

STATE OF COLORADO

Bill Ritter, Jr., Governor
Martha E. Rudolph, Executive Director

Dedicated to protecting and improving the health and environment of the people of Colorado

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Colorado Department
of Public Health
and Environment

December 6, 2010

Ms. Jennie Achee, Assistant General Manager
Arapahoe County Water & Wastewater Authority Certified Mail Number: 7009 1680 0000 2094 4992
13031 East Caley Ave.
Centennial, Colorado 80111

RE: Service of Notice of Violation/Cease and Desist Order, Number: IO-101206-1

Dear Ms. Achee:

Arapahoe County Water and Wastewater Authority is hereby served with the enclosed Notice of Violation / Cease and Desist Order (the "NOV/CDO"). This NOV/CDO is issued by the Colorado Department of Public Health and Environment's Water Quality Control Division (the "Division") pursuant to the authority given to the Division by §§25-8-602 and 25-8-605, C.R.S. of the *Colorado Water Quality Control Act*, (the "Act"). The Division bases this NOV/CDO upon findings that Arapahoe County Water and Wastewater Authority has violated the Act, and/or Permit regulations promulgated pursuant to the Act, as described in the enclosed NOV/CDO.

Pursuant to §25-8-603, C.R.S., Arapahoe County Water and Wastewater Authority is required, within thirty (30) calendar days of receipt of this NOV/CDO, to submit to the Division an answer admitting or denying each paragraph of the Findings of Fact and responding to the Notice of Violation.

This action could result in the imposition of civil penalties. The Division is authorized pursuant to §25-8-608, C.R.S., to impose a penalty of \$10,000 per day for each day during which such violation occurs.

Please be advised that the Division is continuing its investigation into this matter and the Division may identify supplementary violations that warrant amendments to this NOV/CDO or the issuance of additional enforcement actions.

Should you or representatives of Arapahoe County Water and Wastewater Authority desire to discuss this matter informally with the Division, or if you have any questions regarding the NOV/CDO, please do not hesitate to contact Kelly Morgan of this office by phone at (303) 692-3634 or by electronic mail at kelly.morgan@state.co.us.

Sincerely,



Russell Zigler, Legal Assistant
Compliance Assurance Section
Enforcement Unit
WATER QUALITY CONTROL DIVISION

Enclosure(s)

cc: Tri-County Health Department

ec: Aaron Urdiales, EPA Region VIII
Bret Icenogle, Engineering Section, CDPHE
Dick Parachini, Watershed Program, CDPHE
Gary Beers, Permits Unit, CDPHE
Michael Beck, OPA
Barry Cress, DOLA
Kelly Morgan, Case Person
Tania Watson, Compliance Assurance



COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT
DIVISION OF ADMINISTRATION
WATER QUALITY CONTROL DIVISION

NOTICE OF VIOLATION / CEASE AND DESIST ORDER

NUMBER: IO-101206-1

IN THE MATTER OF: ARAPAHOE COUNTY WATER AND WASTEWATER AUTHORITY
CDPS PERMIT NUMBER: CO-0047589
ARAPAHOE COUNTY, COLORADO

Pursuant to the authority vested in the Colorado Department of Public Health and Environment's (the "Department") Division of Administration by §§25-1-109 and 25-8-302, C.R.S., which authority is implemented through the Department's Water Quality Control Division (the "Division"), and pursuant to §§25-8-602 and 25-8-605, C.R.S., the Division hereby makes the following Findings of Fact and issues the following Notice of Violation / Cease and Desist Order:

FINDINGS OF FACT AND CONCLUSIONS OF LAW

1. At all times relevant to the violations cited herein, Arapahoe County Water and Wastewater Authority ("ACWWA") was a political subdivision as defined by §29-1-202, C.R.S.
2. ACWWA is a "person" as defined under the Water Quality Control Act, §25-8-103(13), C.R.S. and its implementing permit regulation, 5 CCR 1002-61, §61.2(73).
3. ACWWA owns and/or operates the Joint Water Purification Plant (the "Facility") located at SW 1/4 of Section 32, Township 5 South, Range 66 West: Latitude 39 34' 10" N, Longitude 104 48' 17" W, near the City of Centennial, Arapahoe County, Colorado.
4. The Facility is a drinking water treatment plant that uses reverse osmosis ("RO"), advanced oxidation reactors, air stripping, and chemical addition for water stabilization and disinfection. The concentrate (waste stream) from the RO process is treated by flocculation followed by coagulant aided microfiltration. This concentrate filtrate from the microfiltration equipment is then blended with water from the ACWWA non-potable distribution system. The ACWWA non-potable distribution system contains a blend of effluent from the Lone Tree Creek Wastewater Reuse facility and raw groundwater. The treated and blended RO concentrate wastewater is discharged to a storm water detention pond prior to entering Windmill Creek.

5. The Facility is the subject of the Colorado Discharge Permit System, Permit No. CO-0047589 (the "Permit"). The current Permit was issued and became effective on September 1, 2008. The Permit was subsequently amended and reissued effective on October 1, 2009 (Amendment 1) and May 1, 2010 (Amendment 2, the "Amended Permit"), respectively, and is due to expire August 31, 2013.
6. The Permit authorizes ACWWA to discharge RO concentrate wastewater, after treatment and blending with water from the ACWWA non-potable distribution system, from the Facility through Outfall 001A into Windmill Creek. The Permit also requires ACWWA to monitor the treated RO concentrate wastewater, prior to blending with water from the ACWWA non-potable distribution system, at Outfall 001B.
7. Windmill Creek is a "state water" as defined by §25-8-103(19), C.R.S. and its implementing permit regulation, 5 CCR 1002-61, §61.2 (102).
8. Pursuant to 5 CCR 1002-61, §61.8, ACWWA must comply with all the terms and conditions of the Permit, and violations of such terms and conditions as specified in the Permit may be subject to civil and criminal liability pursuant to §§25-8-601 through 25-8-612, C.R.S

Failure to Comply with Permit Effluent Limitations

9. Pursuant to Part I.A.1. of the Permit and Amended Permit, ACWWA's permitted discharge at Outfall 001A shall not exceed the effluent limitations specified below:

<u>EFFLUENT PARAMETER</u>	<u>DISCHARGE LIMITATIONS</u>		
	30-Day Average	7-Day Average	Daily Maximum
Flow, MGD	6.3	NA	Report
Total Suspended Solids, mg/l	30	45	NA
Escherichia coli, #/100 ml	126 c/	252 c/	NA
Total Residual Chlorine, mg/l	0.011	NA	0.019 d/
pH, s.u. (minimum-maximum)	NA	NA	6.5-9.0 d/
Oil and Grease, mg/l	NA	NA	10 d/
Total Ammonia as N, mg/l			
January	3.7	NA	14
February	3.4	NA	11
March	3.4	NA	14

<u>EFFLUENT PARAMETER</u>	DISCHARGE LIMITATIONS		
	30-Day Average	7-Day Average	Daily Maximum
April	3.1	NA	14
May	2.7	NA	13
June	2.6	NA	16
July	2.3	NA	16
August	2.0	NA	13
September	2.2	NA	14
October	2.3	NA	12
November	3.0	NA	14
December	3.3	NA	12
Total Dissolved Solids, mg/l	Report	NA	3500
Whole Effluent Toxicity, Chronic	NA	NA	Statistical Difference or IC25>IWC
Total Arsenic, µg/l	100	NA	NA
PD Cadmium, µg/l	6.2	NA	19
PD Trivalent Chromium, µg/l	231	NA	1,773
PD Copper, µg/l	29	NA	50
WAD Cyanide, µg/l	Report	NA	5.0
TR Iron, µg/l	1,000	NA	NA
PD Lead, µg/l	11.0	NA	281
PD Manganese, µg/l	2,618	NA	4,738
Total Mercury, µg/l	0.010	NA	NA
PD Nickel, µg/l	168	NA	1,513
PD Selenium, µg/l	4.6	NA	18.4
PD Silver, µg/l	3.5	NA	22
PD Zinc, µg/l	382	NA	379

<u>EFFLUENT PARAMETER</u>	DISCHARGE LIMITATIONS		
	30-Day Average	7-Day Average	Daily Maximum
Sulfide, mg/l	0.0020	NA	NA
Nitrite, mg/l	NA	NA	0.50
Boron, mg/l	0.750	NA	NA
Bromoform, ug/l	4.3	NA	NA
Chlorofom, ug/l	3.4	NA	28,900
Chlorodibromomethane, ug/l	54	NA	NA
Hexachlorobenzens, ug/l	0.00028	NA	NA
Methoxychlor, ug/l	0.030	NA	NA
Tetrachloroethylene, ug/l	0.69	NA	5,280
Toluene, ug/l	510	NA	17,500
Xylene, ug/l	10,000	NA	NA

c/ These limits are 30-day and 7-day geometric means

d/ These limits are instantaneous maximum limits

10. Pursuant to Part I.A.1. of the Amended Permit, ACWWA's permitted discharge at Outfall 001B shall not exceed the effluent limitations specified below:

<u>EFFLUENT PARAMETER</u>	DISCHARGE LIMITATIONS		
	30-Day Average	7-Day Average	Daily Maximum
Flow, MGD	Report	NA	Report
Total Suspended Solids, mg/l	30	45	NA
Oil and Grease, mg/l	NA	NA	10
Phosphorous, mg/l	0.2	NA	NA

11. Pursuant to Part I.B.1. of the Permit, ACWWA is required to monitor defined effluent parameters at specified frequencies to provide an indication of compliance or non-compliance with the effluent limitations identified in the Permit.

12. Pursuant to Part I.B.1. and Part I.E. of the Permit, ACWWA is required to summarize and report the analytical results of its effluent monitoring to the Division via monthly discharge monitoring reports. Each discharge monitoring report is to include a certification by ACWWA that the information provided therein is true, accurate and complete to the knowledge and belief of ACWWA.
13. ACWWA's discharge monitoring reports for the months of April 2010 through August 2010 include, among other information and data, the following effluent concentration data for Boron, Copper, Iron, Sulfide, E. coli, Selenium, and Chlorine (total residual), which exceed the effluent limitations imposed by Part I.A.1. of the Permit.

Arapahoe County Water and Wastewater Authority EFFLUENT SELF-MONITORING DATA			
DISCHARGE MONITORING REPORTING PERIOD	OUTFALL NUMBER	SAMPLE MEASUREMENT	SAMPLE MEASUREMENT
BORON, TOTAL (AS B)		--	30-DAY AVG. LIMIT = 0.750 mg/l
April 30, 2010	001A	--	208 mg/l
COPPER, PD		DAILY MAXIMUM = 50 µg/l	30-DAY AVG. LIMIT = 29 µg/l
April 30, 2010	001A	71.5 µg/l	71.5 µg/l
June 30, 2010	001A	50.9 µg/l	29.8 µg/l
IRON, TOTAL RECOVERABLE		--	30-DAY AVG. LIMIT = 1,000 µg/l
April 30, 2010	001A	--	1,170.0 µg/l
May 31, 2010	001A	--	1,430.0 µg/l
SULFIDE, TOTAL (AS S)		--	30-DAY AVG. LIMIT = 0.0020 mg/l
April 30, 2010	001A	--	0.8 mg/l
E.COLI, THERMOTOL, MF, MTEC		7-DAY MAXIMUM GM = 252 /100 ml	30-DAY GM = 126/100 ml
May 31, 2010	001A	--	238.20/100 ml
July 31, 2010	001A	1,183.93/100 ml	151.32/100 ml
August 31, 2010	001A	260.59/100 ml	--
SELENIUM, PD		DAILY MAXIMUM = 18.4 µg/l	30-DAY AVG. LIMIT = 4.6 µg/l
May 31, 2010	001A	57.0 µg/l	57.0 µg/l
June 30, 2010	001A	78.5 µg/l	60.15 µg/l
July 31, 2010	001A	54.5 µg/l	41.5 µg/l
August 31, 2010	001A	26.2 µg/l	22.85 µg/l
CHLORINE, TOTAL RESIDUAL		DAILY MAXIMUM = 0.019 mg/l	30-DAY AVG. LIMIT = 0.011 mg/l
June 30, 2010	001A	0.08 mg/l	0.04 mg/l

14. Boron, Copper, Iron, Sulfide, E.coli, Selenium, and Chlorine (total residual) are “pollutants” as defined by §25-8-103(15), C.R.S. and its implementing control regulation 5 CCR 1002-61, §61.2(76).
15. Division records establish that the Permit and the Amended Permit do not authorize the pollutant discharge levels identified above in paragraph 13 and ACWWA does not have any other permits authorizing such discharge into State Waters.
16. ACWWA’s failure to comply with permit effluent limitations, as identified above in paragraph 13, constitutes violations of Part I.A.1. of the Permit and the Amended Permit.

NOTICE OF VIOLATION

17. Based on the foregoing Findings of Fact and Conclusions of Law, you are hereby notified that the Division has determined that ACWWA has violated the following sections of the Permit.

Part I.A.1 of CDPS permit number CO-0047589 which states in part: “In accordance with the Water Quality Control Commission Regulations for Effluent Limitations, Section 62.4, and the Colorado Discharge Permit System Regulations, Section 61.8(2), 5 C.C.R. 1002-61, the permitted discharge shall not contain effluent parameter concentrations, which exceed the following limitations specified below or exceed the specified flow limitation.”

REQUIRED CORRECTIVE ACTION

Based upon the foregoing factual and legal determinations and pursuant to §25-8-602 and §25-8-605, C.R.S., ACWWA is hereby ordered to:

18. Cease and desist from all violations of the Colorado Water Quality Control Act, §§25-8-101 through 25-8-703, C.R.S., its implementing regulations promulgated thereto and the Permit.

Furthermore, the Division hereby orders ACWWA to comply with the following specific terms and conditions of this Order:

19. Within thirty (30) calendar day of receipt of this Order, ACWWA shall retain the services of a qualified individual or entity, specifically experienced in reverse osmosis concentrate wastewater treatment, to evaluate and recommend system improvements to ensure compliance with the terms and conditions of the Amended Permit. The evaluation, at a minimum, shall consider in detail the following:
 - a. An evaluation of the personnel requirements and qualifications for the operation and management of the Facility, including an evaluation of each individual's role, duties, and responsibilities in ensuring the proper operation and maintenance of the Facility;
 - b. An evaluation of raw groundwater characteristics from each active and proposed well servicing the Facility.

- c. An evaluation of influent pollutant concentrations for all parameters/pollutants that could influence treatment process, and what techniques or technologies may be utilized to consistently comply with the Amended Permit limits;
 - d. An evaluation of whether the Facility's treatment system as a whole is adequate to properly treat the influent pollutants to a level that consistently complies with the limitations of the Amended Permit.
20. Within forty five (45) calendar days of receipt of this Order, ACWWA shall provide documentation to the Division that it has retained the services of the qualified individual or entity identified in paragraph 19. This documentation shall include at, a minimum, a copy of the individual or entity's qualifications and a copy of the written contract or agreement for such services, including a copy of the scope of services to be provided.
 21. Within ninety (90) calendar days of receipt of this Order, ACWWA shall submit in writing to the Division a final report on the findings of the evaluation identified and outlined in paragraph 19 above. Along with the findings of the evaluation, the report must identify, for each criterion, specific short-term and long-term measures that will be taken by ACWWA to rectify deficiencies identified by the evaluation so that the Facility consistently produces effluent that meets the limitations identified in Part I.A.1 of the Amended Permit. For each short-term and long-term measure identified, ACWWA shall also submit a time schedule for completion of each measure. The implementation time schedule submitted must identify completion of all measures by no later than May 19, 2011. The measures and time schedule submitted shall become a condition of this Order, and ACWWA shall implement the measures and time schedule as submitted unless notified by the Division, in writing, that alternate measures and/or time schedules are appropriate. If the Division imposes alternate measures and/or time schedules, they shall also become a condition of this Order.
 22. Beginning in December 2010, and every calendar month thereafter, until such time as this Order is closed or the Division decrees so in writing, ACWWA shall submit written progress reports to the Division by the end of each calendar month. At a minimum, each report shall describe the activities undertaken in the previous calendar month and shall specify what activities will be undertaken within the next calendar month to comply with this Order.
 23. If ACWWA becomes aware of any situation or circumstances that cause ACWWA to become unable to comply with any condition or time schedules set forth by this Order, ACWWA shall provide written notice to the Division within five (5) calendar days of ACWWA becoming aware of such circumstances. ACWWA's notice shall describe what, if any, impacts will occur on ACWWA's ability to comply with the Colorado Water Quality Control Act, its Permit and any impacts on the remaining conditions and/or time schedules specified by this Order and what steps ACWWA is taking to mitigate such impacts.
 24. All documents submitted under this Order shall use the same titles as stated in this Order, and shall reference both the number of this Order and the number of the paragraph pursuant to which the document is required. Within thirty (30) calendar days of receiving Division comments on submitted documents, ACWWA shall revise the submitted document(s) to properly address the Division's comments and resubmit the document(s) for Division review.

NOTICES AND SUBMITTALS

For all documents, plans, records, reports and replies required to be submitted by this Notice of Violation/Cease and Desist Order, the ACWWA shall submit an original and an electronic copy to the Division at the following address:

Colorado Department of Public Health and Environment
Water Quality Control Division / WQCD-B2-CAS
Compliance Assurance Section
Attention: Kelly Morgan
4300 Cherry Creek Drive South
Denver, Colorado 80246-1530
Email: kelly.morgan@state.co.us
Fax: (303) 782-0390

(For any facsimile transmittals, please include a cover sheet addressed to Ms. Morgan.)

For any person submitting documents, plans, records and reports pursuant to this Notice of Violation / Cease and Desist Order, that person shall make the following certification with each submittal:

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

OBLIGATION TO ANSWER AND REQUEST FOR HEARING

Pursuant to §25-8-603, C.R.S. and 5 CCR 1002, §21.11 you are required to submit to the Division an answer affirming or denying each paragraph of the Findings of Fact and responding to the Notice of Violation. The answer shall be filed no later than thirty (30) calendar days after receipt of this action.

Section 25-8-603, C.R.S. and 5 CCR 1002, §21.11 also provide that the recipient of a Notice of Violation may request the Division to conduct a public hearing to determine the validity of the Notice, including the Findings of Fact. Such request shall be filed in writing with the Division and include the information specified in 5 CCR 1002, §21.4(B)(2). Absent a request for hearing, the validity of the factual allegations and the Notice of Violation shall be deemed established in any subsequent Department proceeding. The request for hearing, if any, shall be filed no later than thirty (30) calendar days after issuance of this action. The filing of an answer does not constitute a request for hearing.

FALSIFICATION AND TAMPERING

Be advised, in accord with §25-8-610, C.R.S., that any person who knowingly makes any false statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under the Colorado Water Quality Control Act or who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this article is guilty of a misdemeanor and, upon conviction thereof, shall be punished by a fine of not more than ten thousand dollars, or by imprisonment in the county jail for not more than six months, or by both such fine and imprisonment.

POTENTIAL CIVIL AND CRIMINAL PENALTIES

You are also advised that any person who violates any provision of the Colorado Water Quality Control Act (the "Act"), §§25-8-101 to 703, C.R.S., or of any permit issued under the Act, or any control regulation promulgated pursuant to the Act, or any final cease and desist order or clean-up order issued by the Division shall be subject to a civil penalty of not more than ten thousand dollars per day for each day during which such violation occurs. Further, any person who recklessly, knowingly, intentionally, or with criminal negligence discharges any pollutant into any state waters commits criminal pollution if such discharge is made without a permit, if a permit is required by the Act for such discharge, or if such discharge is made in violation of any permit issued under the Act or in violation of any Cease and Desist Order or Clean-up Order issued by the Division. By virtue of issuing this Notice of Violation / Cease and Desist Order, the State has not waived its right to bring an action for penalties under §§25-8-608 and 609, C.R.S, and may bring such action in the future.

RELEASE OR DISCHARGE NOTIFICATION

Pursuant to §25-8-601, C.R.S., you are further advised that any person engaged in any operation or activity which results in a spill or discharge of oil or other substance which may cause pollution of the waters of the state, shall notify the Division of the discharge. If said person fails to so notify, said person is guilty of a misdemeanor, and may be fined or imprisoned or both.

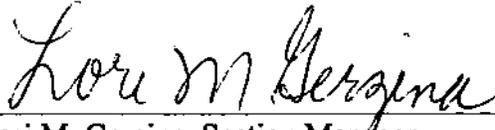
EFFECT OF ORDER

Nothing herein contained, particularly those portions requiring certain acts to be performed within a certain time, shall be construed as a permit or license, either to violate any provisions of the public health laws and regulations promulgated thereunder, or to make any discharge into state waters. Nothing herein contained shall be construed to preclude other individuals, cities, towns, counties, or duly constituted political subdivisions of the state from the exercise of their respective rights to suppress nuisances or to preclude any other lawful actions by such entities or the State.

For further clarification of your rights and obligations under this Notice of Violation / Cease and Desist Order you are advised to consult the Colorado Water Quality Control Act, §§25-8-101 to 703, C.R.S., and regulations promulgated thereunder, 5 CCR 1002.

Issued at Denver, Colorado, this 6th day of December, 2010.

FOR THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

Handwritten signature of Lori M. Gerzina in cursive script.

Lori M. Gerzina, Section Manager
Compliance Assurance Section
WATER QUALITY CONTROL DIVISION