The Water Tap

Issue 27 December 1996

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Safe Drinking Water Act Amendments of 1996 (Questions and Answers)

This is the second article in a series on reauthorization of the Safe Drinking Water Act (SDWA). The first article, in the October issue of the Water Tap, gave an overview of some of the main provisions of the 1996 Amendments by Congress. This article answers some frequent questions the Department has received regarding the new federal law.

Monitoring

Q - What type of technical relief will be available to small water systems?
A - Whenever allowed by the SDWA, the Department of Health (DOH) will ensure opportunity for systems with qualified sources to obtain waivers for source monitoring.
Q - How much will DOH take advantage of variances?
A - To the extent resources are available, DOH has in the past and will continue to take advantage of any variances that pose no unreasonable public health risk.
Q - Is Lead and Copper monitoring included as part of the monitoring relief package outlined in the 1996 Amendments?
A - Monitoring relief only refers to source water monitoring. Lead and copper are distribution system monitoring, and therefore not eligible. Also not included are Surface Water Treatment Rule (SWTR) monitoring requirements, and monitoring for microbial contaminants and contaminants regulated prior to 1986. Since DOH has already taken advantage of waiver provisions in Phase II/V source monitoring, any future source monitoring requirements will be evaluated as they arise under new EPA requirements.

Consumer Information

Q - When will water systems be required to provide an annual "consumer confidence report?"
A - EPA must promulgate a regulation by August 1998, so this requirement will take effect sometime after that. DOH plans to have guidance material available for purveyors.

Operator Certification

Q - What will be the potential impact to water systems from new operator certification requirements?
A - At this point, DOH is waiting for the federal guidance that must be developed by 1998, and plans on participating in that process. The main effect will be on the certification requirement for systems with under 100 connections and NTNC systems (schools, daycares, etc.), which in Washington are not generally required to have certified operators now.
Q - When and how will money be available for training for systems required to have certified operators?
A - Money will probably become available about the year 2000. It will only be used to reimburse for expenses incurred by small systems because of certification requirements under the new SDWA.
Q - How does DOH plan to participate in federal operator certification guidance?
A - DOH will probably become a member of EPA's guidance development workgroup, and will also provide comment to EPA on any proposals that are made.

Capacity

Q - How does financial viability relate to "System Capacity" as defined in the 1996 Amendments? (cont. on pg. 2)

A - "System capacity" refers to the water system's technical, managerial and financial capability to provide an adequate and safe supply of water in a reliable manner. Financial viability is only one aspect of system capacity. DOH's financial viability requirement will be incorporated into DOH's system capacity requirement.

State Revolving Fund

Q - When will funds be available?

A - EPA has stated that funds will be available to States around March, 1997. DOH is currently working out administrative procedures with the Public Works Board and will need to solicit public comment. DOH anticipates funds for distribution to water systems in the fall of 1997. (See article on Page 4)

General

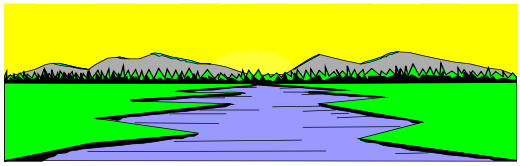
Q - What is EPA currently working on to implement the new amendments?

A - By February 1997, EPA is expected to: (1) have initiated partnerships with States, public water systems, and the public to develop information for States on recommended operator certification requirements; (2) report to Congress on the Needs Survey; and (3) have a comprehensive plan for study to assist States and public water systems with capacity development efforts.

Q - What is DOH currently working on related to the SDWA?

A - The most active work currently is with the State Revolving Fund program, followed by discussion of potential changes to Group A public water system drinking water regulations (Chapter 246-290 WAC). In addition, staff are working on implementation strategies for mandated provisions with deadlines covering the next several years. The next issue of the Water Tap should include a summary of these strategies. When possible, DOH staff will participate in development of federal guidance materials and new rules to ensure maximum State flexibility. For further information, contact Lisa Raysby (360) 664-3951. ■

Water Fact



More than 35% of all deaths in developing countries are directly related to contaminated drinking water.

——*World Health Organization*

What's Up with DOH Waterworks Standards?

Many of you may be wondering what has been happening with the Department's guidance on Group A public water system design standards (i.e., Waterworks Standards Guidance Manual) and associated regulatory changes reflecting mandatory design requirements.

Staff have been working on regulatory language changes to the Group A drinking water regulations (Chapter 246-290 WAC). Included in these changes is language proposed to reflect performance and design standards, and engineering document oversight by the Department.

Performance (in regulation) and Design Standards (in guidance)

The proposed changes to Chapter 246-290 WAC reflect a performance-based approach to design, as well as a methodology to evaluate the water system's ability to provide service. The intent is to make sure that minimum standards for public health protection provide the foundation for design of public water systems. It is also meant to provide a consistent approach for the Department to assess the capability of the system to provide an adequate and safe supply of potable water in a reliable manner at all times.

These and other proposed changes to Chapter 246-290 WAC (such as cross-connection control, planning, public notification, etc.) should be available prior to public workshops in the spring of 1997. All other design related standards in the Waterworks Standards will be considered as guidance material comparable with other industry standards. In other words, in order to deviate from Department standards or other industry practices such as those published by the American Water Works Association, the American Public Works Association, the American National Standards Institute, and in the "Ten State Standards," sufficient justification for change would need to be presented to the Department for approval.

A final draft of the Department's Waterworks Standards Guidance Manual should be available in the late spring to compliment the proposed regulatory revisions. All Group A public water systems, engineering firms and interested parties will be notified of its availability. ■

I N T E R N E T

Visit the DOH Division of Drinking Water's Homepage http://www.doh.wa.gov/ehp/dw/

A Letter From the Director.....

In 1990, the legislature passed the Growth Management Act (GMA), which requires most local governments to develop local land use plans, policies, and development regulations, aimed at accomplishing a variety of statewide goals. The GMA included provisions authorizing interested parties to appeal locally-adopted GMA provisions to one of three regional Growth Management Hearings Boards (GMHB). If a GMHB ruled against the city or county action, it could order that city or county to revise the resulting document to be consistent with GMA. Until the document was revised, it remained in effect, even though it did not comply with GMA.

In 1995, based on the recommendations of the Regulatory Reform Task Force, the legislature gave each GMHB the authority to *invalidate* GMA documents, either partially or totally, if a GMHB found that continued use of the documents "would substantially interfere with the fulfillment of the goals" of GMA. The new invalidation authority has had a dramatic impact on land development with a direct effect on the ability to develop and expand public water systems.

When a GMHB invalidation order occurs, new land use applications (such as building permits or subdivision approvals) that would have been governed by the invalidated document become "vested" against the future GMA document that will ultimately be approved by the GMHB. Since no one can be sure of what that future document will allow or require, in the way of land use (such as zoning densities) approval of the applications by a local government becomes a risky proposition. Who's liable for damages if a subdivision is approved, the lots are sold, and, later, the subdivision is nullified because it doesn't comply with the future land use plan? This is not just a hypothetical question! The King County Superior Court (Association of Rural Residents vs Kitsap County) recently ordered Kitsap County to void its approval of a planned unit development due to its noncompliance with GMA.

The State has developed four general criteria that identify those land use applications, requiring some state approval, that state agencies can process consistent with the GMA. When an invalidation occurs, the Department of Community, Trade and Economic Development (CTED) notifies the local elected officials of the state criteria for their county. DOH follows up with letters to the local elected officials, local health jurisdiction and Group A public water systems which elaborate on the state criteria and provide more detail on evaluating water system plans and water supply projects.

As of this writing, GMA invalidation decisions have affected DOH review of pending water supply applications in Clark, Kitsap, Mason, Island, Whatcom, Skagit, and Chelan counties. Our experience indicates that about two-thirds of proposed water supply projects and about one-third of water system plans meet the state criteria and may be processed by DOH. Cities tend to be least affected by the invalidations. Regional rural service providers are the most affected. Applications that cannot be processed must either be modified to comply with the criteria or wait for the County to come into compliance with GMA. Our experience indicates that returning to compliance can be a very lengthy process.

My best advice to water utilities is to (1) encourage their local governments to fully comply with the provisions of the GMA, and (2) submit their water system plans and projects to DOH for review at an early date so that they can be processed before a GMHB invalidation occurs.

Sincerely,

B. David Clark,
Director

EPA to Publish Needs Survey Results

The Environmental Protection Agency (EPA) expects to publish the results of its 1995 National Needs Survey of

water systems, including those in Washington, sometime in early January.

The Needs Survey is the first comprehensive national evaluation of the capital needs of federally-regulated water systems (in Washington, the "Group A" systems). It was conducted by EPA during 1995, with the cooperation of state agencies responsible for administering the federal Safe Drinking Water Act (SDWA) within each state. DOH administered the survey in Washington, which included obtaining information from over 100 systems, of all sizes. EPA used the information to develop estimates of the capital needs for all Group A systems.

EPA completed a draft report in May of this year. That report has been under review at the federal Office of Management and Budget (OMB) since then. OMB approved the report in the middle of November.

The estimates in the Needs Survey will provide the basis for EPA's allocation of federal State Revolving Fund (SRF) money to each state for the next several years. EPA developed several different allocation formulas using the Needs Survey, and requested comment from the States and other interested persons by December 2. Unless changed by Congress, the formula developed by EPA will determine each state's share of the SRF appropriation made by Congress, beginning with the one to be made in 1997.

A more complete report on the Needs Survey's findings for Washington will be in the next issue of Water Tap. For more information, contact Dave Monthie at (360) 664-9583. ■

AWWA Offers Help to Small Water Systems

The American Water Works Association (AWWA) offers a toll-free informational support hotline for any question or problem regarding drinking water or utility operations. The AWWA's Small System Operational Support Hotline is a free service for small water systems in the United States and Canada with fewer than 1,000 service connections. The line is staffed Monday through Friday from 8:00 A.M. to 5:00 P.M. Mountain Time. For assistance, call 1-800-366-0107.

States Begin Development of State Revolving Fund (SRF) Programs

Washington and other states have begun development of State Revolving Fund (SRF) programs to provide financial assistance to water systems, as authorized by Congress this year as part of the reauthorization of the Safe Drinking Water Act (SDWA).

Staff from both DOH and the Public Works Trust Fund (PWTF) attended training sessions presented by EPA in October. Those sessions focused on the draft SRF Guidance document that EPA is preparing, outlining how it intends to administer the program, and what states will be expected to do. DOH and PWTF staff also provided formal written comments to EPA on the Guidance document on topics that may be of concern to this state.

Washington has tentatively been allocated just over $31 million for the current fiscal year as its share of the national total of $1.275 billion appropriated by Congress for the year. The money is to be used both for financial assistance to water systems and for state programs that implement provisions of the newly-revised federal SDWA. The money to water systems will be used principally for low-interest loans. Repayments on those loans will be used to make future loans, on a "revolving" basis, similar to loans already being made to eligible local governments by the PWTF for water system projects.

EPA expects to have funding available to states by the beginning of March 1997. In order to receive funding, a state will have to submit an extensive application to EPA, which must include a detailed description of how the state intends to use its allocation of funds. This "intended use plan" must undergo public review and comment before being submitted to EPA.

DOH and the PWTF hope to have an application submitted to EPA in the February/March time frame, and have money available to water systems later in 1997. Prior to that, the two agencies will be developing a "Memorandum of Understanding" that outlines the respective roles and responsibilities of each agency. They will also be asking a joint advisory committee for advice on setting up the program. It is also likely there will be legislation introduced during the 1997 legislative session to clarify some aspects of the program.

The two agencies have developed a fact sheet in question and answer format for the SRF program, which will be updated with new developments. For further information, contact Peter Beaton at (360) 664-9698. ■

Certified Operators Must Meet Professional Growth Requirements

The Water Works Operator Certification Program regulations require certified operators to demonstrate continued professional growth in the field in order to be eligible for certification renewal. The Washington Environmental Training Center (WETRC) at Green River Community College provides course evaluation and Continuing Education Unit (CEU) assignment services to water works training course sponsors and maintains individual professional growth transcripts for certified water works operators.

Operators certified **after January 1, 1995,** have until December 31, 2000 to meet the requirement.

Operators certified **prior to January 1, 1995** must accomplish one of the following by December 31, 1997 to meet the professional growth requirement and be eligible to renew their certification:

Option 1: Accumulate a minimum of three CEUs or college credits relevant to the operation, maintenance or management of a water system.

Option 2: Advance by examination in the Water Works Operator Certification Program to a level 2, 3, or 4, or achieve certification by examination in a different classification as follows:

a. WDM to WTPO
b. WTPO to WDM
c. WDS to WDM or WTPO
d. CCS to WDM, WTPO, or WDS

Certified operators who have already met their professional growth requirement should have received a letter verifying their completion and a transcript from WETRC. This letter is the only official record accepted by the Department of Health as documentation of demonstrating continued professional growth in the field.

Backflow Assembly Tester (BAT) professional growth requirements will be discussed in the next issue of Water Tap. For further information on professional growth requirements contact WETRC at (206)-833-9111, ext. 3369 or toll free 1-800-562-0858. ■

Seattle Tolt Project Bidding Underway

The Seattle Water Department (SWD) has requested proposals from four teams to design, build, and operate (DBO) a 120 mgd water treatment plant to treat water diverted from the South Fork of the Tolt River. The SWD is using the alternative public work contracting procedures identified in RCW 39.10, also known as the DBO Process, to award the contract for this work. The proposals are expected to include a bid based upon compliance with current water quality standards and a second bid that anticipates future water quality treatment requirements. The DBO Process is designed to provide a municipality with a mechanism for taking advantage of the competitive nature of the private sector in order to obtain an innovative and cost-effective solution to a problem. The City of Seattle's cost estimate or "benchmark" is $156 million for the design, construction, and operation of the Tolt project over a 25 year period.

The existing Tolt facility was originally constructed and placed into operation during the early 1960's and currently provides about 28 percent of Seattle's drinking water supply. The water from the Tolt supply receives disinfection, fluoridation, and corrosion control treatment. The Tolt supply complies with DOH requirements to remain unfiltered, but concerns regarding future compliance with turbidity and THM standards led to the decision to proceed with the construction of the filtration plant.

Project benefits will include improved water quality, better public health protection, increased source reliability, and a greater yield from the South Fork of the Tolt River. The reduction in the amount of THM precursors in the water, as a result of filtration, together with a reduction in the amount of chlorine required to meet the contact time requirement of the Surface Water Treatment Rule should greatly improve the quality of the water in the distribution system. The filtration treatment will allow the SWD to rely on the Tolt supply throughout the year. Major storm events in the past have required Seattle to take the Tolt supply off-line at a time when its major supply, the Cedar River, is also at risk to storm runoff. This increase in source reliability also provides an estimated 10 mgd of additional supply capacity to the Seattle regional system. For further information contact Bob James at (206) 464-7671. ■

Cross-Connection Control Program Increases Emphasis on Compliance

State Board of Health drinking water regulations (Chapter 246-290-490 WAC) require all Group A water systems to develop and implement a Cross-Connection Control (CCC) program. Due to the public health significance of cross-connections, DOH plans to place an increased emphasis on compliance with the CCC requirements. DOH is currently developing a statewide implementation plan for CCC related activities and is also revising the CCC regulations.

CCC Regulation Revision: The first draft of the revised CCC regulations is currently undergoing review by DOH staff. A revised draft will be available for public review, along with other proposed WAC changes to waterworks standards, in early 1997. Separate public workshops will likely be held to discuss the CCC regulation revisions, since this topic has a potentially different target audience than the overall regulations. These workshops will provide purveyors, Backflow Assembly Testers (BAT), Cross-Connection Control Specialists (CCS's) and other interested parties with the opportunity to learn about the proposed changes, and to give direct input to DOH. Written comments will also be taken by DOH.

The major proposed revisions to the CCC regulation:

- Clarify the responsibility of the purveyor with regard to in-premise protection.
- Identify premises that require mandatory isolation and the type of backflow prevention assembly required for each.
- Define the minimum elements for a purveyor's CCC program.
- Provide possible relaxation of the annual testing requirement for backflow prevention assemblies.

CCC Program Implementation Plan: Under the regulatory reform process enacted by the Legislature, regulatory changes such as the CCC revisions require that DOH develop an implementation plan for agency activities to implement WAC revisions. DOH is currently developing this plan for the CCC program. The plan will outline steps to ensure compliance with the regulations, associated time schedules, and resource projections. A major emphasis of the DOH plan will be to provide training opportunities for purveyors on the topic of CCC program development and implementation. For more information contact Terri Notestine at (360)-753-5987. ■

DOH Develops "Equivalent Residential Units (ERUs)" Policy

With the passage of the Growth Management Act, local health jurisdictions are relying more heavily on DOH to determine the "adequacy" of a water system when a building permit or subdivision approval is under consideration. There has been no guideline for a statewide approach for determining the maximum allowable number of service connections (physical capacity) for a particular water system. DOH has developed a policy that together with the Waterworks Standards provides a standardized approach for evaluating system capacity

The purpose of the policy is to define a common term Equivalent Residential Units "ERU" in order to better evaluate residential, commercial and industrial water demands relative to a water system's physical capacity. An ERU is a unit of measure used to express the amount of water consumed by a typical full-time single-family residence on a particular system. The policy describes the process by which a system's physical capacity information will be gathered and maintained by the Department and how that information will be used for the operating permit evaluation.

Before the policy can be fully implemented, the following must take place: (1) revise the Water Facilities Inventory form (WFI), (2) make programming changes to the Drinking Water Data System, (3) finalize the new Waterworks Standards and, (4) finalize the Water System Planning Handbook. Since the ERU is a new concept, the policy includes a process for phasing in the implementation with regard to existing systems. A copy of the policy may be requested by calling the Drinking Water toll free line at 1(800) 521-0323. ■

Workshop Announcement
"Coordinating Water and Land Use Planning"

An all-day workshop will be held with speakers from local jurisdictions on how to develop a good coordinating process and address specific issues such as fire flow, level of service, piped water in rural areas, annexation, and satellite management. There will also be a discussion of how state water policy affects the planning and providing of local water service. This workshop is for anyone involved in planning, providing or regulating water service.

January 9, 1997 - Hallmark Inn, Moses Lake. Contact: Dick Fryhling, (CTED) (360) 753-4319

January 22, 1997 Tyee Hotel, Tumwater. Contact: Susan Greenlee (AWC) (360) 753-4137

Environmental Partnerships for Washington Communities

The Department of Health (DOH) has recently signed an agreement with the Department of Ecology (DOE) to participate in the Environmental Partnerships for Washington Communities (EPWC) program. EPWC is intended to help small communities comply with the many different environmental mandates they face. The agencies will nominate candidates to participate in the program and then assist them to:

- Identify environmental issues that need to be addressed;
- Rank the actions required by the community to achieve compliance; and
- Establish a schedule for completing those actions within a reasonable time period.

Communities must meet the following criteria to qualify:

1. Categorized under "Local Government" ownership type on the Water Facilities Inventory Form (WFI);
2. Be considered small (generally those serving under 2,500 population);
3. Be under order from DOH and DOE, or recommended to be under order, on two or more issues; and
4. Be willing to pursue, in good faith, necessary actions to come into compliance.

For more information on this program contact John Aden at (360) 664-0441. ■

Education/Training Calendar

February 1997

Program	Location	Sponsor/ Contact	Phone
Pump Operation & Maintenance	Auburn	WETRC	(206) 833-9111
Asbestos Cement Pipe Work Practice Procedures	Auburn	WETRC	(206) 833-9111
Day-Alternative Disinfection Methods and Equipment; Night-Latest Disinfection Technology & Lead, Copper and Corrosion Control	to be announced	Bill Reynolds	(206) 632-2664
BAT Professional Growth Refresher Course	Vancouver	WETRC	(206) 833-9111
BAT Certification Course & Examination	Kennewick	WETRC	(206) 833-9111
BAT Professional Growth Examination	Vancouver	WETRC	(206) 833-9111
Chlorination Systems Operation & Maintenance	Auburn	WETRC	(206) 833-9111
Basic Electrical Systems (Small systems welcome)	Centralia	Ronni Woolrich	(360) 586-1096
O & M of Chlorination Systems	Olympia	Event Solutions	(541) 928-5055
Evergreen Rural Water of Washington Conference Feb. 18-20	Ellensburg	ERWoW	(509) 962-6326

March 1997

Water Works Basics	Auburn	WETRC	(206) 833-9111
BAT Certification Course & Examination	Auburn, Spokane	WETRC	(206) 833-9111
BAT Professional Growth Refresher Course	Auburn, Kennewick	WETRC	(206) 833-9111
BAT Professional Growth Examination	Kennewick	WETRC	(206) 833-9111
BAT Professional Growth Examination	Auburn	WETRC	(206) 833-9111
Washington Water/Wastewater Operations Workshop	Everett	WETRC	(206) 833-9111

April 1997

Metering Residential, Commercial, Sources (small systems welcome)	Westport	Ronni Woolrich	(360) 586-1096
Chlorination System Operation & Maintenance	Tacoma	WETRC	(206) 833-9111
Water Works Basics	Lynnwood, Yakima	WETRC	(206) 833-9111
Asbestos Cement Pipe Work Practice Procedures	Auburn	WETRC	(206) 833-9111
BAT Professional Growth Refresher Course	Auburn	WETRC	(206) 833-9111
BAT Professional Growth Examination	Auburn	WETRC	(206) 833-9111
Water Certification Exam Review	Auburn	WETRC	(206) 833-9111
WSEHA Annual Conference (Apr 30, May 1 & 2)	Tumwater	Michael Antee	(360) 586-8736

Dear Dr. Drip

Thank you for your response to my previous letter regarding monitoring waivers for my Diddley Street and Crud Street wells. I have another question maybe you can help me with. Remember last winter when we had all that flooding? My Crud Street well got flooded and everyone was on my case for not having enough water. It was a real mess and it was two weeks before I dared turn it on again, and then when I did, a week later a bunch of people said they got sick from drinking my water. Lawsuits? You know it! What could I have done when my well got flooded?

Sincerely, Eyedew Wanano

Dear Eyedew:

Whether you are a public water system or a private well owner, and a natural disaster has occurred on or near your property, there are some things you should know about your drinking water supply.

Once something like a flood has occurred, harmful bacteria may have infiltrated the well. If you plan to use your well for drinking and cooking purposes, steps toward disinfecting the well should begin. Shock chlorination is the preferred method for eliminating bacterial contamination in wells.

To disinfect a well contaminated with bacteria, you'll need to chlorinate using a chemical disinfectant such as liquid chlorine (household bleach you can get at a grocery store). For drilled wells, you'll have to disassemble the top of the casing. For bored or dug wells, open the cover and then add the disinfectant. Try to run the liquid down the inside walls of the well. A chlorine concentration of about 100 parts per million (ppm) is required to ensure that disease causing organisms (pathogens) are killed.

The chlorine solution should remain in the well preferably for a 24-hour period, or at least overnight, before it is pumped out. You should contact your local health agency or DOH regional drinking water office for details on the amounts of chlorine to use and how to apply it.

In addition to disinfecting the well, you should also ensure disinfection of the plumbing system. To do this, turn on all water faucets or system blowoffs after the chlorine is added to the well. When a chlorine odor is noticed at taps or blowoffs, close them. Do not use the water lines for several hours (again preferably 24 hours or overnight). After the setting time, open the faucets, or blowoffs, until the chlorine smell is gone.

Since shock disinfecting the well, however, does not provide continued assurance the water will remain free from contamination, water samples from the well should be tested for coliform bacteria by a state-certified laboratory before being used for drinking. Until the flooding subsides and testing is completed, the water should only be used for washing, flushing, etc. After the flooding subsides, and if tests show no contamination for two consecutive days, the water can be used for drinking. In the interim, drinking water may be obtained from bottled water, or by specific disinfection or boiling procedures. For more information contact your local health department or DOH regional drinking water office.

In This Issue: The following individuals have contributed to the production of this issue of ***The Water Tap***: John Aden, Peggy Barton (WETRC), Tim Blake, Jim Hudson, Bob James, Peggy Johnson, Dave Monthie, Lisa Raysby, Richard Sarver, Carol Stuckey, Ronni Woolrich, and Judy Welch, Editor.

Comments and questions are welcome. Please write: Editor, *The Water Tap*, Department of Health, Division of Drinking Water, P.O. Box 47822, Olympia, WA 98504-7822 or email to DWINFO@hub.doh.wa.gov

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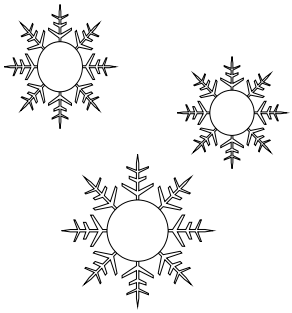
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