.

After speaking with Mr. Fowler, Mr. Harrison contacted Scott Robinson (Operations Manager, WRD-FM) to notify him of a potential fish kill in the Withlacoochee River. Mr. Harrison and Jim Page (Fisheries Biologist III) departed the Waycross Office at 16:00 and travelled to the reported fish kill site at the GA Hwy 133 bridge (Site 11). Mr. Harrison and Mr. Page arrived at the site at approximately 17:40. Upon arrival, Mr. Harrison and Mr. Page found dead fish of several species and sizes that appeared to be 1-2 days old. Both individuals also immediately noticed a pungent odor and evidence that a pulse of water had recently passed through the area. Water quality samples were taken at the site and revealed slightly depressed dissolved oxygen levels (Table 1), but not low enough to kill fish at this time. Both concurred that they did not believe these fish had died from a natural event. Mr. Harrison contacted Mr. Fowler to follow up with some more questions to try and determine potential causes of the fish kill. While discussing the fish kill, Mr. Fowler indicated that the work at the manhole cover in town was related to a sewage spill. A lift station had failed due to a sensor not being reconnected after an update on December 3, 2019, and the failure was not discovered until December 9, 2019. Approximately 7.5 million gallons of sewage spilled into Sugar Creek, which is a tributary to the Withlacoochee River, over the 6 days that the lift station had been offline. Mr. Fowler stated that he and his staff had been monitoring Sugar Creek and had not seen any dead fish, but he contacted EPD as soon as dead fish were observed in the Withlacoochee River. Mr. Harrison informed Mr. Fowler that WRD-FM staff would need to complete an investigation of the kill and sewage spill and would return the next day. Mr. Fowler indicated that he would gladly take staff to the site of the spill and several access points to Sugar Creek. Due to darkness, the field investigation was ceased for the night. At 18:15, Mr. Harrison notified Scott Robinson of the findings and plans to return the next day to complete the investigation.

WRD-FM staff members Don Harrison, Ed Zmarzly (Fisheries Technician III), Jason Mitchell (Fisheries Technician II), and David McGhin (Fisheries Technician I) departed Waycross, GA at 08:00 on Wednesday, Dec. 11 to return to the site of the fish kill. While in route Mr. Harrison notified Mr. Fowler of the estimated time of arrival to the site in order to meet with him. WRD-Staff arrived at Site 11 at 09:35 and Mr. Harrison notified Mr. Fowler via text message that WRD-FM was on site. Mr. Harrison also instructed Mr. Mitchell and Mr. McGhin to proceed downstream of the GA Hwy 133 bridge to enumerate dead fish and determine the lower end of the fish kill. At 10:00, Mr. Fowler indicated he was on way to meet Mr. Harrison and Mr. Zmarzly and would show them the spill site and various access points to Sugar Cr. Mr. Fowler arrived at 10:45 and led WRD-FM staff to where Sugar Creek went under Gornto Rd (Site 5). He then proceeded to take Mr. Harrison to several other sites, including the spill site and lift station before returning to Site 5.

Mr. Harrison and Mr. Zmarzly then proceeded back to the spill site (Site 2) (Photo 1), which was located behind a Home Depot store and upstream of the Bay Tree Rd crossing (Site3). Once at Site 2, Mr.

Harrison and Mr. Zmarzly proceeded to walk upstream approximately 0.1 miles and did not observe any dead fish. Water quality measurements were also taken upstream of Site 2 (Table 1).

At 11:45, Mr. Mitchell notified Mr. Harrison that Mr. McGhin and he had continued downstream approximately 0.7 miles on the Withlacoochee River until they had no longer observed any dead fish (Site 12) and began seeing live fish that showed no signs of stress. They indicated that they had counted over 400 dead fish in this segment of the Withlacoochee. This was determined to be the lower extent of the fish kill. Water quality measurements were also taken at Site 12. Mr. Harrison instructed them to meet Mr. Zmarzly and him behind the Home Depot to discuss a plan to finish enumerating the dead fish. Mr. Harrison also spoke with Bert Deener (WRD-FM Regional Supervisor) and Tim Bonvechio (Fisheries Biologist III) and requested additional assistance with the field investigation. It was determined that the kill area was too large (approximately 4.5 miles of stream) to complete a direct count of all dead fish. It was decided to estimate the total number of fish killed by extrapolation from direct counts on stretches of Sugar Creek and the Withlacoochee River. Miles of stream traversed during each direct fish count would also be documented. At 12:15, Mr. Harrison contacted Mr. Robinson to provide an update on current findings and plans for enumerating the fish killed.

At 13:45, WRD-FM staff met at Site 3 to collect water quality data and discuss the sampling plan. Mr. Harrison and Mr. Zmarzly proceeded to enumerate downstream of Site 3 for approximately 0.46 miles to Site 4. Twenty-five dead fish of various species and sizes were found, and all appeared to be at least 2 days old (Photo 2). Sugar Creek had large amounts of black algae on the bottom of the stream in this section (Photo 3) and still had a pungent odor. One small unnamed tributary to Sugar Creek was intercepted in this stretch, and live fish that showed no signs of stress were observed in this tributary.

Mr. Mitchell and Mr. McGhin returned to Site 11 at 14:00 and proceeded to enumerate fish upstream of the GA Hwy 133 bridge for approximately 0.3 miles to Site 10. They observed 51 dead fish in this segment of the Withlacoochee.

Mr. Deener and Mr. Bonvechio proceeded to the railroad crossing on the Withlacoochee River just below the confluence of where Sugar Creek and the Withlacoochee River adjoin (Site 8) (Photo 4). They proceeded to survey the Withlacoochee River upstream of the confluence with Sugar Creek for approximately 0.1 miles to Site 7 and did not observe any dead fish. They then proceeded to enumerate dead fish upstream of the confluence in Sugar Creek for approximately 0.33 miles to Site 6 and counted 48 dead fish. Then returned to the railroad crossing and proceeded to enumerate dead fish downstream on the Withlacoochee River for approximately 0.44 miles to Site 9 and encountered 157 dead fish (Photo 5). They also noted discolored water and a pungent odor of the areas where dead fish were observed (Photo 6). Mr. Deener and Mr. Bonvechio also stated that they observed live fish that showed no signs of stress in small tributaries/side channels to Sugar Creek and the Withlacoochee River.

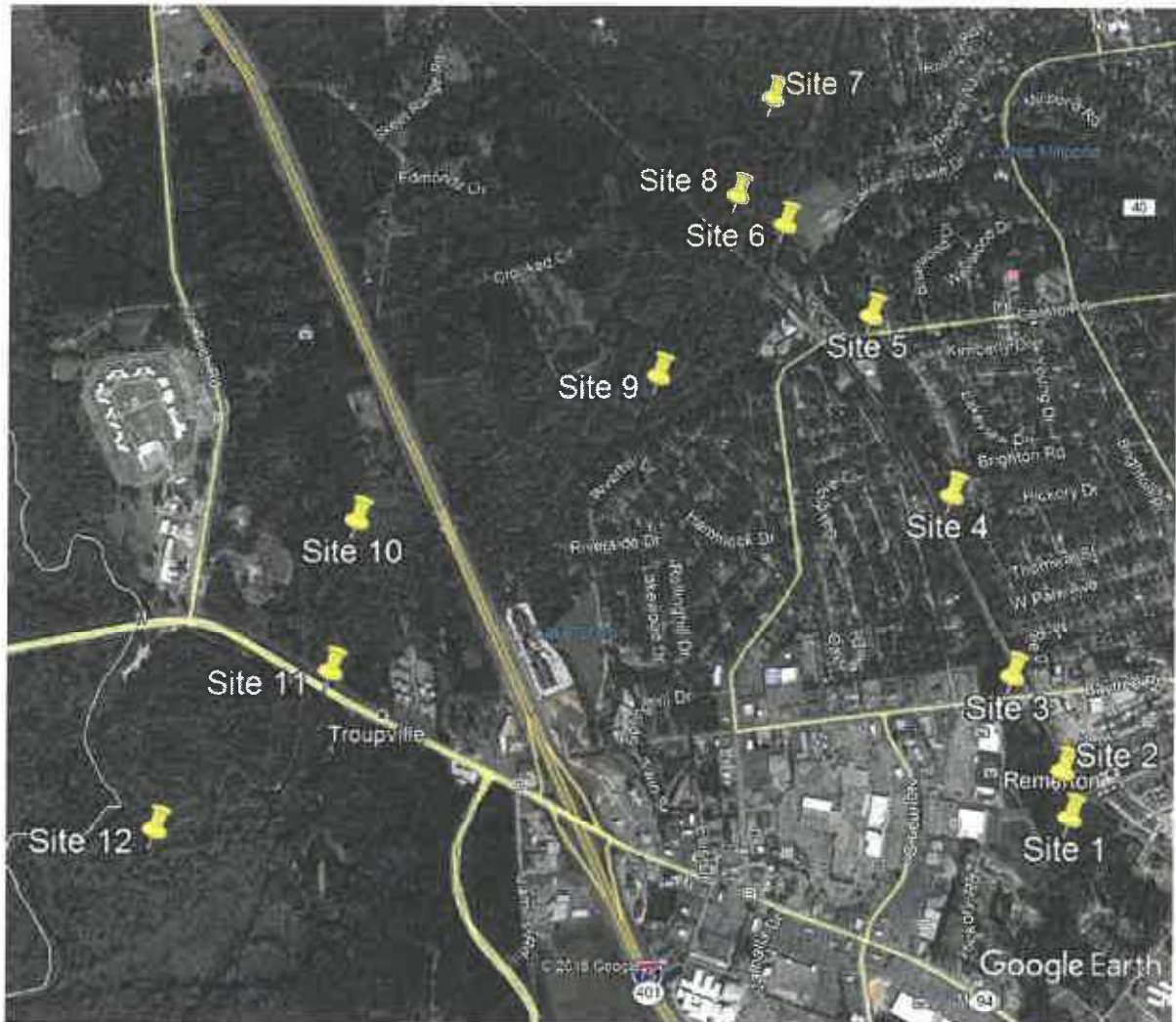
Upon finishing fish counts in the various sections of Sugar Creek and the Withlacoochee River, staff met at Site 5, where another water set of water quality measurements were taken (Table 1). Staff discussed their findings and felt the current extent of the investigation was sufficient. The field investigation of the fish kill was ceased at 17:00.

Conclusion

Indications are that the sewage that entered Sugar Creek at Site 2 likely degraded the water quality to the point that it could not support fish life since there were no dead fish observed upstream of Site 2 where the sewage spill entered Sugar Creek, above the confluence of Sugar Creek and the Withlacoochee River, or in small tributaries to these streams. It is unknown how long the water quality remained degraded

to the point of killing fish in these systems. The sewage spill had been stopped approximately 24 hours before WRD-FM staff were notified and waters appeared to be entering a recovery phase during the fish kill investigation. A total of 768 dead fish were enumerated on approximately 2.23 miles of stream, which was 49.5% of the approximately 4.5 miles of stream impacted by the fish kill. In order to account for the dead fish in the stretches of Sugar Creek and Withlacoochee River, the estimated total numbers of dead fish were calculated by multiplying the total the number of fish enumerated by 2 since approximately 50% of the kill area was sampled. In total there were an estimated 1,536 fish that were killed by this event (Table 2). The fisheries replacement cost for these fish is \$1,613.10 (Table 2). That combined with the investigation cost of \$3,653.17 (Table 3), results in a total fish kill cost of \$5,266.27.

Figure 1. Location of a fish kill that occurred in Sugar Creek and the Withlacoochee River in Valdosta, Georgia on December 10, 2019.



- Site 1: Above Kill Area
- Site 2: Sewage Spill Site on Sugar Creek
- Site 3: Baytree Rd and Sugar Creek
- Site 4: Stopping Point of Upper Count on Sugar Creek
- Site 5: Gornto Rd and Sugar Creek
- Site 6: Upper point of Lower Count on Sugar Creek
- Site 7: Withlacoochee River above the confluence of Sugar Creek
- Site 8: Confluence of Sugar Creek and Withlacoochee River
- Site 9: Stopping Point of Upper Count on Withlacoochee River
- Site 10: Upper Point of Lower Count on Withlacoochee River
- Site 11: GA Highway 133
- Site 12: Lower End of Fish Kill

Photo 1: Site where sewage flowed out of manhole into Sugar Creek. Sugar Creek is immediately behind manhole. Photograph taken by Don Harrison.



Photo 2: Dead largemouth bass in Sugar Creek below Bay Tree Road. Photograph taken by Don Harrison.



Photo 3: Black algae on bottom of Sugar Creek below Bay Tree Road . Photograph taken by Don Harrison.



Photo 4: Confluence of Sugar Creek and Withlacoochee River. Photograph taken by Tim Bonvechio.



Photo 5: Dead fish in the Withlacoochee River below the confluence of Sugar Creek. Photograph taken by Bert Deener.



Photo 6: Discolored water in Withlacoochee River below confluence with Sugar Creek. Photograph taken by Tim Bonvechio.



Table 1. Water quality parameters associated with a WRD Fisheries Section fish kill investigation at Sugar Creek and Withlacoochee River in Valdosta, GA on December 10, 2019.

| Date | Site # | Site Description | Water Temp (°C) | D.O. (mg/l) | pH | Total Hardness | Alkalinity | Conductivity |
|-------------|---------------|-------------------------|------------------------|--------------------|-----------|-----------------------|-------------------|---------------------|
| 12/10/2019 | 1 | Above Spill | 17.6 | 9.52 | 7 | 42 | 34 | 92 |
| 12/11/2019 | 3 | Baytree Rd | 17.9 | 7.45 | 7 | 70 | 44 | 137 |
| 12/11/2019 | 5 | Gornito Rd | 17.4 | 5.7 | 7 | 52 | 40 | 132 |
| 12/11/2019 | 11 | Hwy 133 | 20.4 | 3.25 | 7 | 52 | 48 | 127 |
| 12/11/2019 | 12 | Below Kill | 17.8 | 5.27 | 7 | 72 | 68 | 140 |

Table 2. Total number of dead fish enumerated and their monetary values associated with a WRD Fisheries Section fish kill investigation at Sugar Creek and Withlacoochee River in Valdosta, GA on December 10, 2019.

| Species | Total Number | Total Value (US)¹ |
|---|---------------------|-------------------------------------|
| Pirate Perch (<i>Aphredoderus cyanus</i>) | 12 | not available |
| Hogchoker (<i>Trinectes maculatus</i>) | 2 | not available |
| Redbreast Sunfish (<i>Lepomis auritus</i> .) | 1,134 | \$928.36 |
| Bluegill Sunfish (<i>Lepomis macrochirus</i>) | 28 | \$29.76 |
| Largemouth Bass (<i>Micropterus salmoides</i>) | 82 | \$435.08 |
| Warmouth (<i>Lepomis gulosus</i>) | 60 | \$44.84 |
| Redear Sunfish (<i>Lepomis microlophus</i>) | 2 | \$3.84 |
| Spotted Sunfish (<i>Lepomis punctatus</i>) | 34 | \$29.78 |
| Unidentifiable sunfish (<i>Lepomis</i> spp.) | 20 | \$14.68 |
| Black crappie (<i>Pomoxis nigromaculatus</i>) | 6 | \$11.82 |
| Brown Bullhead (<i>Ameiurus nebulosus</i>) | 28 | \$44.76 |
| Yellow Bullhead (<i>Ameiurus natalis</i>) | 2 | \$0.66 |
| American Eel (<i>Anguilla rostrata</i>) | 2 | \$6.28 |
| Spotted Sucker (<i>Minytrema melanops</i>) | 32 | \$11.40 |
| Swamp Darter (<i>Etheostoma fusiforme</i>) | 10 | \$11.40 |
| Brooks Silverside (<i>Labidesthes sicculus</i>) | 76 | \$9.12 |
| Chain Pickerel (<i>Esox niger</i>) | 2 | \$24.00 |
| Redfin Pickerel (<i>Esox americanus</i>) | 2 | \$6.00 |
| Madtom (<i>Noturus</i> spp.) | 2 | \$1.32 |
| TOTAL FISH VALUES | 1536 | \$1,613.10 |

¹ Southwick, R.I., and A.J. Loftus, editors. 2017. Investigation and Monetary Values of Fish and Freshwater Mussel Kills. American Fisheries Society, Special Publications 35, Bethesda, Maryland. 177pp.

Table 3. WRD Fisheries Section investigative costs associated with a fish kill investigation at Sugar Creek and Withlacoochee River in Valdosta, GA on December 10, 2019.

| Personnel and Vehicle Expenses | | | | | |
|---------------------------------------|--------------------------|-----------------------|--------------------|------------------------|---------------------|
| Personnel | Title | Salary Charges | Vehicle No. | Vehicle Mileage | Vehicle Cost |
| Don Harrison | Fisheries Biologist III | \$1,442.16 | 116833 | 278 | \$161.24 |
| Jim Page | Fisheries Biologist III | \$202.09 | N/A | ----- | ----- |
| Ed Zmarzly | Fisheries Technician III | \$333.61 | N/A | ----- | ----- |
| Jason Mitchell | Fisheries Technician II | \$363.65 | 129823 | 140 | \$81.20 |
| David McGhin | Fisheries Technician II | \$295.24 | N/A | ----- | ----- |
| Bert Deener | Regional Supervisor | \$370.62 | 136413 | 142 | \$82.36 |
| Tim Bonvechio | Fisheries Biologist III | \$311.00 | N/A | ----- | ----- |
| TOTAL | | \$3,318.37 | | | \$324.80 |
| Miscellaneous Expenses | | | | | |
| Description | | | | | Cost |
| Supplies (Gloves, Photocopying, etc.) | | | | | \$10.00 |
| TOTAL | | | | | \$10.00 |
| TOTAL INVESTIGATION COSTS | | | | | \$3,653.17 |

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WATERSHED COMPLIANCE PROGRAM
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ATLANTA, GEORGIA 30334

City of Valdosta

ATTACHMENT D

City of Valdosta
Response to Notice of Violation
May 19, 2014



CITY OF VALDOSTA, GEORGIA
Utilities Department

EPD/WCP WCP

MAY 20 2014

RECEIVED

Henry Hicks
DIRECTOR OF UTILITIES

May 19, 2014

Mr. Lewis Hays
Program Manager
Watershed Compliance
Georgia Environmental Protection Division
4220 International Parkway, Suite 101
Atlanta, Georgia, 30354

RE: Notice of Violation – NPDES Permit Nos. GA0033235 & GA0020222 (Consent Order No. EPD-WQ-5478)

On December 3, 2013, the city of Valdosta and the Georgia EPD entered into a Consent Order that outlines the solutions for the majority of the issues in this Notice of Violation. This response and accompanying information will show the city has completed short term improvements to the Withlacoochee WPCP and since they were completed, protocols implemented, and staff trained, there have been no major permit violations and no spills or overflows at the plant. In addition, the city has awarded a contract for over \$32 million dollars for the Force Main project, with a schedule for completion in December of next year, six months ahead of the C.O. timeline. The next phase of the manhole replacement project will be awarded in June of this year, resolving several other violations in this notice. These three projects cover the violations identified in the NOV, with the exception of two emergencies, and we hope the city's demonstrated commitment by evidence of work completed, contracts awarded and contracts pending will support the city's actions to date to address and resolve these important issues. In addition, the city is ahead of schedule on plans for the relocation of the Withlacoochee WPCP and could finish the project nearly eighteen months ahead of the C.O. schedule. We have completed Phase 1 of the smoke testing program and have identified needed repairs and have those budgeted in upcoming budgets. These actions will resolve the violations noted in this NOV.

The major causes contributing to the violations were excessive and consecutive very heavy rain events which led to extremely high groundwater tables, river and localized flooding resulting in extensive inflow and infiltration (I&I) into the sanitary sewer system as well as the main influent 54-inch gravity sewer to the Withlacoochee WPCP. As a result of river flooding and subsequent inflow into this 54-inch gravity main, influent flows to the Withlacoochee WPCP from the sanitary sewer collection system were severely restricted causing sewer system backups and numerous manholes to overflow in low lying areas of the city. In a few instances, some overflows were attributed to sewer main failure resulting from severely corroded section of pipe. The 54 inch gravity main is scheduled to be replaced by the Force Main project, thus eliminating this liability from the city's system.

P.O. Box 1125 ■ 1016 Myrtle Street
Valdosta, Georgia 31603-1125



(229) 259-3592 ■ Fax (229) 241-8285
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To address these issues, the city has outlined the steps to remedy this situation in the action items listed in Consent Order No. EPD-WQ-5478. In fact, the completion of Action Item 1a. of that order will eliminate the overwhelming majority of these overflows. That project is scheduled to begin in June 2014 and be completed within 18-months, which is 6 months ahead of schedule. Action Item 1.b. regarding the Design Build Contract of the new Withlacoochee WPCP is expected to be awarded by the end of this month with a 18-month construction schedule as well.

The subsequent action items also listed in that order are designed to maximize the reduction of I&I related issues. Regarding areas where we have encountered failure of sewer mains resulting in emergency repairs, we have included additional work beyond the scope of the point repairs by replacing other corroded manholes and cured in place lining of existing sewer mains in the adjacent areas of those failures as well as installation of new sewer mains as necessary to eliminate any failure recurrence and reduce inflow and infiltration (I&I) into those areas of the sewer system.

Emergency Repairs at the Withlacoochee WPCP were completed earlier this spring and new operating protocols fully implemented in March 2014. Since those procedures were instituted, there have been no violations of this facility's NPDES permit with the exception of pH which resulted from exceptionally high inflow into the sanitary sewer system attributed to river flooding. That flooding was a direct result of successive abnormally high rain events on both March and April of this year causing localized flooding within the city as well as significant river flooding. These two months alone had the highest recorded rainfall in city history, receiving 17-inches of rain versus the normal 7-inches.

With regards to the sanitary sewer overflows during these rain events, the city has taken several steps to mitigate those occurrences.

- Smoke testing of the majority of these spill locations was recently completed identifying manholes and sewer lines in these areas in need of immediate attention.
- Utilizing this information, city maintained manholes and sewer lines in those areas are scheduled for lining to eliminate inflow and infiltration. In addition, letters have been sent to property owners notifying them of damaged service connections contributing to the I&I problems.
- As previously mentioned, in locations where emergency repairs are underway, additional scope has been added to those jobs to replace or line sewer mains in the adjacent areas to those point repairs. These projects will total well over \$2 million when completed.
- Bids for lining and in some situations raising an additional 38 manholes to reduce I&I are due May 21, 2014. To date over 90 manholes have been lined or replaced and seven have been raised because of the location adjacent to the storm water collection system. A list of an additional 30 plus manholes is being developed for bid advertisement late this summer.

- The next phase of smoke testing is schedule to begin in July of this year and will focus on remaining locations where surcharges have taken place that were not addressed in this spring's smoke testing plan.
- Areas prone to overflows are inspected and cleaned prior to heavy rain events to ensure possible obstructions are eliminated during higher anticipated flows.
- Finally the city has budgeted to expend \$500,000 dollars in this budget year, \$1 million next year and \$6 million the following year, followed by \$10 million and \$2.5 million in subsequent years to line its largest diameter sewer mains which contribute to most of our I&I problems. This is in addition to the \$32 million dollar Force Main project which will eliminate the system's largest source of I&I.

We believe that the aggressive schedule approach we are taking on the consent order items as well as the additional work planned for sewer main lining will ultimately eliminate the overwhelming majority of our sewer overflows sooner rather than later.

In conclusion, I would like to reiterate that the City has expended over \$52 million in sewer system improvement over the last 5-years and has committed to spend over \$90 million on sewer system improvements in the next five years. We are ahead of schedule on all items in the C.O. and have addressed most, if not all, of the causes of the violations in the NOV letter, with projects either completed, contracts awarded, or active bids with contracts to be awarded in the next several months.

Thank you for taking the time to review the city's efforts to gain and maintain full compliance with EPD regulations. We believe our efforts demonstrate our professional and financial commitment to address and resolve these issues. Please feel free to contact me if additional information is needed.

Respectfully,



Henry Hicks
Utilities Director
City of Valdosta

GEORGIA ENVIRONMENTAL PROTECTION DIVISION
WATERSHED COMPLIANCE PROGRAM
2 MLK, JR. DR. S.E., SUITE 1152
ATLANTA, GEORGIA 30334

City of Valdosta

ATTACHMENT E

City of Valdosta Annual Report
Consent Order No. EPD-WQ-5478
December 27, 2018



CITY OF VALDOSTA, GEORGIA
Utilities Department

W. Darryl Muse
DIRECTOR OF UTILITIES

December 27, 2018

Ms. Alys Hannum
Watershed Compliance Program, Municipal Compliance Unit
GA Environmental Protection Division, Watershed Protection Branch
Suite 1152, 2 MLK, Jr. Drive S.E.
Atlanta, Georgia 30334

RE: Consent Order No. EPD-WQ-5478: Annual Compliance Report

Dear Ms. Hannum:

The City of Valdosta Utilities Department is providing the following annual compliance report update, as required by Condition No. 1 of the Order:

1. On, November 4, 2014, the City of Valdosta Utilities Department received EPD approval for a Supplemental Environmental Project (SEP) at a minimum expenditure of \$200,000.

The Utilities Department awarded this contract to Parsons in December 2014 and this work was completed and a copy of the final report was submitted to your office in October of 2015. As a result of the SEP report findings, we awarded a construction contract to address two high priority projects identified along with one other large project identified through our manhole inspection and smoke testing programs. This work was completed in December 2016. A fourth project identified in the SEP has also been started. The subsequent report will also be utilized along with other data being gathered to develop the future 5-year improvements plan as required in Action Item No. 2 of the consent order. **In addition, a contract for a similar study for the Mud Creek sewer collection system has been awarded to Parsons and the work began in early 2017. The findings will be incorporated in our long term rehabilitation plans. This work continues.**

The City of Valdosta Utilities Department is providing the following annual compliance report update, as required by Condition No. 6 of the Order:

- Action Item No. 1a (Phase 1) – **Pump Station, Force Main, Headworks and Equalization Basin Project:** Design and construct two new master pump stations and two smaller pump stations along with a new force main to a new headworks structure with grit removal and bar screens at the same location for the new Withlacoochee WPCP. In addition a 6.0 MG equalization basin will be included at this site for initial wet

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weather flows and future flow equalization through the new treatment plant. The flow from this project will be gravity fed to the existing WPCP for final treatment and discharge utilizing the existing plant outfall. This project will replace an existing 54-inch gravity sewer main to the current plant as well as the existing influent pump station, both of which are highly prone to severe inflow and flooding from the Withlacoochee River. Project completion deadline is July 2016.

Work began in June 2014 with completion scheduled within 18-months. Final testing and satisfactory startup of this project was completed in late June 2016 on schedule. The new pump station, force main, headworks and equalization basin are operating as designed and constructed. Several warranty items were required to be corrected during the one-year warranty period. This work is complete.

Additional Work: The City of Valdosta is requesting to extend Condition 6 within the existing Consent Order No. EPD-WQ-5478. The additional work includes design and construction of additional storage basins at the Withlacoochee WPCP. The need for additional storage was discovered after receiving an estimated 6 billion gallons of rainfall within a 24 hour period within the incorporated limits of the City. As a result of this rain event, the treatment plant received in excess of 30 million gallons of additional flow. The intent of the additional storage is to allow these excess storm water flows to be retained on site until they can be appropriately processed through the treatment facility.

- **Action Item No. 1b. (Phase 2) – Relocation of Withlacoochee WPCP to new location 60 feet above current flood level:** This project is planned for use of design build approach to expedite design and construction in the shortest possible time frame. A RFP for design build was advertised in the summer of 2013 following approval of the RFP by both Georgia EPD and GEFA. Upon completion of this facility, we will continue to use the existing WPCP Outfall on the Withlacoochee River. This one step design build project was awarded to Parsons Water & Infrastructure at the June 19, 2014, City Council meeting and the Notice to Proceed issued on September 23, 2014. The DDR for this project was submitted to EPD on August 6, 2014, and approval received on October 29, 2014. During the DDR approval process preparatory site work was performed and the Aquarobics SBR system order placed.

Work began in late 2014. EPD approval to start the new treatment plant was received on May 2, 2016. On May 4, 2016, the plant was seeded with raw sewage pumped from the new Remer Lane Pump Station in combination with stored solids from the old plant. Treatment plant processes were successfully brought online and operating as expected later that evening. Discharge of fully treated effluent from the new plant began on May 5, 2016. The bio-solids process was planned for startup at the end of May once solids inventory was

adequate for dewatering. This project had an 18-month construction completion schedule and was successfully completed 13-months ahead the deadline date of August 2017. The new plant is fully operational as designed and constructed. This work is complete.

- **Action Item 2. – Collection System Evaluation Program:** Continue implementation of and complete a 5-year system wide plan to evaluate the entire sanitary sewer collection system and develop schedule for repairs. The evaluation will include inspection of all manholes and collection system lines using smoke testing first followed by Closed Circuit Television (CCTV) inspections of high priority areas. The evaluation will be utilized to prioritize and perform critical repairs and also to plan and prioritize major rehabilitation projects for the future. A schedule to complete major rehabilitation projects identified during the evaluation will be submitted for EPD approval by December 2018.

To date, smoke testing was completed on over 203-miles of the sanitary sewer system. To date, 650 defects were found with the large majority occurring on individual property service lines or cleanout caps missing. Notification letters have been sent to those property owners requesting immediate repairs of those problems. The second round of smoke testing on previously tested lines is underway to determine if defects by the property owners are repaired. If repairs have not been completed in these locations, a final notification will be mailed for immediate repairs within 60-days. Any failure to make repairs within that 60-day time frame will dictate issuance of code violation or discontinuance of sewer service.

65 manholes were found to have defects in Phase 1 through Phase 3 and 56 have been repaired to date. Any manholes that could not be repaired in-house will be added the next Phase of the manhole rehab program. (See Action Item 3.).

To date, a total of 107 sections of sewer mains were found to have defects and all have been CCTV'd and relined using CIPP (cured in place pipe) technology totaling over 14,376 linear feet. During phase 3 CCTV of mains to be lined using CIPP, 10 locations were identified as needing point repairs before CIPP work could be finished. All point repairs were completed under an emergency contract and this phase of lining was completed. Phase 4 of the CIPP program to line 1,875 feet of sewer mains as well as Phase 5 CIPP program to line 3,622 of sewer mains have also been completed.

Additional sewer mains for Phase 6 CIPP program have been identified which include 280 feet of 8" sewer main and 1,389 feet of 12" sewer main.

The final 120-miles of the sanitary sewer system scheduled for smoke testing was completed and we are awaiting the final report from the contractor. The smoke testing project was completed 20-months ahead of the December 2018 deadline.

Smoke testing is complete and over 300 miles of sewer lines were evaluated. During this project approximately 1,351 defects were found and over 14,376 feet of sewer pipe has been rehabilitated using CIPP. Additionally, 134 defective manholes were identified and prioritized. Of those 104 have been repaired. The remaining defective manholes are schedule for repair in 2018.

The remaining 30 manholes were awarded and approved by City Council on June 21, 2018. The contract is for 120 days and the City anticipates the work to be complete by the end of October, 2018. Additionally, 1,454 feet of 12 and 8 inch sewer pipe identified during smoke testing, TV inspection and within the SEP was bid and approved by Council for CIPP repair on June 21, 2018. This work is scheduled to be complete in November 2018.

Additional Work: As a result of excessive rain in the months of November and December, the contractor for the aforementioned project was unable to meet the scheduled completion date. With dryer conditions predicted for the month of January, the contractor will be able to place personnel in currently flooded areas and resume work. In addition to the existing programs, the City is embarking upon in-house Manhole rehabilitation and Infiltration teams to accelerate needed repairs. Significant investment in equipment, training and personnel have been identified for the program. In light of recent I&I exceedances within the Withlacoochee treatment basin, the city will deploy a specialized crew to address these issues.

- **Action Item 3. – Manhole Replacement/Rehabilitation Program:** Continue existing program completing inspection of approximately 6,140 manholes (over 3,700 inspected to date) and prioritizing replacement or rehabilitation of the most deteriorated manholes first. Complete the replacement or rehabilitation of a minimum of 60 manholes each year until all priority 1 manholes are completed. A schedule will be submitted to EPD for ongoing rehabilitation to address priority 2 and all remaining manholes on an annual basis.

To date, well over 235 manholes have been rehabilitated or replaced. Bids were received for Phase 4 of our annual Manhole Rehabilitation/Replacement program in June 2015. The contract for this work was completed in late November 2015. Phase 5 was awarded in November 2016 and was completed in April of 2017. This project is on schedule with the December 2018 deadline.

The remaining 30 priority 1 manholes were awarded and approved by City Council on June 21, 2018. The contract is for 120 days and the City anticipates the work to be complete by the end of October, 2018.

Additional Work: As a result of excessive rain in the months of November and December, the contractor for the aforementioned project was unable to meet the scheduled completion date. With dryer conditions predicted for the month of January, the contractor will be able to place personnel in currently flooded areas and resume work. In addition to the existing programs, the City is embarking upon in-house Manhole rehabilitation and Infiltration teams to accelerate needed repairs. Significant investment in equipment, training and personnel have been identified for the program. In light of recent I&I exceedances within the Withlacoochee treatment basin, the city will deploy a specialized crew to address these issues.

- **Action Item 4a. – Lift Station Rehabilitation/Replacement Program:** Continue with existing rehabilitation/replacement program until all existing older lift stations are completed. This will include connection to SCADA and/or auto-dialer systems along with emergency power capabilities for connection to portable generators should power to any station be lost. A contract for Phase 3 of the Rehabilitation Program was awarded on September 10, 2015 and has been completed. The design for the last four lift stations in this program has been completed. The last phase of this program was awarded in February 2017. To date 16 of the 20 lift stations identified for this program have been completed. We expect this project to be completed at least 10-months ahead of the December 2018 deadline. The final lift station rehabilitation is in process and is expected to be completed in mid-summer.

The final lift station rehabilitation was completed in May of 2018. A fully deployed SCADA system was approved by City Council in the FY 2019 budget and will be implemented in the fall of 2018.

Additional Work: A Supervisory Control and Data Acquisition (SCADA) contract has been issued to EMC (Electric Machine and Control) for all City Lift Stations and Treatment Facilities. The contractor has committed to completing the project in the spring of 2019. This system will allow facilities to communicate and increase near immediate response to abnormal system conditions.

- **Action Item 4b. – Purchase Portable Generators for lift stations:** The purchase of three portable generators will be completed (one per year, with the first generator purchased by December 2014) so that any existing lift station, not wired with two independent electric feeds, can be quickly connected to a portable generator for emergency power needs. In addition to the generators, the city will work with Godwin Pumps to meet emergency bypass pumping needs at each of our lift stations whenever needed.

A three year acquisition plan for portable emergency generators was awarded on June 5, 2014. The first generator has been purchased and the installation of necessary electrical

systems and components at each lift station to allow their individual utilization of an emergency generator whenever necessary is underway. The second and third Generators have been ordered and delivered completing this project 1-month ahead of the December 2016 deadline. Additional generators are being acquired to further harden Utility systems.

Within the FY 2019 budget approved by City Council on June 7, 2018 were 6 additional lift station generators as well as an additional lift station emergency diesel bypass pump.

Additional Work: During this reporting period the City has installed a Diesel Powered Emergency backup Pump at the Lakeland lift station as well as an Emergency backup generator at the Mack Drive lift station. In addition, the City has procured a portable six inch lift station pump to be deployed as required and 10 Emergency Diesel Generators for critical Lift Stations. Delivery and installation of the generators will be accomplished over the next 120 days.

- **Action Item 5. – Ongoing Repairs to the Existing Withlacoochee WPCP:** Funding has been and will be allocated for ongoing repairs to the existing Withlacoochee WPCP to maintain permit compliance until such time as the new treatment plant is brought online. Present repairs include new bar screens and temporary blower system. The repair work at the Withlacoochee WPCP was completed in May 2014, with the replacement of Primary Clarifier gates. The primary clarifiers are be utilized to offset very high influent flows into the facility during extreme rain events and then gradually reintroduce this stored influent into the treatment process once the peak flows subside. Construction of a covered building over the portable belt press system was completed in July 2014 and was the last of the projects associated with the emergency repairs for this plant. Since completion of these repairs, new protocols implemented and employees trained, this facility has consistently met all major permit requirements with the exception of a pH violation reported at the Withlacoochee Plant following a series of major rain events culminating with a minor flood in April 2014. This project was effectively completed in July 2014, 38-months ahead of the August 2017 deadline. **This task is complete.**

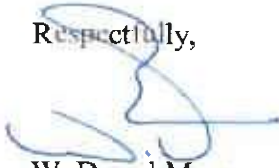
As projects continue and new areas are targeted, the City is requesting the current Consent Order remain in effect through December of 2019. At this time, the City will provide the result of the extension and deliver the impact of completed and ongoing projects to the Department for review. During this extension, all other provisions of the original consent order will remain. While SSO's within the Lift Station and Collection system related to inflow and infiltrations have been significantly reduced the City continues to deploy additional resources and advanced technology toward the elimination of overflows. We acknowledge that much

work remains and are committed to making all necessary improvements to ensure that all SSO's are eliminated.

Since the consent order was issued, the city of Valdosta has invested approximately \$80 million in its utility system. We believe this extraordinary commitment merits consideration to extend the current consent order in recognition of the documented results.

In closing we thank you for working with us and stand ready to meet at any time to discuss the consent order and the progress we have made. If additional information is required please let us know as soon as possible. We look forward to the opportunity to meet and appreciate the professional working relationship we enjoy.

Respectfully,

A handwritten signature in blue ink, appearing to read 'W. Darryl Muse', with a stylized flourish extending to the right.

W. Darryl Muse
Utilities Director
City of Valdosta

CC: Marzieh Shahbazaz, EPD Compliance Monitoring Unit
L. Mark Barber, Valdosta City Manager

GEORGIA ENVIRONMENTAL PROTECTION DIVISION
WATERSHED COMPLIANCE PROGRAM
2 MLK, JR. DR. S.E., SUITE 1152
ATLANTA, GEORGIA 30334

City of Valdosta

ATTACHMENT F

City of Valdosta
Response to Notice of Violation
March 19, 2019



CITY OF VALDOSTA, GEORGIA
Utilities Department

W. Darryl Muse
DIRECTOR OF UTILITIES

March 19, 2019

Mr. Lewis Hays
Watershed Compliance Program, Municipal Compliance Unit
GA Environmental Protection Division, Watershed Protection Branch
Suite 1152, 2 MLK, Jr. Drive S.E.
Atlanta, Georgia 30334

RE: Notice of Violation: Permits No. GA0033235 & GA0020222

Mr. Hays:

The City of Valdosta Utilities Department is providing the following information per the Notice of Violation letter dated February 19, 2019.

1. Explanation of the causes of the spills and violations:

From December 2nd to December 15th 2018, the City of Valdosta and surrounding areas received a combined total of 15 inches of rain during several storm events. Included in that total is 3 to 4 inches of rain that Valdosta received over a two-day period. While the WWTP has a normal average daily flow of 3.5 million gallons (MG), the influent flow peaked at more than 22 MG—nearly seven times the normal rate.

As a result of those rainfall totals into the city, the collection system and treatment plants were overwhelmed. The Withlacoochee Plant has four processing units, although during normal operations the system only requires one. During this storm event, the plant was running all four units plus the excess flow equalization basin.

Given that most spills identified in Attachments A and B were caused by wet weather inflow and infiltration (I&I), it is the City's top priority to address those I&I issues through multiple ongoing sewer system rehabilitation and upgrade programs.

2. Unfinished rehabilitation projects that will impact the causes of the spills and violations:

In addition to a comprehensive Fats, Oils, and Grease (FOG) Program, the city currently has three major recurring programs underway to address overflows and spills; the Manhole Rehabilitation Program, Cured-In-Place Pipe (CIPP) Lining Program, and the Sewer Main Upgrade Program.

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These are annual programs approved by City Council and scheduled in the Department's continuous 5-year capital improvement plan.

Manhole Rehabilitation (Phase 6), which accounts for the rehabilitation of thirty manholes has been underway since early March and is nearing completion. Thirty additional manholes have been identified through the manhole inspection program for Phase 7. These thirty will be completed in early FY2020.

Phase 8 of the CIPP program was completed in February 2019. This project accounted for the rehabilitation of nearly 1,500 linear feet of sewer main. Phase 9 locations have been identified through the smoke testing program and will rehabilitate another 2,000 linear feet. CIPP #9 is scheduled for FY2020.

Eleven project areas within the collection system have been identified for upgrading and upsizing. Six of those areas are classified high priority with the other five being secondary projects. Project #4 of the six high priority projects was just completed the first week of March 2019. Projects #5 is scheduled for FY 2020.

3. Additional projects to correct the causes of the spills and violations:

In addition to the next phases of the three rehabilitation programs, the City of Valdosta has the following projects in progress and/or planned:

Construct a storage basin at the Withlacoochee WPCP: The need for additional storage was discovered after receiving an estimated 6 billion gallons of rainfall within a 24-hour period within the incorporated limits of the City. As a result of this rain event, the treatment plant received in excess of 30 million gallons of additional flow. The intent of the additional storage is to allow these excess storm water flows to be retained on site until they can be appropriately processed through the treatment facility. Lovell Engineering was awarded and recently completed the design of the proposed storage basin. The Utilities Department is currently reviewing those plans.

Collection System Evaluation Program: Continue implementation of and complete a 5-year system wide plan to further evaluate the entire sanitary sewer collection system and develop a schedule for repairs. The evaluation includes the inspection of all manholes and collection system lines using smoke testing followed by Closed Circuit Television (CCTV) inspections of high priority areas. The evaluation will be utilized to prioritize and perform critical repairs and to plan and prioritize major rehabilitation projects for the future.

Establish Manhole Rehab Team: In addition to the existing programs, the City is embarking upon specialized in-house Manhole rehabilitation and Infiltration teams to accelerate needed repairs. Current contract costs allow for thirty manholes per year to be rehabilitated. An in-house team will be capable of completing more than double the number of manholes at less cost. Significant investment in equipment, training and personnel have been identified for the program. Proposal is currently under review for FY2020 budget.

Supervisory Control and Data Acquisition (SCADA): A contract has been issued to EMC (Electric Machine and Control) for all City Lift Stations and Treatment Facilities. The project is underway and currently in the engineering phase. The contractor has committed to completing the project by June 2019. This system will allow facilities to communicate and increase near immediate response to abnormal system conditions.

Purchase Portable Generators for lift stations:

Over the past four years, the City has purchased and installed seven emergency backup generators and one diesel-powered emergency backup pump at high-priority lift stations throughout the collection system. Seven more generators have been purchased and will be dispersed to predetermined lift stations upon their delivery. Additional generators will be acquired in the future to further harden our Utility systems.

While SSO's within the collection system related to I&I have been significantly reduced, the City continues to deploy additional resources and advanced technology toward the elimination of overflows. We acknowledge that much work remains and are committed to making all necessary improvements to ensure that all SSO's are eliminated.

In closing we thank you for working with us. Please let us know if you require further information. We look forward to our meeting in April and appreciate the professional working relationship we enjoy.

Respectfully,



David Frost
Assistant Utilities Director
City of Valdosta

CC: Alys Hannum, Environmental Compliance Specialist 1
W. Darryl Muse, Director of Utilities
L. Mark Barber, City Manager, City of Valdosta

GEORGIA ENVIRONMENTAL PROTECTION DIVISION
WATERSHED COMPLIANCE PROGRAM
2 MLK, JR. DR. S.E., SUITE 1152
ATLANTA, GEORGIA 30334

City of Valdosta

ATTACHMENT G

City of Valdosta

Capital Improvement Plan

Table D-9

High Priority and Follow-On Project Detailed Cost by Basin

Table D-9 High Priority and Follow-on Project Detailed Cost by Basin

| Basin | Project | Priority | Project Costs by | | High Priority | | Follow-on Project by % I&I Reduction | | | | | | |
|--|---------------------------|---------------------------|--------------------|------------|---------------|---------------|--------------------------------------|---------------|--------------|---------------|------------|--------------|------------|
| | | | Diameter | Unit Cost | Feet | \$ | 25% | | 10% | | None | | |
| | | | | (\$ / ft) | | | Feet | \$ | Feet | \$ | | Feet | \$ |
| 2 Mile Branch | 2M-1 | 2nd Phase | 30" | \$ 550.00 | | | 350 | \$192,698 | 1,103 | \$606,890 | 1,103 | \$606,890 | |
| | | | Total Capital Cost | | | | | 350 | \$192,698 | 1,103 | \$606,890 | 1,103 | \$606,890 |
| | | | Fees | 15.50% | | | | | \$29,868 | | \$94,068 | | \$94,068 |
| | | | Contingency | 20.00% | | | | | \$44,513 | | \$140,191 | | \$140,191 |
| | Project Cost | | | | | | \$ 267,090 | | \$ 841,149 | | \$ 841,149 | | |
| | 2M-2 | High Priority / 1st Phase | 18" | \$ 292.60 | | | | | | | 271 | \$79,247 | |
| | | | 21" | \$ 341.37 | | | 865 | \$295,133 | 2,437 | \$831,975 | 2,547 | \$869,446 | |
| | | | 24" | \$ 367.40 | 249 | \$91,642 | 225 | \$82,665 | 225 | \$82,665 | 225 | \$82,665 | |
| | | | Total Capital Cost | | 249 | \$91,642 | 1,090 | \$377,798 | 2,662 | \$914,640 | 3,043 | \$1,031,358 | |
| | | | Fees | 15.50% | | \$14,205 | | \$58,559 | | \$141,769 | | \$159,861 | |
| | | | Contingency | 20.00% | | \$21,169 | | \$87,271 | | \$211,282 | | \$238,244 | |
| | Project Cost | | | \$ 127,816 | | \$ 523,628 | | \$ 1,267,691 | | \$ 1,439,463 | | | |
| | 2M-3 | 2nd Phase | 18" | \$ 292.60 | | | | | 353 | \$103,416 | 353 | \$103,416 | |
| | | | 21" | \$ 341.37 | | | | | 1,137 | \$388,266 | 1,989 | \$679,137 | |
| | | | Total Capital Cost | | | | | | 1,491 | \$491,682 | 2,343 | \$782,553 | |
| | | | Fees | 15.50% | | \$ - | | \$ - | | \$ 76,211 | | \$ 121,296 | |
| Contingency | 20.00% | | \$ - | | \$ - | | \$ 113,578 | | \$ 180,770 | | | | |
| Project Cost | | | \$ - | | \$ - | | \$ 681,471 | | \$ 1,066,619 | | | | |
| 2M-4 | High Priority / 1st Phase | 15" | \$ 268.13 | 200 | \$ 53,622 | 1,303 | \$ 349,305 | 1,690 | \$ 453,209 | 1,690 | \$ 453,209 | | |
| | | 18" | \$ 292.60 | 261 | \$ 76,488 | | \$ - | 892 | \$ 260,986 | 892 | \$ 260,986 | | |
| | | 21" | \$ 341.37 | | \$ - | | \$ - | 351 | \$ 119,949 | 351 | \$ 119,949 | | |
| | | Total Capital Cost | | 461 | \$ 130,109 | 1,303 | \$ 349,305 | 2,934 | \$ 834,143 | 2,934 | \$ 834,143 | | |
| | | Fees | 15.50% | | \$ 20,167 | | \$ 54,142 | | \$ 129,292 | | \$ 129,292 | | |
| | | Contingency | 20.00% | | \$ 30,055 | | \$ 80,689 | | \$ 192,687 | | \$ 192,687 | | |
| Project Cost | | | \$ 180,332 | | \$ 484,137 | | \$ 1,156,123 | | \$ 1,156,123 | | | | |
| Total Basin Project Cost | | | \$ 307,348 | | \$ 1,274,844 | | \$ 3,946,433 | | \$ 4,511,364 | | | | |
| 1 Mile Branch | 1B-1 | 2nd Phase | 30" | \$ 550.00 | | | | | 549 | \$ 302,207 | 953 | \$ 524,229 | |
| | | | Total Capital Cost | | | | | | 549 | \$ 302,207 | 953 | \$ 524,229 | |
| | | | Fees | 15.50% | | \$ - | | \$ - | | \$ 46,842 | | \$ 81,256 | |
| | | | Contingency | 20.00% | | \$ - | | \$ - | | \$ 69,810 | | \$ 121,097 | |
| | Project Cost | | | \$ - | | \$ - | | \$ 418,860 | | \$ 726,582 | | | |
| | 1B-2 | High Priority / 1st Phase | 24" | \$ 367.40 | 380 | \$139,596 | 687 | \$252,259 | 687 | \$252,259 | 687 | \$252,259 | |
| | | | 30" | \$ 550.00 | | | | | 160 | \$88,168 | 869 | \$477,960 | |
| | | | Total Capital Cost | | 380 | \$139,596 | 687 | \$252,259 | 847 | \$340,428 | 1,556 | \$730,220 | |
| | | | Fees | 15.50% | | \$21,637 | | \$39,100 | | \$52,766 | | \$113,184 | |
| | | | Contingency | 20.00% | | \$32,247 | | \$58,272 | | \$78,639 | | \$168,681 | |
| Project Cost | | | \$ 193,480 | | \$ 349,632 | | \$ 471,633 | | \$ 1,012,065 | | | | |
| Total Basin Project Cost | | | \$ 193,480 | | \$ 349,632 | | \$ 890,692 | | \$ 1,738,666 | | | | |
| Browns Canal | RC-1 | 2nd Phase | 18" | \$ 292.60 | | | 1,295 | \$ 378,934 | 2,434 | \$ 712,312 | 2,434 | \$ 712,312 | |
| | | | Total Capital Cost | | | | | 1,295 | \$ 378,934 | 2,434 | \$ 712,312 | 2,434 | \$ 712,312 |
| | | | Fees | 15.50% | | \$ 58,735 | | \$ 110,408 | | \$ 110,408 | | \$ 110,408 | |
| | | | Contingency | 20.00% | | \$ 87,534 | | \$ 164,544 | | \$ 164,544 | | \$ 164,544 | |
| | Project Cost | | | \$ - | | \$ 525,803 | | \$ 987,265 | | \$ 987,265 | | | |
| | RC-2 | High Priority / 1st Phase | 15" | \$ 268.13 | | \$ - | 2,058 | \$ 551,721 | 3,322 | \$ 890,746 | 3,757 | \$ 1,007,328 | |
| | | | 18" | \$ 292.60 | 584 | \$ 170,858 | | \$ - | | \$ - | | \$ - | |
| | | | Total Capital Cost | | 584 | \$ 170,858 | 2,058 | \$ 551,721 | 3,322 | \$ 890,746 | 3,757 | \$ 1,007,328 | |
| | | | Fees | 15.50% | | \$ 26,483 | | \$ 85,517 | | \$ 138,066 | | \$ 156,136 | |
| | | | Contingency | 20.00% | | \$ 39,468 | | \$ 127,447 | | \$ 205,762 | | \$ 232,693 | |
| Project Cost | | | \$ 136,809 | | \$ 764,685 | | \$ 1,234,574 | | \$ 1,396,156 | | | | |
| Total Basin Project Cost | | | \$ 236,809 | | \$ 1,285,888 | | \$ 2,221,639 | | \$ 2,983,421 | | | | |
| West Duques Bay | WD-1 | High Priority | 12" | \$ 214.50 | 325 | \$ 69,713 | | | | | | | |
| | | | 15" | \$ 268.13 | 277 | \$ 74,271 | | | | | | | |
| | | | 24" | \$ 367.40 | 466 | \$ 171,208 | | | | | | | |
| | | | 30" | \$ 550.00 | 713 | \$ 392,150 | | | | | | | |
| | | | Total Capital Cost | | 1,781 | \$ 707,342 | | | | | | | |
| | | | Fees | 15.50% | | \$ 109,638 | | | | | | | |
| | Contingency | 20.00% | | \$ 163,396 | | | | | | | | | |
| | Project Cost | | | \$ 940,375 | | | | | | | | | |
| | WD-2 | High Priority | 24" | \$ 367.40 | 1,903 | \$ 699,017 | | | | | | | |
| | | | Total Capital Cost | | 1,903 | \$ 699,017 | | | | | | | |
| | | | Fees | 15.50% | | \$ 108,348 | | | | | | | |
| | | | Contingency | 20.00% | | \$ 161,473 | | | | | | | |
| | Project Cost | | | \$ 963,837 | | | | | | | | | |
| WD-3 | 2nd Phase | 21" | \$ 341.37 | | | | | | | 1,324 | \$ 451,837 | | |
| | | Total Capital Cost | | | | | | | | 1,324 | \$ 451,837 | | |
| | | Fees | 15.50% | | \$ 70,035 | | | | | | \$ 70,035 | | |
| Contingency | 20.00% | | \$ 104,374 | | | | | | | \$ 104,374 | | | |
| Project Cost | | | \$ 174,409 | | | | | | | \$ 626,246 | | | |
| Total Basin Project Cost | | | \$ 1,949,213 | | | | | | | \$ 626,246 | | | |
| Pipeline Cost | | | \$ 2,686,849 | | | \$ 2,914,364 | | \$ 7,058,964 | | \$ 9,259,686 | | | |
| I&I Reduction Cost (from Table TD-6) | | | | | | \$ 19,674,514 | | \$ 7,869,846 | | | | | |
| Total Withlacoochee Project Cost w/ high priority projects | | | | | | \$ 25,275,827 | | \$ 17,615,659 | | \$ 11,946,535 | | | |

GEORGIA ENVIRONMENTAL PROTECTION DIVISION
WATERSHED COMPLIANCE PROGRAM
2 MLK, JR. DR. S.E., SUITE 1152
ATLANTA, GEORGIA 30334

City of Valdosta

ATTACHMENT H

City of Valdosta
Sewage Spill Notification List

H-1: FLORIDA SEWAGE SPILL NOTIFICATION EMAIL LIST

| First Name | Last Name | Organization | Email Address |
|------------|--------------|---|--|
| Anthony | Adams | Lafayette County Commissioner | a.adamsdistrict4@windstream.net |
| Beth | Burnam | Hamilton County Commissioner | district1@hamiltonboce.org |
| Ken | Cornell | Alachua County Commissioner | kcornell@alachuacounty.us |
| Rick | Davis | Madison County Commissioner | district5@madisoncountyfl.com |
| Thomas | Demps | Taylor County Commissioner | tdemps@taylorcountygov.com |
| Don | Hale | Suwannee County Commissioner | commissioner1@suwgov.org |
| Gene | Higginbotham | Dixie County Commissioner | higginbotham.wade@mail.dc.state.fl.us |
| John | Meeks | Levy County Commissioner | district1@levycounty.org |
| Daniel | Riddick | Bradford County Commissioner | beeriddick@yahoo.com |
| James | Tallman | Union County Commissioner | district3@unioncounty-fl.gov |
| Kenrick | Thomas | Gilchrist County Commissioner | kenrickthomas@gilchrist.fl.us |
| Ronald | Williams | Columbia County Commissioner | rwilliams@columbiacountyfla.com |
| Tim | Alexander | Dixie County Manager | tim.alexander@dixie.fl.gov |
| Bradley | Carter | Bradford County Manager | brad_carter@bradfordcountyfl.gov |
| Bobby | Crosby | Gilchrist County Administrator | berosby@gilchrist.fl.us |
| Wilbur | Dean | Levy County Coordinator | dean-wilbur@levycounty.org |
| Louie | Goodin | Hamilton County Coordinator | hamiltoncounty@windstream.net |
| Randy | Harris | Suwannee County Administrator | randyh@suwgov.org |
| Brian | Kauffman | Madison County Coordinator | mccoord@madisoncountyfl.com |
| Steve | Land | Lafayette County Clerk | sland@lafayetteclerk.com |
| Michele | Lieberman | Alachua County Manager | mlieberman@alachuacounty.us |
| LaWanda | Pemberton | Taylor County Administrator | lpemberton@taylorcountygov.com |
| Ben | Scott | Columbia County Manager | ben_scott@columbiacountyfla.com |
| James | Williams | Union County Coordinator | countycoord@unioncounty-fl.gov |
| Kimberly | Allbritton | Jefferson/Madison County Health Administrator | Kimberly.Allbritton@flhealth.gov |
| Amie | Johns | Bradford County Health Administrator | amie.johns@flhealth.gov |
| Padraic | Juarez | Taylor County Health Administrator | padraic.juarez@flhealth.gov |
| Barbara | Locke | Dixie/Gilchrist/Levy County Health Administrator | barbara.locke@flhealth.gov |
| Thomas | Moffses Jr. | Columbia/Hamilton County Health Administrator | thomas.moffses@flhealth.gov |
| Paul | Myers | Alachua County Health Administrator | paul.myers@flhealth.gov |
| Bob | Vincent | Florida Dept of Health Program Administrator Water Well Surveillance | bob.vincent@flhealth.gov |
| Kerry | Waldron | Lafayette/Suwannee/Union County Health Administrator | kerry.waldron@flhealth.gov |
| Scott | Rivkees | Florida Dept of Health Surgeon General | srivkees@peds.ufl.edu |
| Timothy | Alien | Union County Emergency Management Director | allente@unionsheriff.us |
| Scott | Garner | Dixie County Emergency Management Director | scott.garner@dixieemergency.com |
| Sharon | Hingson | Suwannee County Emergency Management Director | sharon.hingson@suwanneesherrif.com |
| Henry | Land | Hamilton County Emergency Mmanagement Director | hamcoem@windstream.net |
| Marc | Land | Lafayette County Emergency Management Director | lafayem@windstream.net |
| John | MacDonald | Levy County Emergency Management Director | johnmacdonald@levydisaster.com |
| Chuck | Mincy | Taylor County Emergency Management Director | chuck.mincy@taylorsheriff.org |
| Shayne | Morgan | Columbia County Emergency Management Director | shayne_morgan@columbiacoutyfla.com |
| Raymond | Shuford | Bradford County Emergency Mmanagement Director | raymond_shuford@bradfordsheriff.org |
| Ralph | Smith | Gilchrist County Emergency Management Director | rsmith@gilchrist.fl.us |
| David | Torsell | Alachua County Emergency Management Interim Director | dtorsell@alachuacounty.us |
| Alan | Whigham | Madison County Emergency Management Director | madisoncoem@embarqmail.com |
| Scott | Koons | North Central Florida RPC Executive Director | koons@ncfrpc.org |
| Lauren | Yeatter | North Central Florida RPC Senior Planner | yeatter@ncfrpc.org |
| Ben | Glass | Suwannee River WMD Community Affairs Manager | bhg@srwmd.org |
| Tom | Mirti | Suwannee River WMD Deputy Executive Director | thm@srwmd.org |
| Hugh | Thomas | Suwannee River WMD Executive Director | hlt@srwmd.org |
| Darlene | Velez | Suwannee River WMD Environmental Scientist III | dsv@srwmd.org |
| Julie | Espy | Fl Dept of Environmental Protection Program Administrator | julie.espy@floridadep.gov |
| Thomas | Kallemeyn | Fl Dept of Environmental Protection Program Administrator NE Distreit | thomas.kallemeyn@floridadep.gov |

| | | | |
|---------|------------|---|--|
| Jim | Maier | Fl Dept of Environmental Protection Assistant Director NE District | jim.maier@floridadep.gov |
| Russell | Simpson | Fl Dept of Environmental Protection Ombudsman NE District | russell.simpson@floridadep.gov |
| Herndon | Sims | Fl Dept of Environmental Protection Wasterwater Compliance NE District | herndon.sims@floridadep.gov |
| Noah | Valenstein | Fl Dept of Environmental Protection Secretary | noah.velenstein@dep.state.fl.us |
| Heather | Webber | Fl Dept of Environmental Protection Environmental Administrator NE District | heather.webber@floridadep.gov |
| Mark | Barber | City of Valdosta | mbarber@valdostacity.com |
| Darryl | Muse | City Of Valdosta Utilities | dmuse@valdostacity.com |
| Teresa | Bolden | City Of Valdosta | tbolden@valdostacity.com |

H-2: ADDITIONAL CONTACTS

| First Name | Last Name | Organization | Email Address |
|------------|-----------|---|--|
| Katrina | Yancey | Fl Dept of Environmental Protection Environmental Consultant | Katrina.Yancey@floridadep.gov |
| Kevin | O'Donnel | Fl Dept of Environmental Protection Environmental Administrator | Kevin.ODonnell@floridadep.gov |
| Ryan | Murphy | Florida Senate | Murphy.Ryan@flsenate.gov |
| Bill | Monford | Florida Senate | Montford.Bill@flsenate.gov |
| Rob | Bradley | Florida Senate | bradley.rob@flsenate.gov |
| Tonya | Shays | Florida Senate | shays.tonya@flsenate.gov |
| Mary | Lee-White | Florida Senate | lee.mary@flsenate.gov |
| Chuck | Brannan | Florida House of Representatives | chuck.brannan@myfloridahouse.gov |
| Wilson | Preston | Florida House of Representatives | preston.wilson@myfloridahouse.gov |
| Tonya | Miller | Florida House of Representatives | Tonya.miller@myfloridahouse.gov |
| Kyle | Coopage | Lowndes County Board of Health | Kyle.Coppage@dph.ga.gov |
| Mike | Smith | Brooks County Emergency Management Agency | Brks911@windstream.net |

GEORGIA ENVIRONMENTAL PROTECTION DIVISION
WATERSHED COMPLIANCE PROGRAM
2 MLK, JR. DR. S.E., SUITE 1152
ATLANTA, GEORGIA 30334

City of Valdosta

ATTACHMENT I

Environmental Protection Agency
Region 4 Guide to Collection and Transmission
System Management, Operation, and Maintenance Programs
2011

**EPA Region 4
Guide to
Collection and Transmission System
Management, Operation, and Maintenance Programs**

Version 1.1



PURPOSE & DISCLAIMER

This document is the work product of the EPA Region 4, Water Protection Division, Clean Water Enforcement Branch (CWEB) and supersedes a previous draft dated September 2003 (Version 1.0). This document serves as an introduction for new Region 4 inspectors in the CWEB Municipal Infrastructure Enforcement Program and contains descriptive information for utilities conducting self-assessments in the Region 4 Management, Operation, and Maintenance (MOM) Programs Project.

The MOM Programs Project is conducted in compliance with EPA Policy, EPA Guidance, and Rules and Regulations promulgated under the Clean Water Act. If some statement or part of the document is not in compliance with the Act, EPA Policy, EPA Guidance or the Rules and Regulations, then it should not be construed as conveying rights not conveyed by the Clean Water Act, EPA Policy, or the Rules and Regulations.

October 2011

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INTRODUCTION

A utility should develop an appropriate, comprehensive Management, Operation and Maintenance (MOM) Program for the sewerage infrastructure (sewer system and wastewater treatment plant) which it owns and operates. A comprehensive MOM Program is comprised of individual management, operation, and maintenance programs, each of which:

- is specific to, and tailored for, the utility's infrastructure;
- has a written purpose explaining why the program is needed; has specific written goal(s) establishing the accomplishment(s) desired for the current fiscal year;
- has the details of the activities and procedures that are followed to implement the program written down in the form of Standard Management Procedures (SP), Standard Operating Procedures (SOP), and/or Standard Maintenance Procedures (SMP) that are used by the utility's personnel;
- is implemented by well-trained personnel; has established appropriate performance measures which are tracked by management; and,
- has a written procedure requiring periodic review, evaluation, and any necessary revision.

An important concept is that MOM programs are utility-specific. Most, if not all, of the programs described in this guide are based on actual programs observed at proactive utilities. However, utilities may have different titles for the various MOM programs described in this guide and may have them organized very differently. Some utilities may be organized in a way that they consolidate some of the MOM programs described in this guide, or they may exclude part of a program described in this guide because of justifiable circumstances. Utilities may also have additional MOM programs that are not contained in this guide.

Tailored to the Utility

The utility should have programs tailored to match its geographic, physical, and climatic conditions; level of complexity; infrastructure configuration; and level of sophistication. Utilities may also have a number of their MOM programs implemented through a managed contract rather than by their own trained personnel.

Program Purpose

The purpose of a given MOM program is the reason why the program is needed and why it exists.

Example: The purpose our utility's smoke testing program is to identify sources of inflow our sewer system that need to be eliminated so that we can regain some of our peak flow capacity.

Program Goal

The individual program goal(s) establishes the accomplishments desired for the given MOM program during the upcoming fiscal year.

Example: The goal our smoke testing program for this fiscal year is to reclaim system peak

capacity, and to reduce treatment plant hydraulic loading by identifying sources of inflow to the system by conducting investigations in the ABC and DEF sewersheds. This goal will be accomplished in a cost-effective manner using our personnel and by using a contractor.

Program Documentation

The program documentation specifies, in writing, the specific details of the activities and procedures that personnel follow to implement the program. Program documentation should be maintained in a central location and made available to all personnel.

Example: Our utility has a long-term, ongoing, smoke testing program. The program priorities and standard operating procedures are contained in a manual entitled “Smoke Testing Program for Utility X.”

Implemented by Trained Personnel

Training programs are established and followed to ensure that utility personnel are well-trained to implement each program and successfully achieve each program’s goals.

Example: All personnel assigned to our smoke testing activity receive three hours of basic training followed by eighty (80) hours of on-the-job training to assure competency. Our contract with outside sources to conduct smoke testing requires the contractor to follow our standard operating procedures.

Performance Measures

Appropriate performance measures should be established for each program and reviewed at minimum on an annual basis.

Example: During this fiscal year, the performance goal is to smoke test 200,000 lineal feet of gravity sewer in two sewersheds selected according to our priority procedures. Last year, we exceeded our performance goal of 178,000 lineal feet of gravity sewer by smoke testing 193,000 lineal feet. As a result, 623 defects were identified and passed on to our rehabilitation and private service lateral programs for correction.

Periodic Evaluation

An evaluation by utility management should occur for each program, annually at minimum, to evaluate how well a program accomplished the program goals established at the beginning of the period and to determine whether the program, as presently implemented, is using the most efficient approach. Remedies should be identified and scheduled to correct any deficiencies. Questions the evaluation should answer are:

- Are there program design, resource or implementation deficiencies that keep the program from achieving its performance measures?
- Are these program deficiencies leading to sanitary sewer overflows, permit violations or other

Clean Water Act violations?

- Are there program deficiencies leading to decreased customer service and/or unwarranted deterioration of utility assets?
- Are there changes that should be made to the program that will make its implementation more efficient, thereby conserving resources for better implementation of other programs?

Example: The smoke testing program has yielded good results during the past four years. Following our priority criteria, most of the significant inflow problems have been eliminated. Next year the program will be reduced by 25% and the resources applied to our maintenance of way program. Peak flows will be monitored at key locations to determine if this reduction in the smoke testing program will need to be reversed in the future. Additionally, we are conducting a cost analysis to determine whether we should contract out for all smoke testing work in the future.

SYSTEM PROFILE AND PERFORMANCE SUMMARY

A proactive utility will maintain a profile of its system as a basis for explaining its situation to regulatory agencies, the public, and when networking with other utilities. A profile typically contains basic population and inventory information as well as a recent system performance summary. An example of a system performance summary is provided on the following page.

Population Served:

Number of Customers:

Number of Treatment Plants:

Total Wastewater Design Treatment Capacity:

Total Volume of Wastewater Treated:

Miles of Gravity Sewers:

Number of Manholes:

Number of Inverted Siphons:

Number of Pump Stations:

Miles of Force Main:

Number of Employees:

Annual Capital Improvement Budget:

Annual Operation and Maintenance Budget: ...

Total Annual Operating Budget:

| System-Wide MOM Programs Recent Performance Summary | | | | | | | | | | | | |
|---|--|--|--|--|--|--|--|--|--|--|------|-------|
| Performance Measures for Previous 12 Months | | | | | | | | | | | Year | Month |
| A. Number of Customer Complaints | | | | | | | | | | | | |
| B. Number of NPDES Permit Violations | | | | | | | | | | | | |
| C. Number of Capacity-Related Overflows | | | | | | | | | | | | |
| D. Number of Maintenance-Related Overflows | | | | | | | | | | | | |
| E. Number of Operations-Related Overflows | | | | | | | | | | | | |
| F. Number of Blockages | | | | | | | | | | | | |
| G. Number of Cave-Ins | | | | | | | | | | | | |
| H. Number of Pump Station Failures | | | | | | | | | | | | |
| I. Peak Flow Factor at Treatment Plant (1 hour high/dry month avg.) | | | | | | | | | | | | |
| J. Monthly Average Treatment Plant Flow Rate (gal/capita/day) | | | | | | | | | | | | |
| K. Monthly High One Day Treatment Flow Rate (gal/capita/day) | | | | | | | | | | | | |
| L. Number of By-Passes at Treatment Plant | | | | | | | | | | | | |
| M. Volume of Treatment Plant By-Passes (gal) | | | | | | | | | | | | |
| N. WWTP Weekly Average Influent BOD (mg/L) | | | | | | | | | | | | |

MANAGEMENT PROGRAMS

1. Organization

a. Organizational Chart

An organizational chart clearly depicts all units in the organization, the lines of authority between the various organization units, a description of the functions of each of the organization units, the title and duties of each position in the organization units and an indication of whether or not each position is currently budgeted and filled.

b. Relation to Other Municipal Functions

An organizational chart clearly depicts the relationship of the sewerage utility to other municipal functions such as public works, streets and drainage, building inspection, building permits, and public health. There is a mechanism for updating the chart in manner timely to changes which may occur in the organization.

2. Training

a. Technical Training Program

This program specifies requirements (curriculum) for initial and refresher training to ensure each employee has a level of knowledge, commensurate with duties, of the overall functions of the utility's infrastructure. This program also includes outside technical training and networking opportunities, such as conferences and seminars, that are made available to employees.

The program includes the extent to which employee certification, at either the State or the utility's organization level, is required as a basis for obtaining or maintaining a position. Records of technical training are maintained and the degree to which completed technical training is tied to promotion and pay is specified. Finally, the program specifies the technical training required before an employee is permitted to undertake specific work assignments or tasks.

b. Skills Training Program

This program specifies requirements (curriculum) for initial and refresher training to ensure each employee has a level of knowledge, commensurate with duties, of the specific equipment to be used and the procedures to be followed in carrying out duties. This program should include outside skills training opportunities, such as manufacturers' or vendors' training workshops, that are made available to employees.

The program includes the extent to which employee certification, at either the State or the utility's organization level, is required as a basis for obtaining or maintaining a position. Records of skills training, whether formal or on-the-job apprenticeship, are maintained and the degree to which completed training is tied to promotion and pay is specified. Finally, the program specifies the skills and on-the-job training required before an employee is permitted to undertake specific work assignments or tasks.

c. Safety Training Program

This program specifies requirements (curriculum) for initial and refresher training to ensure each employee has an adequate level of knowledge regarding on-the-job safety. The program includes the extent to which employee safety certification at the State or at the utility's organization level is required as a basis for obtaining or maintaining a position. Records of safety training, including on-the-job safety meetings, are maintained. Finally, the program specifies the safety training required before an employee is permitted to undertake specific work assignments or tasks.

3. Safety

a. Safety Authority

A Safety Authority (whether a safety department, safety committee, safety officer, or similar mechanism) is present to establish utility safety policy, oversee compliance, and maintain the overall Safety Program. Program maintenance includes specifying safety resources needed for utility activities, assuring record of appropriate standard reporting forms, and establishing a Safety Review Board if appropriate.

b. Confined Space Program

This program provides marking for confined spaces, and uses a permitting system and written standard procedures for confined space entry.

c. General Safety Procedures Program

This program provides instruction in defensive driving, first aid, CPR, personal sanitation, personal protection clothing, and similar general work-related safety issues.

d. Traffic Management Procedures Program

This program provides for standard traffic management techniques, off-hour scheduling of line work, and coordination with law enforcement.

e. Lock-Out/Tag-Out Program

This program provides signs on equipment involved in the program, limitation to authorized personnel, required tag information, and permit requirements.

f. Safety Equipment Program

This program assures the availability of appropriate safety equipment such as tripods and hoists, well-calibrated atmospheric testing equipment, self-contained breathing apparatuses, lights and barricades, exhaust fans, and personal protective clothing.

g. Safety Performance Program

This program tracks parameters such as number of injuries, lost days, and workman's compensation claims to be used by management to assess Safety Program effectiveness.

4. Information Management Systems (IMS)

a. Management Programs IMS

This information management system enables utility management to adequately evaluate operation, maintenance, customer service (complaint response), and system rehabilitation activities so that overall system performance can be determined and utility planning can be conducted.

b. Operation Programs IMS

This information management system is used to track scheduled operational activities and to enhance operational performance. The system ensures timely production of operating reports and standardized data collection methods are used by field personnel (e.g., forms or PDA files). The system requires data review by the field supervisor and securely preserves operating records. While the system need not be computer-based, it should be capable of feeding information to the Management Programs IMS.

c. Maintenance Programs IMS

This information management system is used to track scheduled maintenance activities and to enhance maintenance performance. The system ensures timely production of maintenance reports and standardized data collection methods are used by field personnel (e.g., forms or PDA files). The system requires data review by the field supervisor and securely preserves maintenance records. While the system need not be computer-based, it should be capable of feeding information to the Management Programs IMS.

d. Customer Service IMS

This information management system is used to track reactive activities (i.e., emergencies or customer complaints) and to enhance customer service. The system ensures timely production of complaint reports and standardized data collection methods are used by field personnel (e.g., work order forms or PDA files). The system requires data review by the field supervisor and securely preserves service records. While the system need not be computer-based, it should be capable of feeding information into the Management Programs IMS.

5. Engineering

a. Collection and Transmission System Plans Program

This program ensures a full set of as-built plans for the collection and transmission system are available, field crews have ready access to the plans, and a written standard procedure is present to account changes, update the plans, and supply revised versions to field crews in a timely manner.

b. System Inventory Program

This program ensures an inventory of the utility's collection and transmission system is present, updated, and cataloged by service area or sewershed. The inventory lists the system components with their attributes and characteristics (e.g., pipe age, pipe size, pipe material, invert elevation, pump sizes, location of inverted siphons, pump stations, manholes, etc.).

c. Mapping Program

This program ensures adequately detailed maps are available to be used in conjunction with the utility's MOM programs. At minimum, the maps depict the location of gravity sewer lines, force mains, air valves, manholes (by identifying numbers), pump stations, major appurtenances, and the size of pipes.

d. Sewer System Design Program

This program ensures all new sewer system construction will be adequately designed and constructed using specifications that assure the integrity of the infrastructure. The program includes documented design criteria (e.g., slope and bedding materials), use of standardized construction details, use of standardized materials and construction practices, a standard design review process which includes review by utility personnel for possible maintenance concerns, standardized review forms, and record keeping procedures.

e. New Construction and Rehabilitation Inspection Program

This program ensures new construction or rehabilitative work is properly inspected, and built using the utility's standard construction specifications (including use of best management practices to prevent stream pollution). The program includes use of standardized construction procedures, standardized construction testing procedures, standardized inspection and testing forms/reports, and assurance that the inspection is conducted under the authority and supervision of a registered Professional Engineer. The program also provides subsequent closed circuit television (CCTV) inspection of line construction prior to expiration of the warranty, and retention of the tapes for reference.

f. Acquisition Considerations Program

This program ensures prospective infrastructure is inspected and evaluated for compliance with the utility's standard design and construction criteria before it is acquired by the utility from another entity. The program includes written standard procedures to conduct the evaluation and estimate the time/cost requirements to bring the infrastructure into compliance with utility standards.

g. Continuous Sewer System Assessment Program

i.) Prioritization

This program prioritizes sewer service areas (i.e., sewersheds) for sewer system assessment activities. Prioritization is based upon information such as complaints, flow monitoring (including flow isolation studies), historical location of sewer overflows, pump station run times, field crew work orders, and other relevant information available to the utility.

ii.) Dyed Water Flooding

This program conducts dyed water testing, when appropriate, to locate sources of inflow and other illicit connections to the sewer system. The program includes written standard procedures, standard forms, performance measures, and a mechanism for including dyed water testing information in the IMS.

iii.) Corrosion Defect Identification

This program identifies locations within the sewer infrastructure subject to corrosion and provides for inspection of those locations for corrosion on a routine basis. The program includes written procedures for corrosion identification, corrosion identification forms, performance goals, corrosion defect analysis, and a mechanism for including corrosion defect information in the IMS.

iv.) Manhole Inspection

This program ensures routine inspection of manholes within the sewer system. The program includes standard manhole inspection procedures, manhole inspection forms, performance goals, manhole defect analysis, and a mechanism for including manhole inspection information in the IMS.

v.) Flow Monitoring

This program supplies flow monitoring data to support engineering analyses related to sewer system capacity and peak flow evaluations, and to assist scheduling of sewer line maintenance. The program may include installation of an appropriate number of calibrated permanent and/or temporary flow meters, or rudimentary use of visual flow observations taken during base flow periods in wet and dry seasons. The latter option is more cost-effective for some very small utilities. Either program should include a procedure for adequate rainfall measurement, servicing meters, and a mechanism for including flow monitoring information in the IMS.

vi.) Closed Circuit Television (CCTV)

This program provides internal inspection of the integrity of gravity sewer lines. The appropriate number of qualified CCTV personnel and dedicated equipment, or the scope of a CCTV contract, is determined to ensure sewer inspection work is completed properly. The program includes standard operating procedures (including pre-inspection cleaning), performance measures, and mechanisms for including CCTV information in the IMS and retaining CCTV tapes.

vii.) Gravity System Defect Analysis

This program analyzes gravity sewer system defects. The program includes standard defect codes, written defect identification procedures and guidelines, a standardized process for cataloging gravity system defects, a mechanism for including gravity system defect information in the IMS, and training specified for personnel.

viii.) Smoke Testing

This program identifies sources of inflow into the gravity sewer system by use of smoke

testing equipment. The program includes written standard smoke testing procedures, smoke testing forms, performance goals, smoke testing defect analysis, and a mechanism for including smoke testing information in the IMS.

ix.) Service Lateral Investigations

This program investigates infiltration and inflow contributions and other problems originating in service laterals. The program includes written standard investigation techniques, standard investigation forms, performance goals, standard analysis procedures, and a mechanism for including service lateral investigation information in the IMS.

x.) Pump Station Performance and Adequacy

This program permits evaluation of pump station performance and pump station adequacy. The program includes trend analysis of pump run-time meter, pump start-counter, or amperage data; historical review of the fundamental causes of pump failures; use of appropriate remote monitoring and alarm notification equipment; and a mechanism for including pump station performance information in the IMS.

h. Infrastructure Rehabilitation Program

This program rehabilitates gravity sewer lines, force mains, manholes, pump stations, and related appurtenances. The program includes a process for prioritizing rehabilitation, inventory of all completed rehabilitation (including a breakdown of the rehabilitation techniques used), inspection and performance measurement for all completed rehabilitation, written schedules for rehabilitation work, and a mechanism for including rehabilitation information in the IMS.

i. System Capacity Assurance Program

i.) Capacity Assurance for New Connections

This program ensures there is adequate capacity to collect, transmit, and treat additional sewage expected as a result of prospective new sewer connections. The program is integrated into, or thoroughly coordinated with, the building permit process. It is also integrated into the Acquisition Considerations Program described above in 5(f). The program has a mechanism for including capacity assurance information in the IMS.

ii.) Protocols for Capacity Assurance

The program includes, but is not limited to: use of standardized design flow rate rules of thumb (i.e., regarding pipe roughness, manhole head losses, accuracy of distance and slope on as-built drawings, and water use); use of techniques to predict the impacts of additional flow (i.e., use of a hydraulic model of gravity system, pressure system, and other appropriate techniques); and use of flow metering to confirm mathematical estimations of existing peak flow. The program requires certification of adequate capacity by a registered Professional Engineer, and includes an IMS mechanism for integrating analysis from this program with information on infiltration/inflow reduction activities.

6. Overflow Tracking

a. State Agency Reporting Program

This program includes written standard operating procedures which clearly define the minimum State Agency reporting requirements for events where sewage leaves the infrastructure before treatment, and the steps utility personnel must follow to meet or exceed those reporting requirements.

b. Local Agency Reporting Program

This program provides secondary notice to the public and to other appropriate organizations (e.g., downstream utilities with water intakes and local public health authorities) when an overflow presents an imminent and substantial threat to public health or the environment. The program includes written criteria for making this notice, procedures for notifying news media and posting notices at stream locations, and may also prepare an annual summary report available to the public.

c. Records Management Program

This program tracks all events where sewage leaves the utility's collection or transmission system before treatment (i.e., overflows to land, directly to waters, or indirectly to waters by storm drains or other paths). The program uses standardized forms which record, at minimum, the following information for response and inclusion in the IMS:

- ❖ Location of the discharge
- ❖ Name of the receiving water and description of the pathway (e.g., storm drain)
- ❖ Estimation of the discharge volume and the method of estimation
- ❖ Description of the system component that is source of the discharge
- ❖ Date and time the discharge started and stopped
- ❖ Root cause, or suspected root cause, of the discharge
- ❖ Steps taken to eliminate the discharge and steps taken to prevent reoccurrence.

7. Financial Analyses

a. Cost Analysis Program

This program regularly analyzes and projects future utility management, operations, and maintenance costs needed to properly implement these utility programs. The cost analyses include, at a minimum: overhead, labor and equipment, financial impacts of outsourcing certain activities, overtime, and the financial impacts imposed by organizational departments or agencies outside the utility. Cost analyses are performed for all management, operations, and maintenance equipment and the capital infrastructure investment. Cost analyses incorporate life cycle depreciation and establish cost-effective points for replacement. The program has a mechanism for including such replacement points in the IMS.

b. Capital Improvement Financing Program

This program analyzes, projects, plans and finances capital improvement needs established through proper engineering study. Capital improvement financing is planned using a five (5) year planning horizon with annual updates.

c. Budget and Customer Rate Program

This program establishes the annual utility budget and recommends customer rates. The program assures that the budget and funding provided by customer rates will meet the cost and capital financing needs set by programs 7(a) and 7(b) above.

8. Equipment and Supplies

a. Spare Parts Inventory Program

This program ensures proper management of the utility spare parts inventory including spare pipe. The program includes adequate parts storage facilities, identification and retention of an adequate number of critical spare parts (i.e., those which are difficult to obtain quickly but critical to proper operations), control of access to spare parts, an organized system for inventory management (either manual or computerized), arrangement with local vendors for common parts, and specification of spare parts to be carried on vehicles.

b. Equipment and Tools Inventory Program

This program ensures proper management of the utility equipment and tools inventory. The program includes adequate equipment and tools storage facilities, control of access to equipment and tools, an organized system for inventory management (either manual or computerized), and specification of equipment and tools to be carried on vehicles.

c. Vehicle Repair Program

This program ensures proper management of utility vehicles. The program includes provisions for vehicle maintenance and vehicle repair. Performance measures for the program will consider turn-around time, cost factors, contract maintenance, and the life cycle cost analysis performed for vehicles.

9. Customer Service

a. Complaint Management Program

This program ensures proper complaint management. The program includes written standard management procedures for dispatchers (i.e., dispatch priorities, work order generation, and standardized complaint and problem codes). The program uses an organized record keeping procedure (including the use of standardized forms) which facilitates tracking work orders and follow-up with customers, and uses a mechanism to evaluate response performance and supply this information to the IMS.

b. Public Information Program

This program communicates utility activities which may closely impact the public (e.g., smoke testing, major construction or maintenance, or emergency maintenance), and ensures communication of activities which may coincide with those of other departments and agencies (e.g., street paving).

c. Public Education Program

This program educates the public and solicits support regarding issues such as service lateral maintenance, grease management, food disposals, inflow sources,

maintenance/rehabilitation needs requiring increased rates, and problems caused by basement sump pumps.

10. Legal Support

a. Inter-Jurisdictional Agreement Program

This program develops, negotiates, and enforces agreements with neighboring utilities which send the utility flow or with major volume sewer customers. The program ensures that the agreements require the second party to have proper management, operation, and maintenance programs so the utility's infrastructure is not stressed by problems originating across jurisdictional boundaries. The program also ensures the agreements address flow-based capacity issues, specify the life of the agreement, have credible provisions for enforcement, and have provisions for modification.

b. Sewer Ordinance Program

This program develops, revises, and amends sewer ordinances as needed to support the proper management, operation, and maintenance of the utility. The program provides adequate legal authority for the utility regarding sewer use, grease management, pretreatment, private service laterals, sump pumps and roof drains, private haulers, recovering costs of damage to utility infrastructure, and other legal authorities as required. Legal support is provided for case work and guidance for utility staff.

11. Water Quality Monitoring

a. Routine Monitoring Program

This program determines the existence of unpermitted discharges originating at locations where sewers cross waterways or at other isolated or remote sewer locations. The program includes scheduled sampling during dry weather periods from a network of monitoring stations. The program also includes a map of the sampling network, and formally establishes sampling frequency, sampling parameters (i.e., fecal coliform and others), standard sampling procedures, quality assurance/quality control procedures, and a mechanism for including program information in the IMS.

b. Investigative Monitoring Program

This program determines the source of industrial, commercial, or sanitary wastewater resulting from cross connections with the stormwater drainage system, and typically activates through complaints or discovery by operations personnel. The program has formally established sampling parameters (i.e., fecal coliform and others), standard sampling procedures, quality assurance/quality control procedures, and a mechanism for including program information in the IMS.

c. Impact Monitoring Program

This program determines the impact of pollution resulting from discharges occurring within the utility infrastructure before treatment. Combined with the reporting programs described in Overflow Tracking (6) above, this program assists the utility, regulatory authorities, and public health authorities determine the appropriate response to protect health and/or the environment. The program has formally established sampling parameters (i.e., fecal coliform

and others), standard sampling procedures, quality assurance/quality control procedures, and a mechanism for including program information in the IMS.

12. Contingency Plan for Utility Infrastructure

a. Contingency Planning Program

This program develops and modifies contingency plans for the sewer system and the treatment facilities that will be implemented during emergency situations. The planning process includes a preparedness committee of senior and experienced management and field personnel. A system overview is conducted to determine vulnerability to a variety of events which may be due to utility failures, natural causes, or failures caused by another party. Based upon these hypothetical events and past experience taken from root cause failure information in the IMS, prediction system component failure is made. Strategies to timely repair or overcome such component failures are developed, and the six (6) major contingency plan components are available in writing: public notification, agency notification, emergency flow control, emergency operation and maintenance, preparedness training, and water quality monitoring (described in 11(c) above).

i.) Public Notification

The public notification component includes a set of criteria, developed with input from local public health authorities, which are used as a basis for initiating public notification; a step-by-step procedural flow diagram; a list of manager names and phone numbers; a plan for regular business hours, off-hours, weekends, and holidays; a list of *Public Contacts* with phone numbers; identification of managers authorized to give statements; and pre-scripted news releases.

ii.) Agency Notification

The agency notification component includes a set of criteria, developed with input from appropriate local, State, and Federal authorities, which are used as a basis for initiating agency notification; a step-by-step procedural flow diagram; a list of manager names and phone numbers; a plan for regular business hours, off hours, weekends, and holidays; a list of *Agency Contacts* with phone numbers; identification of personnel authorized to contact agencies; and copies of standard reporting forms used by the agencies.

iii.) Emergency Flow Control

The emergency flow control component is used to reduce overflow volumes and pollution where possible. The component includes a set of criteria which are used as a basis for initiating emergency flow control procedures; a step-by-step procedural flow diagram; a list of manager names and phone numbers; a plan for regular business hours, off-hours, weekends, and holidays; a list of *Emergency Flow Control Contacts* with phone numbers; identification of personnel authorized to initiate the emergency flow control program; and standard emergency flow control reporting forms.

Flow control activities may include flow re-routing, flow diversion, household flow reduction and advisories, commercial flow reduction and advisories, water pressure reduction and advisories, or use of pretreatment program protocols set forth in permits for

significant industrial users. The initiating criteria, reporting forms and report formats should be developed in cooperation with significant industrial users and appropriate local, State, and Federal authorities.

iv.) Emergency Operation and Maintenance

The emergency operation and maintenance component includes a set of criteria which are used as a basis for initiating emergency operation and maintenance procedures; a step-by-step procedural flow diagram; a list of manager names and phone numbers; a plan for regular business hours, off-hours, weekends, and holidays; a list of *Emergency Operation and Maintenance Contacts* with phone numbers; identification of personnel authorized to initiate emergency operation and maintenance procedures; and standard reporting forms.

The initiating criteria, reporting forms, and report formats should be developed in cooperation with utility's insurance representatives, State and Federal emergency management agencies, and the State regulatory authority. Further, development of the emergency operations and maintenance component should include analyses of the need and use of stand-by equipment (prearranged rentals), stand-by contractors, and access to critical spare parts.

v.) Preparedness Training

The preparedness training component ensures that all personnel are fully aware of procedures and able to efficiently implement the Contingency Plan. The preparedness training component includes specialized training courses, field trials, and special emergency situation safety training.

b. Response Flow Diagram

This diagram includes the roles of senior management and field personnel and shows the relationship of the six (6) major contingency plan components: public notification, agency notification, emergency flow control, emergency operation and maintenance, preparedness training, and water quality monitoring.

OPERATION PROGRAMS

1. Pump Station Operation

a. Preventive Operation Program

This program ensures reliable operation of the transmission system through use written standard operating procedures available for both manned and unmanned stations. Procedures may include reading and recording information from pump run-time meters, or start counters, or taking amperage readings; recording wet well conditions and grease accumulation; checking and resetting (as necessary) wet-well set points; checking and recording system pressure; checking remote monitoring and alarm equipment components; checking operation of alarms and stand-by power; and reporting maintenance needs. The program has established schedules, routes, priorities, standard forms, performance measures, and a mechanism for including program information in the IMS.

b. Reactive Operation Program

This program ensures timely response to atypical situations in the transmission system through use of written standard operating procedures available for both manned and unmanned stations. Procedures may include initiating auxiliary power with portable generators, installing portable pumps during high flow, or initiating the Contingency Plan. The program has established standard forms and reporting procedures, performance measures, and a mechanism for including program information in the IMS.

2. Pretreatment Program

This program ensures that operation of the utility's treatment facility is protected from pollutant pass-through or interference. If a utility has industrial or commercial users it may have this program which includes industrial user identification, permitting, monitoring and inspections, enforcement, and other components. Personnel involved with the utility pretreatment program will have frequent communication with operation and maintenance personnel to detect possible pretreatment permit violations. The program has standard operating procedures, performance measures, inspection schedules, and a mechanism for including program information in the IMS.

3. Corrosion Control Program

This program provides for inspection of the utility infrastructure for corrosion caused by hydrogen sulfide or other corrosives, the development and implementation of site-specific corrosion control measures, a monitoring program to evaluate corrosion control measures, program performance measures, and a mechanism for including program information in the IMS.

4. Fats, Oils, and Grease Control Program

This program prevents fats, oils, and grease from entering the utility infrastructure, therefore preserving sewer capacity, prolonging the infrastructure life, reducing overflow events, and saving the utility maintenance costs. The program includes a grease control ordinance, grease trap and interceptor design standards, permitting and inspecting commercial grease traps and interceptors, a credible enforcement component, a public education component for residential sources, performance measures, and a mechanism for including program information in the IMS.

5. Service Connection/Disconnection Program

This program includes written standard procedures for new sewer tap installation or for sewer disconnection; inspection of all new service connections to, or disconnections from, the utility sewer; a credible enforcement program; performance measures; and a mechanism for notifying personnel in the Mapping Program or including program information in the IMS.

6. Private Haulers Program

This program issues permits to private commercial or septic tank waste haulers discharging to the utility, and includes written standard operating procedures for inspection/sampling of the haulers, a credible enforcement program, program performance measures, and a mechanism for including program information in the IMS.

7. Line Location Program

This program responds to requests for utility sewer line locates, and includes written standard line location procedures, defined prioritization to assist scheduling, appropriate staffing and equipment for the average number of requests, standard line location procedures, standard forms, performance measures, and a mechanism for including program information in the IMS.

MAINTENANCE PROGRAMS

1. Pump Station Preventive Maintenance

a. Pump Station Repair Program

This program is a reactive maintenance component intended to repair pump stations that are currently in a state of disrepair but still cost-effective to service. The program includes established priorities for pump station repairs, maintaining an ongoing inventory of completed repairs, a work schedule for pump station repairs, and a mechanism for including pump station repair information in the IMS. Upon completion of pump station repairs, service activities are transferred to the pump station Preventive maintenance program.

b. Electrical Maintenance Program

This program is a component of the pump station Preventive maintenance program. The program includes an established number of crews and personnel required to perform effective electrical maintenance, written standard electrical maintenance procedures, scheduling Preventive maintenance, standard forms, performance measures, and a mechanism for including electrical maintenance information in the IMS.

c. Mechanical Maintenance Program

This program is a component of the pump station Preventive maintenance program. The program includes an established number of crews and personnel required to perform effective mechanical maintenance, written standard mechanical maintenance procedures, scheduling Preventive maintenance, standard forms, performance measures, and a mechanism for including mechanical maintenance information in the IMS.

d. Physical Maintenance Program

This program is a component of the pump station Preventive maintenance program. The program includes an established number of crews and personnel required to perform effective physical maintenance, written standard physical maintenance procedures, scheduling, standard forms, performance measures, and a mechanism for including physical maintenance information in the IMS.

2. Gravity Line Preventive Maintenance

a. Routine Hydraulic Cleaning Program

This program includes accurately determined cleaning needs, established priorities and scheduled cleaning activities, support of an appropriate number of crews and personnel, acquired necessary equipment (e.g., Jet Unit, Combination Unit, etc.), written standard hydraulic cleaning procedures, standard forms, performance measures, and a mechanism for including hydraulic cleaning information in the IMS.

b. Routine Mechanical Cleaning Program

This program includes accurately determined cleaning needs, established priorities and scheduled cleaning activities, support of an appropriate number of crews and personnel, acquired necessary equipment (e.g., Rodders, Bucket Machine, etc.), written standard mechanical cleaning procedures, standard forms, performance measures, and a mechanism

for including mechanical cleaning information in the IMS.

c. Root Control Program

This program includes accurately determined root control needs, established priorities and scheduled activities, support of an appropriate number of crews and personnel, acquired necessary equipment (e.g., mechanical, chemical, etc.), written standard root control procedures, standard forms, performance measures, and a mechanism for including root control information in the IMS.

d. Manhole Preventive Maintenance Program

This program includes accurately determined manhole maintenance needs, established priorities and scheduled activities, support of an appropriate number of crews and personnel, acquired necessary equipment (rings and lids, structural repair, etc.), written standard manhole maintenance procedures, standard forms, performance measures, and a mechanism for including manhole maintenance information in the IMS.

3. Air Valve Preventive Maintenance Program

This program provides for inspection and maintenance of air valves located on force mains (including regular valve exercise). The program includes an established number of crews and personnel required to perform effective Preventive maintenance, written standard air valve maintenance procedures, scheduling, standard forms, performance measures, and a mechanism for including air release valve maintenance information in the IMS.

4. Maintenance of Way

a. Maintenance of Rights-of-Way and Easements Program

This program includes accurately determined maintenance needs, established priorities and scheduled activities, support of an appropriate number of crews and personnel (based on the number of waterway crossings and/or miles of sewer off-street), written standard maintenance procedures, standard forms, performance measures, and a mechanism for including maintenance information in the IMS.

b. Street Paving Monitoring Program

This program includes accurately determined monitoring needs, established priorities and scheduled activities, coordination with storm drain projects and street and highway officials, support of an appropriate number of crews and personnel, acquired necessary equipment (e.g., manhole and valve raising, etc.), written standard monitoring procedures, standard forms, performance measures, and a mechanism for including monitoring information in the IMS.

5. Reactive Maintenance Program

This program provides response to customer complaints or other unscheduled system problems forwarded by dispatchers. The program includes support of an appropriate number of crews and personnel, written standard response procedures including a protocol for initiating the Contingency Plan, standard forms, collection of information in support of failure analysis, sewer map availability, performance measures, and a mechanism for including reactive maintenance information in the IMS.

GEORGIA ENVIRONMENTAL PROTECTION DIVISION
WATERSHED COMPLIANCE PROGRAM
2 MLK, JR. DR. S.E., SUITE 1152
ATLANTA, GEORGIA 30334

City of Valdosta

ATTACHMENT J

City of Valdosta
Response to Meeting
March 5, 2020



CITY OF VALDOSTA, GEORGIA
Utilities Department

W. Darryl Muse
DIRECTOR OF UTILITIES

March 5, 2020

Mr. James A. Capp, Branch Chief
Watershed Compliance Program, Municipal Compliance Unit
GA Environmental Protection Division, Watershed Protection Branch
2 MLK, Jr. Drive S.E., Suite 1152 East
Atlanta, Georgia 30334

RE: Proposed Consent Order
City of Valdosta Withlacoochee
Water Pollution Control Plant
(WPCP) and Mud Creek WPCP
NPDES Permits No. GA0033235 &
GA0020222

Dear Mr. Capp:

Thank you for allowing the City of Valdosta to meet with you and your staff to review the conditions outlined in the proposed consent order. Over the years, the Division and the City have developed a relationship that embraces continuing infrastructure improvement as well as sustainable new technology to reduce environmental impacts. To that end, the City concurs with many requirements outlined in the proposed consent order. The City is Valdosta is requesting consideration of the following options;

The City requests a Project In-Lieu of Penalty (PIP). To gain a better understanding of community effects on waters of the state, the City proposes to collect additional water quality data for a 4 years. The collection points are Okapilco Creek, Knights Ferry, Nankin Boat Ramp and the Withlacoochee at the Florida/Georgia line. These tests will be conducted no less than 3 days each week. Water quality will be tested for Fecal Coliform and E-Coli. Also, a DNA sample will be collected monthly at the same locations. The City believes this data will help fill in the blanks and become invaluable in identifying as well as managing source and non-point source effects on State waters. The estimated cost for this project is \$225,000.

The City requests to enter into an education and marketing campaign to address eco-tourism as well as place educational placards near public access points along State waters. The estimated costs is \$35,000.



This is the City of Valdosta's proposed Project In-Lieu of Penalty.

If there are questions or if additional information is required, please contact W. Darryl Muse at 229.259.3592 or via email at DMuse@Valdostacity.com.

Respectfully,



W. Darryl Muse
Utilities Director
City of Valdosta

CC: Lewis Hays, EPD Program Manager
Marzieh Shahbazaz, EPD Compliance Monitoring Unit
Ms. Alys Hannum, EPD Compliance Monitoring Unit
L. Mark Barber, Valdosta City Manager