DATE:

October 6, 2008, revised August 12, 2010

TO:

Office of Drinking Water Technical Staff

THROUGH: J. Wesley Kleene, PhD, PE, Director Julius Office of Drinking Water

FROM:

Susan E. Douglas, PE, Director APP

Division of Technical Services, Office of Drinking Water

SUBJECT:

SURVEILLANCE & REGULATIONS - "State-Only" (non-federal) Violations

RELATED:

WM 823 (SDWIS), WM 910 (Groundwater Rule)

Revision Highlights:

VAC Type Code B0 and B1 have been revised to include Triggered Source Water Monitoring Plans (TSWMP) for groundwater systems.

The relationship between State-only violations and Significant Deficiencies has been added.

This memo clarifies ODW policy and procedures for assessing compliance and issuing notices of violations (NOVs), and determining other enforcement actions related to non-compliance with requirements of the Commonwealth of Virginia Waterworks Regulation which are not based on federal drinking water rules and regulations. Violation types and other data management requirements are specifically designated to facilitate data entry, tracking, and enforcement actions. Additionally, this memo outlines the procedures necessary to implement these state drinking water violations.

BACKGROUND

Violations of federal rules and regulations require the ODW to track and report such violations to the U.S. EPA through the State Drinking Water Information System (SDWIS). ODW has now extended this data management process to include all violations specific to the Commonwealth of Virginia Waterworks Regulations (12 VAC 5-590), promulgated under Article 2, Title 32.1 of the Code of Virginia, for its own surveillance, compliance determinations, and decision-making purposes.

VIOLATION TYPES

The following table outlines the various violation types to which this memo applies:

	VAC Type Code Violations	
TYPE	DESCRIPTION ¹	
A0	No Waterworks Operation Permit	
A1	No Construction Permit for Modification	
A2	Exceedance of Permitted Design Capacity	
A3	Operating Facility Beyond Permit Condit(ion)	
A4	New WW or Component in Service w/o Appr(oval)	

¹ Abbreviated descriptions as they appear in SDWIS; further explanation is provided in italics

	VAC Type Code Violations						
TYPE	DESCRIPTION						
	No BSSR or TSWMP (Bacteriological Sample Site Plan or						
В0	Triggered Source Water Monitoring Plan)						
B1	Failure to Follow (Approved) BSSR or TSWMP						
B2	Lacks Properly Licensed Operator						
B3	Do not use						
B4	No WW Business Operations Plan (WBOP)						
B5	No CCCP (Cross Connection Control Plan)						
B6	Failure to Implement CCCP						
C1	Failure to Report by 10 th Day of Month						
C2	State Monitoring Violation						
C3	Reliability Problem						
C4	Lack of Monitoring Equipment						
C5	Failure to Meter Water Production						
C6	Less Than 20 psi at Service Connection						
C7	State MCL Violation						
C8	Do not use						
C9	Failure to Notify Consumers						

For a complete description of each violation type, procedures for assessing compliance, issuing NOVs, and determining other related enforcement actions see the attached spreadsheet.

SURVEILLANCE & COMPLIANCE DETERMINATION

Since these violations are not related to National Primary Drinking Water Regulations, it is important to recognize and understand the "Triggering Event", as this is what helps to determine compliance or noncompliance. Use of the information in the attached spreadsheet will help guide the compliance determination process. All compliance and enforcement actions (i.e., issuance of Notices of Violations, etc.) shall be entered into SDWIS per WM 823.

SIGNIFICANT DEFICIENCIES AND VIOLATION NOTICES

The following VAC (State) violations have also been identified as Potential Significant Deficiencies:

VAC Violation	Significant Deficiency (WM 910)
B1 – Failure to Follow BSSR or TSWMP	MR04 – Sampling not in accordance with BSSR
B2 – Lacks Properly Licensed Operator	OC01 – Number and Class of Operators do not meet WW Regulations
C6 – Less Than 20 psi at Service Connection	DS01 – Distribution pressure falls below 20 psi

VAC Violation	Significant Deficiency (WM 910)
C3 – Reliability problem; examples in WM 908 Attachment 2:	
Failure to reliably maintain treatment or chemical addition — chlorination	TR05 – Failure to maintain continuous disinfection TR06 – Minimum chlorine residual not maintained to meet CT TR07 – Entry point chlorine residual < 0.2 mg/L
Failure to reliably maintain treatment or chemical addition – corrosion control	TR11 – Inadequate continuous treatment
Failure to maintain infrastructure — well seal	SO04 – Sanitary seal or pitless adapter well cap missing or defective
Failure to maintain infrastructure – storage tanks	FW01 – Tank not watertight FW02 – Roof/Access hatches not watertight FW03 – Tank structurally unsound FW04 – Vent improperly screened FW05 – Overflow improperly screened or protected from contamination FW06 – Drain improperly screened or protected from contamination
Failure to maintain infrastructure – distribution system	DS03 – Distribution leakage rate > 30%

When a VAC Violation is identified in the sanitary survey, it should be issued. When the Deputy Field Director confirms that the item is also a Significant Deficiency, then the Significant Deficiency data must be entered into SDWIS, and "associated" to the Violation.

NOTICES OF VIOLATION

Once the determination is made to issue a notice of violation, staff shall use current NOV templates and instructions as modified to appropriately reflect a State violation.

DATA MANAGEMENT

All State violations shall be tracked in essentially the same way as the Federal violations, with the understanding that State violations are not reported to the U.S. EPA. All initial data entry and changes to data shall be completed in a timely manner in accordance with the requirements of WM 823.

END OF MEMO

VAC Type Violations listed in SDWIS Web Manual

WM 908

Type	12 VAC	Description	This Means?	Triggering Event	ODW Action (see note 1)	Corrective Action by Owner	Failure Consequences	FO Options
Α0	5-590-190	NO WATERWORKS OPERATION PERMIT (new to ODW)	The owner does not have a valid Operation Permit and is serving customers.	No record of an Operation Permit on file when ODW staff becomes aware of it.	Issue an NOV outlining requirements to obtain operation permit.	Comply with NOV	Enforcement action or new NOV at next SS.	Issue Temp permit. Central Office must concur if NOV is not issued. May need to refer to Enforcement.
A1	5-590-190	NO CONSTRUCTION PERMIT FOR MODIFCATION	Unauthorized construction for which a construction permit is required.	When staff becomes aware of it.	Issue immediate NOV and advise owner to submit "as-builts" plans & specifications for review & approval. Include county building official and other officials to receive copies of NOV.	Owner submits "as-built" plans & specifications within specified deadline for review & approval.	Issue follow-up NOV and initiate enforcement action.	Require owner to stop use of new equipment/source where appropriate; issue BWN; or other options approved by Central Office
A2	5-590-190	EXCEEDANCE OF PERMITTED DESIGN CAPACITY	Exceeded the permitted design capacity (face of permit -capacity, connections, or "existing" criteria) as a monthly average.		Issue NOV with statement of corrective action necessary.	Owner submits corrective action plan within 30 days to return to permitted capacity or expand PWS.	Initiate enforcement	Once triggered, Field Office should work with waterworks to review & approve corrective actions.
А3	5-590-190	OPERATING FACILITY BEYOND PERMIT CONDITION	Exceeded operating parameters other than the limiting parameter that establishes the permit capacity (i.e, filtration rate, sedimentation basin rates, etc.) or exceeded/violated Special Operating Requirements or the EDS.	SS or MOR or when/if staff becomes aware of it.	Verify the conditions at the facility. Special Investigation Survey may be conducted by ODW. If verified - NOV.	Owner corrects operation or submits corrective action plan to return to permit condition, if necessary (30 calendar days)	Re-issue NOV or Initiate enforcement	Once triggered, Field Office should work / initiate discussions with waterworks.
A4	5-590-250	NEW WATERWORKS OR COMPONENTS IN SERVICE WITHOUT APPROVAL	PWS did not receive approval prior to operating new component, source, or entire waterworks. (Construction permit issued; no Statement of Completion, no final inspection, no satisfactory test results, etc.)	ODW finds out during SS or other means.	Issue an NOV requiring Statement, disinfection, other. May need to take out of service until verification with ODW.	Comply with NOV	Enforcement action or new NOV at next SS.	ODW to authorize operation pending specific actions by owner / ODW.
В0	5-590-370	NO BSSR	No approved BSSR.	ODW discovers that bacteriological sampling with no approved plan on record.	Issue an NOV and advise owner to submit plan within 30 days for review & approval.	Owner submits an approvable plan.	Reject samples and issue NOV for failure to monitor.	If necessary issue BWN based on results received and Tier 1 PN (under 12 VAC 5-590-540B3d).
B1	5-590-370	FAILURE TO FOLLOW APPROVED BSSR	Not collecting from sites specifically identified in the approved BSSR.	ODW discovers that bacteriological sampling is haphazard or no approved plan on record.	Field Office to issue letter as reminder or NOV if failure has potentially significant impact on determining bacterilogical quality.	Sampling at originally approved sites in accordance with approved plan or owner to revise BSSR to provide approved sites within 30 days.	Reject samples and issue NOV for failure to monitor.	If necessary issue BWN based on results received and Tier 1 PN (under 12 VAC 5-590-540B3d).
B2	5-590-460	LACKS PROPERLY LICENSED OPERATOR	No properly licensed Operator = license class does not meet waterworks class reqt. (for classified waterworks without primary or secondary Disinfection or Chemical Addition)	SS or MOR or other event indicates there is no properly licensed operator.	Field Office to issue NOV immediately, with deadline specified. If inappropriate operator in charge, notify DPOR.	Waterworks to provide properly licensed operator within 30 days.	Issue follow-up NOV(s)	After 6 months without correct operator, refer to ODW Enforcement.
В3		FAILURE TO FOLLOW APPROVED MONITORING PLAN	DO NOT USE.	DO NOT USE.	DO NOT USE.	DO NOT USE.	DO NOT USE.	DO NOT USE.

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Type	12 VAC	Description	This Means?	Triggering Event	ODW Action (see note 1)	Corrective Action by Owner	Failure Consequences	FO Options
В4	Code: 32.1- 172 and 5-590-200	NO COMPREHENSIVE BUSINESS PLAN (Waterworks Business Operations Plan)	WBOP has not been submitted for an existing waterworks to be owned by a first-time owner in Virginia, as required	Discovery of ownership change, SS	Issue an NOV outlining requirements for WBOP with deadline.	Submit approvable WBOP by deadline	New NOV at next SS.	New owners: Issue Temp permit. HQ must concur if NOV is not issued. May need to refer to Enforcement.
B5	5-590-580	NO CCCP	This violation only occurs when there is NO approved program at an operating waterworks, and does not apply to minor revision of an existing CCCP. At existing waterworks, prior CCCP may be "inherited" from previous owner on change of ownership (see note 3).	Permitted WW: SS file review/ownership change New WW: Operation permit issuance process	Permitted WW: NOV w/ 30day deadline to present written compliance plan. New WW: Provide technical asset as needed to develop CCCP prior to Op. permit issuance.	Submit approvable CCCP	Permitted WW: follow-up NOV(s) New WW: do not issue Op permit.	New WW: If extenuating circumstances can be demonstrated by owner, issue Temp Op permit with Special Permit Requirements for CCCP.
В6	\circ	FAILURE TO IMPLEMENT CCCP	CCCP is approved but no evidence that the entire program is implemented; i.e, no records of surveys, inspections, corrective action taken on devices, etc.	SS reveals failure to fully implement CCCP; as supported by owner's records (or lack thereof).	Field Office to issue NOV immediately with response deadline of 60 days.	Owner to provide written evidence to support that CCCP is effective and on-going.	Issue follow-up NOV(s).	If no response or inadequate response after 6 months, refer to ODW Enforcement.
C1		FAILURE TO REPORT BY 10TH DAY OF MONTH	This is for late reporting when monitoring was conducted in the compliance period. Failure to provide required sample results or MORs by the 10th day of the month following the reporting period. Applies to: "routine" raw water MPNs, increased monitoring for GUDIs, and MORs.	For results that are reported late. Sample results and/or MORs received after the reporting deadline.	Case 1: For MORs and raw water MPNs that are reported late, Field Office to issue reminder letter. Case 2: For other sampling, issue NOV immediately.	Future sample results and /or MORs are submitted to Field Office on a timely basis.	Case 1a (MORs): 3 or more late reports in a 12 month period - Issue NOV. Case 1b (MPNs): issue reminder letter.	After 3 NOVs (case 1a & 2); i.e., over 3-year period, refer to ODW Enforcement.
C2	varies	STATE MONITORING VIOLATION	Failure to sample in the compliance period, or sampling at unapproved sites or inappropriate times (State-required compliance monitoring; Not operational control). Examples: "routine" raw water MPNs, increased monitoring for GUDIs, consecutive system Stage 1 DBPs.	File, SS, results or MOR review, or whenever staff becomes aware.	Issue NOV	Owner conduct appropriate monitoring.	Issue follow-up NOV(s)	Refer to ODW Central for enforcement action.
СЗ	5-590-360	RELIABILITY PROBLEM	Waterworks is unable to demonstrate the ability to provide pure water of adequate quantity and quality. As determined by the Field Office in conjunction with Technical Services. Examples are included (but not limited to) list in Attachment 2.	Whenever, however, staff becomes aware of it (SS or MOR surveillance, complaints, media, etc).	Verify reliability problem with field data and/or other observations. Request owner to provide corrective action plan within 30 days. Issue NOV immediately if significant consequences.	Take immediate corrective action or submit written corrective action plan provided to field office for review.	Issue NOV for failure to provide corrective action plan or to carry out plan.	If problem still persists, initiate discussions with owner regarding permit revocation and refer to ODW Enforcement. Written corrective action plan may not be needed under all circumstances. Plan should include timelines.
C4	06	LACK OF MONITORING EQUIPMENT	Required monitoring equipment is absent, inoperable, or inaccurate.	SS reveals the absence of the required monitoring equipment or MOR review indicates potential problem.	Request that monitoring equipment be provided within 30 days via SS correspondence. Issue NOV immediately if significant consequences.	Provide monitoring equipment and obtain written confirmation of its use within 30 days.	Issue NOV for failure to provide required monitoring equipment.	After 3 consecutive NOVs refer to ODW Enforcement.

ATTACHMENT 1 WM 908 Page 3 of 3

Type	12 VAC	Description	This Means?	Triggering Event	ODW Action (see note 1)	Corrective Action by Owner	Failure Consequences	FO Options
C5	\circ	FAILURE TO METER WATER PRODUCTION	Failure to meter and/or report readings: 1 -Not having an operable meter in place to accurately measure production or 2 -failure to read meter or 3-failure to report results to ODW	SS reveals no meter present (and owner does not have a metering variance) or MOR review indicates potential problem.	Require meter installation/repair within 90 days.	Install or repair meter within 90 days. Start reading meter and reporting results to ODW within 30 days thereafter.	Issue NOV for failure to accurately meter production.	After 3 consecutive NOVs refer to ODW Enforcement.
C6	30-6	LESS THAN 20 PSI AT SERVICE CONNECTION	20 psi is not provided at all service connections under all conditions of flow. Water main breaks and natural disaster incidents are excluded.	Complaint or report verified by ODW or other event (SS or MOR review) that ODW becomes aware of. Field Verfication supported by chart recorder or pressure gauge.	Issue NOV	Owner to submit a corrective action plan within 30 days or show proof that problem has been resolved.	Issue NOV for failure to submit plan within 30 days. Cc: building official on NOV.	Require fire hydrants to be bagged or removed, deny waterline extensions, Initiate discussion regarding permit revocation.
C7		STATE MCL VIOLATION	A DBP or MRDL violation has occurred in a consecutive system.	A DBP or MRDL violation has occurred in a consecutive system.	Follow procedures for the equivalent federal violation	Follow procedures for the equivalent federal violation	Follow procedures for the equivalent federal violation	Follow procedures for the equivalent federal violation
C8		TURBIDITY PERFORMANCE, SW ONLY	DO NOT USE.	DO NOT USE.	DO NOT USE.	DO NOT USE.	DO NOT USE.	DO NOT USE.
C9		FAILURE TO NOTIFY CONSUMERS	Failure to issue Special Notices not linked to an MCL or TT: Do Not Drink / Do Not Use / Boil Water Advisory (WM 844) or Commissioner's Order Consecutive system Stage 1 DBPR: DBP violation or Maximum Residual Disinfectant Level (MRDL)	Failure to provide the appropriate public notification completion statement (or to sustain the notification level). DBP / MRDL violation - System did not submit completion report	Issue a Special Notice for acute situations. Issue an NOV for failure to perform public notice.	Provide public notification for non-acute situations within the required time	Warning letter from ODW Enforcement if Commissioner's Order violated	Worse case: initiate Enforcement discussion

NOTES

- Assess risk to human health and notify HQ and LHD of any immediate risk, take corrective action (issue BWN) immediately, if necessary New owner must submit in writing that he is adopting the previous plan as is or with changes noted.

- C3: Refer to Attachment 2 for examples.
 C9: Public Notifications for Variances & Exemptions (12VAC5-590-540.) are not included here

VAC Violation Type C3 - RELIABILITY PROBLEM - Examples

Major Category	Specific Catergory	Examples	Triggering Event	Corrective Action by Owner
Failure to reliably maintain treatment or chemical addition	General	Any component of waterworks treatment/infrastructure that impairs the waterworks ability to deliver the quantity and/or quality of water as permitted.	Sanitary Survey or Monthly Operation Report	Compliance Plan with dates
Failure to reliably maintain treatment or chemical addition	Chemical Feed: Chlorination	Failure to maintain required free chlorine residual; Failure to continuously feed chlorine; No free chlorine residual; No standby chlorinator (12VAC5-590-1000.C.3.); Chlorinator functioning intermittently, not functioning, or not functioning properly; Inoperable gas scales.	Sanitary Survey or Monthly Operation Report	Replace or repair chlorinator (include spare); Submit incident report with plan of action and dates; Report free chlorine residual on MORs.
Failure to reliably maintain treatment or chemical addition	Chemical Feed: Corrosion Control	Poor or inconsistent operation of corrosion control treatment.	Sanitary Surveys	Compliance Plan with dates
Failure to reliably maintain treatment or chemical addition	Treatment	Need to replace filter media, filter control valves, rate of flow controls, SCM or Zeta Meter; Inadequate coagulation & settling.	Sanitary Surveys	Compliance Plan with dates
Failure to maintain Infrastructure	Well seal	Well sanitary seal not intact: broken, loose, or missing; Well casing not effectively sealed against entrance of water or contaminants; Cracked or missing well pad.	Sanitary Surveys	Compliance Plan with dates
Failure to maintain Infrastructure	Well house	Well house not secured; Fire damage to house left unrepaired; Solid waste next to the well house.	Sanitary Survey or Monthly Operation Report	Compliance Plan with dates
Failure to maintain Infrastructure	Well sources	Well offline; Serving more than 50 connections with only one well source.	Sanitary Survey or Monthly Operation Report	Compliance Plan with dates
Failure to maintain Infrastructure	Storage tanks	Tank needs rehab - pitted, rusted, or leaking; Tank overflow or drain lacking screen; Buried tanks; Tank offline (storage no longer adequate).	Sanitary Surveys	Compliance Plan with dates
Failure to maintain Infrastructure	Controls/Electrical	Unsafe electrical conditions (exposed wiring); No sight glass on hydro tank; Well/booster pump/hydro tank controls not working properly; Various equipment failures not corrected.	Sanitary Surveys	Compliance Plan with dates
Failure to maintain Infrastructure	Distribution system	Unaccounted for water exceeds 30% of production.	Monthly Operation Report	Compliance Plan with dates