

**STATE WATER CONTROL BOARD ENFORCEMENT ACTION**

**A SPECIAL ORDER BY CONSENT**

**ISSUED TO THE**

**TOWN OF MONTEREY**

*VPDES Permit No. VA0023281*

**SECTION A: Purpose**

This is a Consent Special Order issued under the authority of Va. Code §§ 10.1-1185 and 62.1-44.15(8a) between the State Water Control Board and the Town of Monterey, for the purpose of resolving certain violations of the State Water Control Law and the State Water Control Board regulations.

**SECTION B: Definitions:**

Unless the context clearly indicates otherwise, the following words and terms have the meaning assigned to them below:

1. "Va. Code" means the Code of Virginia (1950), as amended.
2. "Board" means the State Water Control Board, a permanent citizen's board of the Commonwealth of Virginia and described in Va. Code §§ 10.1-1184 and 62.1-44.7.
3. "Department" or "DEQ" means the Department of Environmental Quality, an agency of the

Commonwealth of Virginia as described in Va. Code § 10.1-1183.

4. "Director" means the Director of the Department of Environmental Quality.
5. "Order" means this document, also known as a Consent Special Order.
6. "Monterey" or "the Town" means the Town of Monterey, an incorporated Town in Highland County, Virginia.
7. "Permit" means VPDES Permit No. VA0023281, which was reissued to Monterey by DEQ on September 26, 1997, and expired on September 26, 2002, and the new Permit to issued on September 27, 2002, which will expire on September 26, 2007. Abbreviations for Permit parameters discussed below include dissolved oxygen ["DO"], chlorine ["Cl"], biochemical oxygen demand ["BOD"], carbonaceous biochemical oxygen demand ["CBOD"], total suspended solids ["TSS"], ammonia ["NH<sub>3</sub>"] and pH.
8. "Facility" and "STP" refer to the sewage treatment facilities subject to the Permit, including the wetlands beds.
9. "DMR" means Discharge Monitoring Report, required by the Permit to be submitted to DEQ monthly.
10. "I/I" means inflow and infiltration.
11. "VDH" means the Virginia Department of Health, Office of Water Programs, Lexington field office.
12. "VRO" means the Valley Regional Office of DEQ, located in Harrisonburg, Virginia.
13. "O&M" means operations and maintenance.
14. "PER" means Preliminary Engineering Report.

### **SECTION C: Finding of Facts and Conclusions of Law**

1. Monterey owns and operates a wastewater treatment facility which treats wastewater from the Town and surrounding areas in Highland County, Virginia. Treated wastewater from the Facility discharges to West Strait Creek in the Potomac River basin.
2. In 1993, Monterey completed construction of a new wetlands treatment facility to treat domestic wastewater from Town and County residents, as required by a previous Consent Order, using an Innovative and Alternative Treatment grant from EPA. Since its inception, the

Facility has been unable to meet final effluent limit requirements of the Permit as required by the previous Consent Order. DEQ has issued Notices of Violation to the Town since 1993 for apparent permit and Consent Order violations. Permit violations alleged by DEQ include, but are not limited to, chronic chlorine violations, pH violations, and DO violations, and occasional CBOD and TSS violations. Consent Order violations alleged by DEQ include, but are not limited to, failure to complete construction in a timely manner; failure to comply with final effluent limits of the Permit; and failure to submit an O&M Manual and sludge management plan in a timely manner. An independent consultant concluded in March 1998 that Monterey will remain unable to consistently meet permit limits without an upgrade to the Facility.

3. In addition, Monterey has experienced extreme variability in flows to the Facility, indicating a significant problem with inflow and infiltration. High flows have contributed to recurring Permit violations. Flows routinely average in excess of 95% of the STP's treatment capacity. During inclement weather, flows approach ten times the STP's capacity. Without extensive repairs to the collection system, high flows will continue to impact the STP.
4. In September of 1997, DEQ issued a Permit to Monterey with new effluent limitations for ammonia. The Permit provided a 4 year schedule to achieve compliance with these new limits. The Permit to be reissued in 2002 contains final effluent limitations for ammonia. Monitoring data provided by the Town indicates that Monterey will be unable to meet the ammonia limits without an upgrade to the STP.
5. DEQ staff have performed five benthic surveys of West Strait Creek above and below the Facility's discharge. These surveys, taken between Spring of 1995 and Fall of 1999, document a severe adverse impact to West Strait Creek as a result of Monterey's discharge. DEQ issued Notices of Violation following these surveys for apparent violations of the Permit and Virginia's General Water Quality Standard, 9 VAC 25-260-20(B), which requires that all state waters be maintained free from sewage and other wastes in amounts that interfere with reasonable, beneficial uses of such waters.
6. Monterey's Town Council has been working closely with VRO staff since 1998 to abate the apparent violations discussed above. The Town has implemented many of the recommendations made for interim improvements to the STP in a March 1998 Evaluation and Optimization Study by Olver, Inc. Monterey has:

- hired and trained a new STP operator and assistant;
- completed and implemented an O&M Manual for the plant;
- significantly improved proper monitoring and reporting;
- completed removal of sludge from the chlorine contact tank and Imhoff tank and is routinely removing scum buildup from the Imhoff tank gas vents;
- continued routine cleaning of the bar screen;
- completed an approvable Sludge Management Plan;

- installed a backflow preventer;  
installed an automatic composite sampler;  
installed a buried chlorine feed line to prevent freezing; and  
planted yellow flag iris to improve wetland bed performance.
7. Monterey's Town Council has also taken steps to identify and correct I/I problems with the sewer system. A Sanitary Sewer System I/I Study was completed in June of 1998. The Town completed smoke testing of the sewer system in August 1998, and has taken action pursuant to its sewer use ordinance to begin to eliminate connection of all roof drains and sump pumps found to be connected to the sanitary sewer system. Monterey hired Engineering Concepts in 1999 to complete a Preliminary Engineering Report for I/I corrective action. The Town has now, with the assistance of the Central Shenandoah Planning District Commission, authorized procurement of the funds to complete the first phase of work identified in the PER.
  8. The Town's STP staff has worked closely with DEQ's On-site Operator Training Program and has cooperated with Va. Tech in a graduate-program study of plant performance. That study indicated that unpredictable levels of reduced sulfur compounds in the effluent from the wetlands periodically exert a high chlorine demand. In an attempt to maintain an adequate chlorine residual in the contact tank, Monterey must add chlorine at very high concentrations. This high dosing of chlorine, and subsequent dechlorination with sulfur dioxide, results in a reduction of the effluent pH to levels far below that allowed by the Permit. As part of a small-scale study, aerating the wastewater resulted in a significant reduction in the reduced sulfur concentration. Removal of the reduced sulfur prior to chlorination is a possible treatment that may result in more consistent permit compliance with chlorine and pH effluent limits. The study also found that CBOD violations may be reduced by more effective removal of sludge from the wetland beds.

#### **SECTION D: Agreement and Order**

Accordingly the State Water Control Board orders the Town of Monterey, and Monterey voluntarily agrees:

1. Monterey shall complete the actions described in Appendix A of this Order for interim and long-term improvements to the STP and its collection system by correcting excessive I/I and implementing certain process changes.
2. Monterey has provided financial information to DEQ documenting its inability to pay a civil charge above and beyond the cost of returning to compliance. A civil charge for these violations will therefore not be assessed.
3. Monterey shall comply with the interim effluent limits and monitoring requirements contained in Appendix B for CBOD, suspended solids, and ammonia. For the Permit's effluent limits for pH, DO and Cl, the Parties acknowledge that pending repair or replacement of the STP,

Monterey may experience additional violations of Permit conditions for these parameters. Accordingly, pending completion of repair or replacement of the STP, Monterey shall operate the facility in a manner that produces the best quality effluent of which it is capable in order to minimize such additional violations and minimize potential impacts to water quality. For each month where Monterey violates permit limits, the Town shall submit a letter of explanation to DEQ with that month's DMR detailing steps taken to minimize such violations and potential impacts.

4. This Order cancels and supersedes the Consent Special Order issued to the Town of Monterey on April 15, 1991, as amended on May 21, 1992.

### **SECTION E: Administrative Provisions**

1. The Board may modify, rewrite, or amend the Order with the consent of Monterey, for good cause shown by Monterey, or on its own motion after notice and opportunity to be heard.
2. This Order only addresses and resolves those violations specifically identified herein, including those matters addressed in the Notice of Violations issued to Monterey by DEQ as summarized in Section C above. This Order shall not preclude the Board or the Director from taking any action authorized by law, including but not limited to: (1) taking any action authorized by law regarding any additional, subsequent, or subsequently discovered violations; (2) seeking subsequent remediation of the facility as may be authorized by law; or (3) taking subsequent action to enforce the Order. This Order shall not preclude appropriate enforcement actions by other federal, state, or local regulatory authorities for matters not addressed herein.
3. This Order is made by agreement and with the consent of the parties, and does not constitute a finding, adjudication, or admission of any violation of any federal, state, or local law, rule, or regulation or any allegations contained herein.
4. Monterey consents to venue in the Circuit Court of the City of Richmond for any civil action taken to enforce the terms of this Order.
5. Monterey declares it has received fair and due process under the Administrative Process Act, Va. Code §§ 2.2-4000 *et seq.*, and the State Water Control Law and it waives the right to any hearing or other administrative proceeding authorized or required by law or regulation, and to any judicial review of any issue of fact or law contained herein. Nothing herein shall be construed as a waiver of the right to any administrative proceeding for, or to judicial review of, any action taken by the Board to enforce this Order.
6. Failure by Monterey to comply with any of the terms of this Order shall constitute a violation of an order of the Board. Nothing herein shall waive the initiation of appropriate enforcement actions or the issuance of additional orders as appropriate by the Board or the Director as a

result of such violations. Nothing herein shall affect appropriate enforcement actions by any other federal, state, or local regulatory authority.

7. If any provision of this Order is found to be unenforceable for any reason, the remainder of the Order shall remain in full force and effect.
8. Monterey shall be responsible for failure to comply with any of the terms and conditions of this Order unless compliance is made impossible by earthquake, flood, other acts of God, war, strike, or such other occurrence. Monterey shall show that such circumstances were beyond its control and not due to a lack of good faith or diligence on its part. Monterey shall notify the DEQ Regional Director in writing when circumstances are anticipated to occur, are occurring, or have occurred that may delay compliance or cause noncompliance with any requirement of the Order. Such notice shall set forth:

the reasons for the delay or noncompliance;  
the projected duration of any such delay or noncompliance;  
the measures taken and to be taken to prevent or minimize such delay or noncompliance; and  
the timetable by which such measures will be implemented and the date full compliance will be achieved.

Failure to so notify the Regional Director within 24 hours of learning of any condition above, which the parties intend to assert will result in the impossibility of compliance, shall constitute a waiver of any claim to inability to comply with a requirement of this Order.

9. This Order is binding on the parties hereto, their successors in interest, designees and assigns, jointly and severally.
10. This Order shall become effective upon execution by both the Director or his designee and Monterey. Notwithstanding the foregoing, Monterey agrees to be bound by any compliance date which precedes the effective date of this Order.
11. This Order shall continue in effect until the Director or Board terminates the Order in his or its sole discretion upon 30 days written notice to Monterey. Termination of this Order, or any obligation imposed in this Order, shall not operate to relieve Monterey from its obligation to comply with any statute, regulation, permit condition, other order, certificate, certification, standard, or requirement otherwise applicable.
12. By its signature below, Monterey voluntarily agrees to the issuance of this Order.

And it is so ORDERED this \_\_\_\_ day of \_\_\_\_\_, 2002.

STATE WATER CONTROL BOARD

\_\_\_\_\_  
Robert G. Burnley, Director  
Department of Environmental Quality

The Town of Monterey voluntarily agrees to the issuance of this Order.

By: \_\_\_\_\_

Date: \_\_\_\_\_

Commonwealth of Virginia  
City/County of \_\_\_\_\_

The foregoing document was signed and acknowledged before me this \_\_\_\_ day of

\_\_\_\_\_, 2002, by \_\_\_\_\_, who is  
(name)

\_\_\_\_\_ on behalf of the Town of Monterey.  
(title)

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Notary Public

My commission expires : \_\_\_\_\_

## APPENDIX A

In order to comply with the provisions of the State Water Control Law and regulations, the Town of Monterey agrees to implement the following actions:

### A. INTERIM MEASURES

To improve plant performance until an upgrade is completed, Monterey shall perform the following actions:

1. Maintain adequate staffing for the STP to assure all routine maintenance required by this Order can be performed in a timely manner.
2. Continue routine maintenance of the Imhoff tank-- break up scum on vents daily to allow gas to escape, clean slots weekly. Measure and record sludge depth in Imhoff tank monthly and remove sludge as necessary. Maintain a log of required maintenance.
3. Continue routine daily cleaning of bar screen and weekly cleaning of grit channels.
4. By September 30, 2002, provide DEQ with a detailed written procedure for regular cleaning of sludge from wetlands beds on a twice-yearly basis. After DEQ review and comment, implement the procedure. The interval between the cleaning of the wetlands beds shall not be less than 4 months.
5. To abate chronic pH and chlorine violations, retain an engineer to investigate the feasibility of installing an aeration tank and related equipment after the wetlands beds but prior to chlorination as recommended by Virginia Tech. The engineer should develop a PER by January 31, 2003, which evaluates the necessary tank size, detention time and aeration needs, necessary to achieve significant reduction of reduced sulfur concentrations in the effluent and to achieve substantial compliance with effluent limitations for pH and DO. The PER should also determine the most cost effective and feasible means of effecting this reduction and propose a schedule for submittal of plans and specifications to DEQ and VDH, and for completion of construction after DEQ approval of the plans and specifications. The PER should be submitted to DEQ and VDH by January 31, 2003. DEQ and VDH will review the plan and will consult with Monterey about the economic feasibility of installing the tank as an interim measure to abate the ongoing violations. Upon the determination by DEQ that such an upgrade is feasible, Monterey shall install the aeration tank according to a schedule agreed upon by the parties.

## B. LONG-TERM CORRECTIVE MEASURES

### Inflow and Infiltration

1. Submit plans and specifications for the necessary improvements to the sanitary sewer system to correct the excessive inflow and infiltration identified in the August 1999 PER as Phase One corrective action to De's Valley Regional Office and VDH for approval **by October 31, 2002**.
2. Advertise for bids **by January 31, 2003**, for completion of the corrective action.
3. Award bid for the construction **by March 31, 2003**.
4. Begin construction by **May 31, 2003**.
5. Complete construction by **November 30, 2004**.
6. After completion of the inflow and infiltration corrective action above, DEQ will reevaluate VPDES Permit limits, including the ammonia limit, set for the Monterey facility.
7. Monterey shall evaluate flows to the Facility and performance of any improvements to the existing wetlands beds, including any aeration added pursuant to Paragraph 5 of Appendix A of the Order, for twelve months following completion of the I/I corrective action above. If the Facility is not consistently able to meet the Permit's final effluent limits, **by November 1, 2005**, Monterey shall provide to DEQ for review and approval either a schedule for additional I/I work or a schedule for an upgrade of the STP to meet Permit limits, or both. The schedule shall include solicitation of funds to design and construct the improvements, submittal of plans and specifications, and a construction schedule. This schedule will be incorporated by DEQ and Monterey into an Amended Consent Special Order.
8. If Monterey experiences delays beyond its control in receiving moneys from its approved grant-loan which adversely impact the schedule contained in this appendix, Monterey shall notify DEQ immediately of the delay and propose an amended schedule for completing the work.

## C. REPORTING REQUIREMENTS

Submit quarterly progress reports to DEQ beginning **October 10, 2002**, and continuing each quarter on **January 10, April 10, July 10, and October 10** until this Order is cancelled. The progress reports shall identify work completed during the previous three months pursuant to this Order and work projected for the upcoming quarter, and shall include a statement regarding any anticipated problems in future compliance with this Order.

No later than 14 days following a date identified in the above schedule of compliance, Monterey shall

submit to DEQ's Valley Regional Office a written notice of compliance or noncompliance with the scheduled item. In the case of noncompliance, the notice shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled item.



APPENDIX B

INTERIM EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. Monterey shall comply with the Permit's effluent limits and monitoring requirements except as specified below:

<u>EFFLUENT CHARACTERISTICS</u>	<u>DISCHARGE LIMITATIONS</u>				<u>MONITORING REQUIREMENTS</u>			
	<u>Monthly Average</u>		<u>Weekly Average</u>		<u>Minimum</u>	<u>Maximum</u>	<u>Frequency</u>	<u>Sample Type</u>
CBOD <sub>5</sub> <sup>c, d</sup>	25 mg/L	11.4 kg/d	40 mg/L	18.2 kg/d	NA	NA	1 Day/Week	8HC
Suspended Solids <sup>c, d</sup>	30 mg/L	13.6 kg/d	45 mg/L	20.4 kg/d	NA	NA	1 Day/Week	8HC
Ammonia-N (mg/L) <sup>c</sup> (Jun-Dec)	NL		NL		NA	NA	1/Month	8HC
Ammonia-N (mg/L) <sup>c</sup> (Jan-May)	NL		NL		NA	NA	1/Month	8HC

NL = No Limitation, monitoring required

NA = Not Applicable

- a. The design flow of this treatment facility is 0.120 MGD.
- c. See Part I.C. of the Permit for additional monitoring instructions.
- d. At least 85% removal for CBOD<sub>5</sub> and TSS must be attained for this discharge.
- e. There shall be no discharge of floating solids or visible foam in other than trace amounts.