

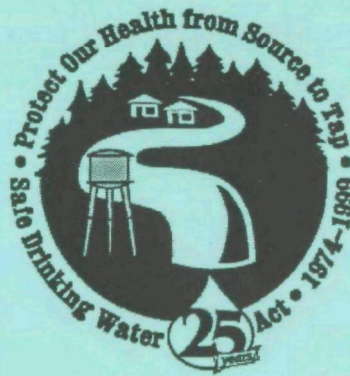


NATIONAL DRINKING WATER ADVISORY COUNCIL

Summary Meeting Minutes

May 5-6, 1999

*State Game Lodge in Custer State Park
Custer, South Dakota*



Members of the Council

Dr. L. D. McMullen, Chairperson
Ms. Mary Pesina Baiza
Mr. Patrick Banegas
Dr. William Bellamy
Mr. Walter Bishop
Mr. Richard J. Coombe
Dr. Jeffrey K. Griffiths
Ms. Diana Neidle
Mr. John P. Scheltens
Dr. Dave P. Spath
Mr. Peter D. Thornton
Dr. Thomas Yohe

Also present during all or part of the meeting were:

Ms. Cynthia Dougherty, Director, Office of Ground Water and Drinking Water (OGWDW)
Ms. Charlene Shaw, Designated Federal Officer, OGWDW
Dr. Richard Bull, Science Advisory Board Liaison
Ms. Elizabeth Fellows, Deputy Director, OGWDW
Mr. Peter Shanaghan, OGWDW
Mr. Robert Blanco, Director, Implementation and Systems Division, OGWDW
Mr. Rod Coker, Peer Office, Indian Health Services
Mr. Cal Clifford, Peer Office, Indian Health Services
Mr. Danny Davis, Executive Director, South Dakota Rural Water
Mr. George Vansco, West River Director, South Dakota Rural Water
Mr. Ray Ecoffey, OSP Rural Water (also a Hot Spring City Council representative)
Ms. Martha Macek, Electrical Engineer, South Dakota Rural Water

WEDNESDAY, MAY 5, 1999

I. OPENING REMARKS-L.D. McMULLEN/CYNTHIA DOUGHERTY

- The Chair of the National Drinking Water Advisory Council (NDWAC) welcomed the Council members. Since two members, Ms. Mary Pesina Baiza and Dr. Peter D. Thornton, were new to the Council, all Council members, as well as representatives of small systems, tribal systems, and the U.S. Environmental Protection Agency (EPA) introduced themselves and their work.
- The first part of the afternoon and evening was devoted to small systems and tribal drinking water system issues to provide some background for the field trip planned for later in the week and for future meetings at which issues of small systems and affordability would be major themes.

II. BRIEFING ON SMALL SYSTEMS-PETER SHANAGHAN

- A basic ethic of the Safe Drinking Water Act (SDWA) is that everyone getting drinking water from a public water system in the USA should enjoy the same level of health protection from drinking water-related illnesses, regardless of the system that serves them. EPA's efforts, in working with small and tribal systems, are aimed at helping those systems achieve that level of health protection. However, these issues are not separate and distinct from the broader initiative of the SDWA.
- There are many issues to consider for health protection; for example, a person could drink water from 20 different water systems in a given day.
- EPA has very specific goals under the Government Performance and Results Act (GPRA), such as by the year 2005, it is expected that a greater percentage of the population will receive water that conforms with the requirements of SDWA as compared to 1994.
- Ninety percent of the population is served by 10 percent of the systems. The vast majority of the population is receiving water from publicly-owned systems.
- USA has about 170,000 public water systems regulated under the SDWA. About 55,000 of these are community water systems, which serve year-round residential populations; these systems are the ones that receive most of EPA's attention. About 20,000 are non-transient, non-community systems, such as rural schools and factories that have their own water supply. Just under 100,000 are transient systems, such as roadside rest stops that serve different people every day. About 85 percent of the households in the country are served by public water systems; about 15 percent have their own wells.

- A third of all community water systems serve less than 100 people each; another third serve between 100 and 500 people. About another quarter of the systems serve between 500 and 3,300 people, and eight percent serve between 3,300 and 10,000 people (not connections). These numbers show that the distribution is skewed very heavily toward the very small systems.
- The ownership profile of small systems is institutionally diverse. There are three types of ownership: ancillary (*i.e.*, mobile home parks where the water system is not the principal purpose of the business); private systems, investor-owned or individually-owned (*i.e.*, homeowner associations and not-for-profit type systems); and publicly owned systems. The majority of small systems fall within the ancillary category, so more than half of the systems that serve less than 100 people are mobile home parks. Another large percentage is privately owned, and only a small fraction is publicly owned. There are slightly less ancillary systems but slightly more publicly owned systems that serve between 100 and 500 people; about 20 percent of the systems that serve less than 500 people are publicly owned. Out of 55,000 ancillary systems, more than 70 percent are privately held. The other 30 percent are run by county districts, cities, counties, improvement districts, etc.
- The problem with small drinking water systems is not exclusively a problem of small local governments; since many systems are either private or ancillary. A problem occurs when the owner of an ancillary system abandons the system, and for lack of volunteers the local government ends up owning the system. This is a matter for concern because currently county and public parks are not the best run systems.
- About 90 percent of the population is served by 10 percent of the systems. In other words, about 25 million people are served by small systems. Even though this represents 10 percent of the population, this still represents a significant number of people.
- When Congress reauthorized the Safe Drinking Water Act in 1996, based on Congressional findings, special attention was put on small systems. Congress recognized that there is a need for new approaches to deal with small water system problems. One finding was that more effective protection of public health requires prevention of drinking water contamination through well-trained system operators; water systems with adequate managerial, technical, and financial capacity; and enhanced protection of source waters.
- There are several major components to the capacity developments provisions that frame the small systems issue within SDWA. The first is the requirement for states to develop two programs that deal with water system capacity. The first program requires systems to demonstrate capacity before they commence operations; the second program requires states to develop and implement capacity development strategies that will enhance the technical, financial, and managerial capabilities of water systems. The law also ties system level eligibility for assistance from the new Drinking Water State Revolving Fund

(SRF) to systems that have adequate capacity or the ability to attain capacity through the use of assistance. If a state does not develop these programs in accordance with the law, it will lose 20 percent of its SRF allotment. Systems which do not have capacity and refuse to undertake changes to obtain capacity are prohibited from receiving SRF money.

- In terms of building state programs, EPA is focused on new system capacity building and capacity development strategy. EPA wants to ensure that the appropriate coordination exists among all players. EPA is providing direct assistance to the states through its contractors and through grants, and is developing resource and training materials. Water system capacity development is the enhancement of the technical, financial, and managerial wherewithal of a water system to consistently provide safe and affordable drinking water to its customers. All three components are equally important.
- Technical capacity pertains to the following issues: does the system have an adequate supply of source water, is the source water adequately protected, what is the condition of the system's infrastructure (the well or intake, the treatment plant, the distribution system, the storage tanks, etc.), and are the system's operation and maintenance effective and preventive.
- Financial capacity pertains to the following issues: is there sufficient revenue, does the system have access to sufficient money to meet its obligations, is there enough money coming into the system to meet all obligations and needs, is the system credit worthy or at least qualified for financial assistance from the lenders of last resort, does the system manage the income it has effectively, and is the system collecting all of the money that is due to it.
- Managerial capacity pertains to the following issues: is the owner of the system known, is there enough staff, are the staff members the right people to run the system, what is the organization of the staff, and is the system able to communicate effectively with its customers, state regulators, and technical assistance providers.
- Every system (large or small) must be able to answer the questions pertaining to technical, financial, and managerial capacity. If this is not possible, long term problems will ensue.
- Capacity development is not an end in itself; it is an effort to enhance the capabilities of systems in order to have an impact on public health protection, *i.e.*, proper monitoring, effective maintenance of the infrastructure, protection of source water, training and certification of operators, communication with customers, necessary treatment of drinking water, and efficient system operation.
- A system can be thought of as having different increments of capacity. There is a baseline capacity; this is the capacity of a system to provide water of adequate pressure,

free of microbial contaminants, and able to meet its customer's needs. Once this baseline is established, the additional capacity needed to comply with the requirements that were in place before the SDWA '96 amendments can be determined. Now that there are post '96 requirements, there will be another increment of capacity necessary in order to comply with these requirements. Finally, there is the increment of capacity needed to allow the systems to perform a really good job or "superior service."

- States are going to benefit from measuring improvements as a result of capacity building. As comprehensive inspections of systems are done, deficiencies identified will be corrected more expeditiously than they have been in the past. There will most likely be an improvement in the economics and the efficiency of the system as well. In the end, capacity building may result in the same level of public health protection as could have occurred without capacity building, but it will happen at a lower cost.
- Before EPA can start looking at results, EPA needs to make sure that systems have the right infrastructure. To do that, EPA HQ has a small systems team that provides the focus for the small systems efforts, and is moving in three major directions to build the national drinking water program: (1) strengthen the program internally by improving the relationship with the EPA regions and among regions in order to better serve and address small systems needs on a local basis; (2) help the states to build the programs they need to address small systems issues; and (3) help small systems directly build the capacity they need. EPA is supporting the development of regulations, guidance, and policy in order to ensure that small systems issues are up-front and center in the regulatory process.
- One of the comments was that such a difference in focus on small versus large systems issues will lead to a tiered national public health water-related program in which large systems focus on long-term, chronic health issues, such as bromates and trihalomethanes, while small systems focus on acute health problems and basic health standards, based on disinfection.
- The EPA representative responded that currently there is a difference in regulatory coverage related to microbial contaminants, but in the future, small and large systems will be expected to meet one set of standards. How these standards will be met will be different; EPA now has the authority to identify compliance or variance technologies for small systems that are different from the best available technology (BAT), identified for large systems. Getting systems to comply with these same standards will be one of EPA's major challenges.
- EPA is focusing on programs for new system capacity demonstration and capacity development strategy. EPA provides direct assistance to the states through contractors and through grants to help the states develop their programs. Recipients of such grants are the Rural Water Association, the Rural Community Assistance Program, and

universities providing technology assistance. EPA is also developing resource materials and training materials to help the states.

- EPA works with other funding agencies, particularly at the federal level, to coordinate the approach to the capacity issue. EPA also works with many stakeholders to address small systems issues.
- As small systems plan for the future, they need to think about the appropriate spatial boundary issue. Do they continue on their own or do they partner with other systems? If they want to partner with other systems, will these other systems be nearby or will they be in other counties or even in other states. There is a range of opportunities that needs to be explored, such as, informal cooperation, formal contracting for services, systems joining together to form a cooperative, systems merging together to form a new entity, systems buying or acquiring other systems, etc.
- The NDWAC Small Systems Implementation Workgroup, created in November 1998, has been charged with formulating the strategic direction EPA and the states should take to help small systems meet their obligations and requirements. The group has assembled data from different sources and is examining the existing and the forthcoming regulations to determine what small systems will need to do to comply with the regulations. The group will then identify strategic recommendations that EPA and the states can use to build the necessary capacity.
- Under the capacity development program, it is now required that before states can approve a new system, whether it involves approving the water rights or the plans and specifications of the system, it must ensure that the system has the necessary capacity and can meet the standards. Until now some states have used their own authorities to approve new systems, but now the states must follow the new federal rule that a new system they approve must be able to operate to meet applicable standards.
- The total number of small systems is declining, due to assimilation or regionalization. As capacity requirements are continually pushed, this trend will likely continue. Regionalization means different things in different areas of the United States. In many areas, it would mean assembling a lot of systems within 5 to 10 miles of a metro area. In rural South Dakota, it would involve more of a statewide approach.
- Regionalization will presumably take place as long as the government does not create disincentives when structuring grant and small community assistance programs at the state and federal level. In the past, federal and state programs have caused disincentives to regionalization.
- In order to receive SRF loan/grant financial assistance, a system must have capacity or must be able to be brought to capacity with the assistance.

- There is concern over situations in which big cities will not work with small systems in surrounding communities. In some cases, the big cities could easily sell water to or connect to the small systems, but they will not. Even though there may be costs or liability involved, there needs to be an incentive program so that large cities will allow small systems to connect to their systems.
- A participant wanted to know if EPA was tracking federal and state programs to see if they are achieving public health protection through small systems. States, as part of their capacity development strategy, are required to: measure whether improved public health protection for small systems is being achieved, determine how they should measure approvals, and establish a baseline. States are further required, in later years, to provide reports on the efficacy of their strategy and on the ways in which they are helping the systems build capacity. So, the concept of tracking capacity development nationally does not exist; there is de-centralized implementation under the SDWA.
- There was a concern about EPA's emphasis on capacity because its focus is on the process, not on the end product, namely, health protection. A system could have a fabulous process, but if it doesn't address the basic issue of public health protection, there could be glowing statistics, with no actual impact on public health.
- As EPA looks at its goals and objectives under the agency's performance goals, it must determine a way to measure changes. If there are no improvements, EPA must reexamine its programs. To achieve source water protection, EPA must evaluate its programs and determine which ones work and which don't.
- Due to the promulgation of new standards, EPA felt that there would be a sudden increase in non-compliance violations. To avoid such a situation, EPA would measure two metrics, the existing standards and the new standards; eventually these would meld over time.
- A participant commented that the levels at which standards are set could have a negative impact on the ability of small systems to meet cost-benefit criteria if the criteria are not sensitive to the small system issue. EPA replied that if cost-benefit flexibility was allowed in the law, based on the effects on small systems, this would actually cause less country-wide protection than the larger systems could easily afford. Congress has set up other mechanisms to address small systems affordability, including variances, exemptions, and other compliance technologies.
- EPA has the authority to enforce the law and require systems to pay penalties. Under emergency authority, EPA can even shut down a system, but this usually does not happen because this does not remedy the situation. Additionally, enforcement is usually not

necessary; EPA and the small system can come to some agreement that still meets the rule.

- There will be some systems that EPA and the states will put at the top of their lists in terms of pumping resources into them, targeting financial assistance to them, and recognizing that these are the systems that really need the subsidies.
- In some states, there is pressure for the state to acquire troubled systems. In some cases, from an investment standpoint, a system is not viable, but with the state's help, the customers are able to get a dependable, safe water supply. When the cost is spread among more than a million customers base, the slight increase does not show.
- Over the past years, some large municipal systems have chosen to sell their systems so that they may be professionally managed instead of seeking to bring their systems up to standard.
- It was felt that the Small Systems workgroup members need to continue to focus on public health, and not get caught up with the process. States will do what EPA requires of them, and public health is what the states need to address.

III. BRIEFING ON TRIBAL WATER SYSTEMS

- Nationwide, there are 536 tribal water systems, each one in a sovereign tribal nation. EPA's relationship with tribal water systems is different from its relationship with states. With states, there is a primacy agency that oversees the drinking water systems in the state, but with tribes, EPA deals directly with the tribal water system on a government to government relationship. Also, EPA has no legal authority to authorize a state to act as the primacy agent with the tribal systems.
- EPA's water program has an overall strategy for working with Indian tribes which is comprehensive and involves establishing a water program presence with each tribe in certain program areas, conducting baseline assessments, establishing priorities and implementing programs.
- In terms of implementing the SDWA, the goals for the tribes are the same as those for other small systems and they are to increase the number of people receiving water that is in compliance with health standards. In the annual report, there is a separate section on tribal public water systems which shows compliance and non-compliance.
- There is nothing in common from tribe to tribe.

- There are almost 1,000 tribal public systems in the country serving less than 10,000 people; there is only one tribal system that serves more than 10,000 people. The majority of tribal water systems are ground water systems.
- The need of these systems on a per-household basis is twice the need of other small systems. (This is from the 1995 Drinking Water Infrastructure Need Survey.) There are various categories of needs. For tribal systems, there is less need in the transmission and distribution arena, but significantly more need in the storage area.
- Current need is defined as anything that has to be done right away to address any problems. Future need refers to anything that must be done over the next 20 years. The current needs for tribal systems is a much larger percentage of the total need than it is for any of the other size categories.
- Tribal median household income is only about 60 percent of the national median household income. The percentage of tribal individuals in poverty is almost two and a half times the percentage of similar individuals on a national level. In terms of total number of people, this represents a relatively small number of people because the total tribal population is very small. It is important to consider socioeconomic conditions when looking at tribal water systems.
- EPA can use the enforcement authorities established in the SDWA to get compliance from tribal authorities, but it does not often do so because it prefers to work with tribes to give them the capacity they need to solve their problems.
- EPA has a two-pronged approach to dealing with tribal systems. The first is direct implementation efforts which involve working directly with the tribal water systems, conducting sanitary surveys, and participating in all the activities that a primacy agency would do with a water system. The second is an effort to build tribal system capacity and to provide assistance to tribes.
- EPA makes available some funds for direct implementation work. This year, it is \$3.78 million. About a quarter of the funds goes to capacity development, another quarter goes to operator certification, and the rest is distributed to other programs.
- The Drinking Water SRF has an established national set-aside (drinking water infrastructure grant set-aside) to fund tribal systems. It is 1 ½ percent of the annual appropriation. This is money that is distributed to the tribes through the EPA Regions, based on the needs of the tribes. The regions consult with the Indian Health Service and with the tribes regarding the selection of projects.

- In terms of capacity development, there are no specific requirements for tribes. Tribes are not required to develop programs in the same way that States are, so EPA is trying to build capacity through capacity building grants.
- What is unique to tribes is the operator certification program. EPA is in the process of developing resource material specifically targeted to tribal systems on the subject of operator certification and is developing a voluntary certification program for tribal operators. Baseline standards for certification are being developed and certification providers (such as states) who have approved certification programs will provide the service to tribes. To receive an infrastructure grant set-aside, the tribal water system must be operated by a certified operator.
- In order for a system to receive a grant under the drinking water infrastructure grant set-aside, the system must be operated by a certified operator. This should provide an incentive for operator certification in the tribal arena. There is a similar condition about capacity development; systems receiving the funding must have adequate capacity or must be able to develop their capacity.
- Source water protection is not mandatory for the tribes in the same way it is for other small systems. However, protecting source water is a strong tribal ethic. EPA provides assistance grants to help the tribes do source water assessments and to develop source water protection programs, but this is largely voluntary.
- EPA offers or coordinates a significant amount of training and technical assistance that is available to tribes. In EPA's Regional Offices, there are staff members who provide one-on-one technical assistance to tribes. Many of the regional offices have formed interagency agreements with federal entities such as the Indian Health Service and the Bureau of Reclamation, to help build tribal capacity, as well as to achieve direct implementation. Some of the regional offices also provide grants to third parties such as certain state rural water associations for training and assistance, *e.g.*, the National Rural Water Association (NRWA) and the Rural Community Assistance Program (RCAP).
- The NRWA funding for 1999 was \$8 million, and the RCAP funding was \$1 ½ million. The grant agreements with both of these entities require that at least 3 percent of their funding be used for technical assistance to tribal systems.
- Out of the 536 tribes, only a few are involved with voluntary activities such as wellhead protection. The basic needs of Indian tribes have been operator certification and sanitary surveys of the treatment plants.
- Recently, many tribes have started building casinos and restaurants which attract transient visitors to the area. Even though systems supplying these casinos and restaurants should

be meeting the requirements, there was some concern that this could affect overall public health. If these systems are not meeting standards, EPA needs to take action.

- The Indian Health Service is part of the Department of Health and Human Services, and has 12 area offices nationwide. It has a sanitation facility construction program that addresses drinking water, waste water, and solid waste needs for the tribes. It annually ranks tribal needs and creates a sanitation deficiency system list. On a nationwide level, the Indian Health Service has identified \$900 million in drinking water needs of a total of \$1.6 billion for water, sewer, and solid waste. The Indian Health Service is working with EPA to track those needs. EPA has a needs evaluation system in regards to SRF funding; the Indian Health Service's sanitation deficiency system is similar.
- Currently, both EPA and the Indian Health Service have separate unmet needs tracking systems. It was suggested that EPA Headquarters and the Indian Health Service work more closely to try and mesh the two systems. What the tribes need is one simplified system that they can understand, identify with, and work under as they start to receive funds.
- In South Dakota, the Indian Health Service is working with EPA Region 8 to develop a mechanism to conduct the source water protection program and the assessments for all the tribes. It is being tried with the Aberdeen Area Tribal Chairman's Health Board, the only entity that represents all tribes in the area. The Indian Health Service is trying to get EPA to make a grant to them so that they can do assessments on all reservations or at least manage and administer the assessments on all the reservations. This would be similar to what states are doing. EPA was asked to support this initiative.
- The Indian Health Service is the only federal agency that has environmentally trained sanitary engineers that are working on the reservations on a daily basis. The Service has a disease incidence tracking system, but it has not really compared systems on reservations that have capacity versus those that do not have capacity. As a public health agency, the Indian Health Service does not take enforcement actions, it provides technical assistance.
- When it was suggested that EPA work more one-on-one with people on the reservations, it was replied that in the last several years, EPA has made some significant changes in terms of how it is organized to work with tribes. For one, EPA established an American Indian Environmental Office within the Office of Water that deals with tribal issues across all of EPA's environmental programs. That office has a Tribal Operations Committee, which is made up of one or more tribes from each EPA region to advise EPA on all the tribal issues that EPA deals with. The committee, which meets several times a year, provides input at the national policy level.
- The way the law and regulations are set up, if a state or tribe does not have primacy, EPA gets their share of the drinking water state grants, to carry out direct implementation on

those state or tribal lands. In the past EPA would use that money to visit the tribes and to work with them; now that Congress has changed the appropriations' structure, this is no longer allowed.

- The Tribal Assistance Program, which is part of the American Indian Office, has a newly established program which involves doing a lot of work on the reservations. The American Indian Office has some basic environmental grants that tribes can use for any environmental work. The number of these grants has grown considerably, and EPA is attempting to increase these grants further.
- Some participants said that there hasn't been a lot of cooperation between tribes. A participant asked if there could be cooperation in a multi-tribal setting. The response was that all tribes were separate and had their own initiatives and focus, but depending on the issues, some tribes would support other tribes. Overall, self-governance and self-determination is very important to tribes, and this will be preserved above all. Another participant suggested that all the federal agencies involved in infrastructure development on tribal lands cooperate and pool their funds into a leveraged program.
- The issue with tribal systems may not be an infrastructure problem, rather a problem with how services are delivered and managed and how responsibility is taken at the tribal level, in terms of management and monitoring.
- Since EPA does not have the authority under the SDWA to require tribes to have a certified operator, EPA will have to provide a financial incentive if it wants tribes to have a certified operator. The requirement for tribes is that a certified operator be available, not that the person working on the system has to be a certified operator.
- The Rural Utility Service and the Indian Health Service are working more closely than they have done before. None of the entities, on their own have enough money to accomplish their major goals, but together, they can get a project done.
- The Mini Wiconi project on the Pine Ridge Reservation is a good example of a cooperative effort. The Bureau of Reclamation has gotten funding to build a large rural distribution and treatment facility near Fort Pierre which takes water out of the Missouri River. Throughout the building process, there have been many instances where different appropriations have been combined in order to achieve the main objective.
- The approach to environmental health protection is changing these days. The current approach in many places is to go into communities and identify different variables that are affecting people's behaviors. In order to make an improvement in people's personal health, there needs to be a change in their behavior. Sometimes, it is important to engage in other social agency type activities in order to help improve the overall health of people; in fact, this may be necessary to finally affect the drinking water issue.

- When conducting a source water assessment with a particular tribe, four tribal departments should be involved with the process: Rural Water, Water and Sewer, Environment, and Water Resources. These are in addition to the various federal and state agencies involved. As it gets down to the local level, many cross-disciplinary functions are involved.
- Since more interagency and interdepartmental cooperation will be needed in the future, it would be useful to have a database for all individuals involved. The major obstacle will be gathering all the necessary information together into one place.

IV. DRINKING WATER COST AND AFFORDABILITY FOR SMALL SYSTEMS

- When discussing affordability, one must consider the unit involved. One of the units is the household which is the most vulnerable economic unit. There is a relationship between the household and the water system. The water system provides water to a household and the household pays the water system. The cost that this water system faces, the cost of doing business, is a function of many things, such as, does the system use a least-cost solution to the problem of water supply in that particular area, is the water system achieving all possible economies of scale, is it an economically efficient water system, is the system getting its capital as cheaply as it can, and is the system receiving subsidies in the form of grants or low interest loans. Many options exist for the water system to distribute, collect, and recuperate its cost.
- On the household side, the ability to pay these costs is primarily a function of employment and income. When it comes to affordability, these discussions get stuck on the household side of the issue. There is a lot that goes on in the affordability area on the water system side and this is where a capacity development strategy can help.
- Affordability is a function of two things: the price of the water and the ability of people to pay for the water. As price increases, affordability goes down. As the ability to pay is increased, affordability goes up. The threshold of affordability is where price is equal to the ability to pay.
- As with all systems, there is a significant distribution of income of people who receive water from ancillary systems. It is often assumed that everyone receiving water from a small system is poor and will not be able to afford price increases; this is not always true.
- The ability to pay is obviously going to be increased with higher employment, higher income, better paying jobs, progressive rate structures that recover more of the costs from excessive use, and transfer of payments for poorer communities.

- There was some discussion about the use of inclined block rate structure. In theory, for the first block of water use, the household would pay the actual cost. For the next block of water use, the household would pay the actual cost plus a little more. This means that people using excess capacity must pay a lot more for their water. The problem with this theory is that it assumes that poorer people are not using the excess capacity because they will not be watering an acre of grass and they won't have the water-using appliances that larger, wealthier households have. But this doesn't account for the "poor" household that has eight individuals under one roof or the household that cannot afford the repairs to fix leaking faucets.
- When it comes to the ability to pay, there is a problem with prioritization. Some households will choose to pay their cable bills before they pay their water bills because they know it will be several months before their water supply is shut off.
- Consumer expenditure data for 1995 were presented. As the income category goes up, the percentage of income that is spent on housing, transportation, food, and health and personal care products go down. As income goes up, there is more income available to put into insurance and pensions. At the bottom of the income expenditures are electricity, telephone, alcohol and tobacco, and water and other public health services (waste water, waste, and trash). It is striking that twice as much is spent on alcohol and tobacco as on water and other services at all income levels. Part of this may be due to the historical artificially-low price of water.
- Price is an important issue. The factors that increase price are infrastructure repair and replacement, compliance, and demand growth; the factors that decrease price are economies of scale, technology, efficiency, and subsidies.
- There is great economy of scale in the production of water. There is essentially no economy of scale in the distribution of water. There are economies to be realized in common management. These have not been fully explored, but they need to be.
- When one looks at systems, it is often such that large systems have relatively small per-household costs, and small systems have relatively large per-household costs. By putting a number of the small systems under common management, cost differentials can be decreased.
- There are a few key factors that affect affordability for small systems: rate design; economies of scale in both production and management, provision of subsidies in the form of low-interest loans or grants, and appropriate use of regulatory flexibility in regards to technologies, and variances and exemptions.

- The way the water industry is currently structured, it is very inefficient from an economic perspective. It is believed that with correct restructuring, people could get “more bang for their buck.”
- EPA needs to investigate the idea of discretionary expenditures. When looking at affordability, EPA must look at the percentage of discretionary income that will be affected when aiming for a higher quality of life with less health expenditure. EPA needs to determine which expenditures are discretionary, and which ones are not.
- EPA must look not only at the individual’s ability to pay for water, but must also consider the public sector. A community system income may not just come from rate structures, but from property taxes, sales taxes, and fees. A local government may have good reason to fund part of its drinking water costs out of a general fund.
- Besides individual and institutional affordability, when making decisions in the public domain, it is a collective decision, versus the individual decision.
- There are other complexities with the cost of water. For example, the cost of water may be reflected in the rents that people are paying in their homeowners association fee.
- The real action, in terms of affordability, must take place at the state level. The states have the ability to set their own affordability criteria which they will use for purposes of granting variances and exemptions. They can also set affordability criteria for the provision of additional subsidies to disadvantaged communities under the Drinking Water SRF.
- A participant asked if there was any empirical data about small systems banding together or proprietary organizations buying utilities because of economies of scale. The response was that there has not been much work, but there is a tremendous need for this work. The data could help EPA understand communities that do not meet those criteria by discovering what the characteristics of these communities are, the importance of the relative priorities of these communities, and the public challenges these communities face.
- Data from the Rural Water Systems show that people are willing to pay a significant amount of money for a quality product. In some cases, paying for water from rural water systems is cheaper than the alternatives. If lower-income households have poor tasting water, they may add devices to remedy this which may add to the overall cost that they pay for water.
- Water may be delivered below cost for many reasons. One reason may be that certain states take the property tax away and issue bonds. Another reason may be that some local government officials may be well-intentioned, but not necessarily good business decision-

makers when it comes to water systems. Often their decisions are based on the perception of affordability, and their reactions are that water systems need to cut costs. Yet another reason may be that water rates are often viewed almost like a tax, and government officials don't like to increase rates or taxes because they are under intense public scrutiny. There is the perception that water is cheap or free and is readily available; in other words, people are not willing to pay a lot for their water.

- Because of individual decisions, households may be paying a lot more for their water than they should. For example, if an impact fee or a connection fee of \$2,000 is included in a mortgage with an interest rate of 7 percent, the person paying that mortgage may end up paying \$9,000. All the while, this money is not going to the government, it is going to the bank. This is a huge increased cost, added by choice.
- There has been the perception that water supply is a social service, rather than a utility.
- Historically, clean water has made a big difference in public health. Because much of the population today has not lived through a time when water was not so clean, this issue is not obvious. Clean water is now a public health measure that is not perceived by the public.

Thursday, May 6, 1999

I. WELCOME

- Rolly Knoll, the park superintendent at Custer State Park welcomed the participants and provided background information on the park and its facilities.
- New meeting participants, Mr. Pat Banegas—manager of a water and sanitation district in New Mexico, member of the New Mexico Rural Water Association and the National Rural Water Association, and Mr. Garland Erbele—of the State Department of Environment and Natural Resources, were introduced to the group.

II. COMMENTS/PUBLIC PARTICIPATION

- Steven Hensley, representing the American Trucking Association which has approximately 35,000 members nationwide, reviewed the most important points of his written comments which were distributed earlier to the entire group. The majority (70-80 percent) of the trucking companies in the United States are small businesses (less than six trucks) and the rest are large organizations (like the United Parcel Service or Fed-Ex).
- The first concern presented was the lack of options for facilities which will have to close down their motor vehicle waste underground injection control wells. Many businesses

will no longer have the ability to continue operations. The Trucking Association was responding to the two options presented by the workgroup which were: permit with waiver and “melting bay” options, to alleviate pressure on the industry. The first, a permit with a waiver is not a true option for all facilities because of its high cost. The second, the “melting bay” option, for facilities with more than one maintenance bay, involves the physical separation of one bay to be used for vehicles which are wet from precipitation or snow melt. The vehicles will drip dry, then be moved to a maintenance shop. Then, the bay drain will be allowed to remain open. This second option is not cost effective.

- Other possible pre-existing options include the use of public sewers. This option is not possible for a number of facilities which do not have access to a public sewer. Another option, to pump and haul, is also not available to all facilities. It would be beneficial if options were available when the rule comes out in order to allow all facilities to maintain the level of service which they are currently providing.
- The 90-day closure period is inadequate for proper closure of UIC wells. No direct notification is required to the facilities. Thus, notification would fall on the American Trucking Association or public news media to inform all the members. The Association will not be able to shoulder the full responsibility of such a huge task. Publications have a standard three-month turnaround period. Thus, no media notification will occur for at least three months. In addition, contracting for proper well closure including testing, permitting, etc. takes three months at best. When a well is closed, the discharge must go somewhere. The connection to a sewer, considering one is available, could be possible. If one is unavailable, this process could take years considering negotiations, permitting, and construction. Some facilities cannot get connected to public sewers even upon offering to finance it themselves. This program is similar to the UST Program which took 10 years to bring all involved systems into compliance. In considering the above points, the proposed 90-day closure period seems unrealistic.
- Finally, the most acceptable option is a less costly permit option. This could be done with limited monitoring, or reduced monitoring after contamination tests had been completed. This concept is currently being used in the National Pollutant Discharge Elimination System (NPDES) permit system for storm water as well as a permit being used by EPA on some UIC discharge wells within the trucking industry.

III. UIC/SOURCE WATER PROTECTION

- Jim Tripp and L.D. McMullen represented NDWAC in the Underground Injection Control (UIC)/Source Water Protection workgroup. After Bob Blanco provided some background information on Class V wells, each recommendation was considered, discussed and voted on.

A. *Robert Blanco*

- The UIC Program is segmented into five basic classes of wells, for administrative convenience. Class I wells include municipal wells and hazardous waste wells that discharge injected fluids below the lowest underground source of drinking water. Class II include the oil and gas recovery class in which brine water is often injected to force the energy for removal purposes. Mining is the third category and is often associated with salt dome mineral extraction. Class IV wells include hazardous constituents and radioactive wastes that are leaking into source waters or potential source waters. Class V wells include shallow injection wells. Some types of wells included in this group are shallow industrial waste disposal wells (dry cleaners, electroplating operation wastes, funeral homes, and beauty parlors), and deep wells including motor vehicle waste disposal wells, large capacity cesspools, large capacity septic systems, storm water drainage wells, and geothermal wells.
- The current requirements for Class V wells are stated in §1421 of the SDWA which requires the EPA to promulgate regulations to prevent underground injection that endangers drinking water sources, specifically prohibiting the movement of fluids containing contaminants that may cause problems for a public water supply. The Class V program is currently authorized by rule. There are 33 states which have taken primacy for the Class V program thus, by law, these programs meet federal requirements. EPA administers 17 state programs including those on Indian lands. Specific regulations for Class I, II, and III wells exist.
- EPA submitted a report to Congress in 1987 with information compiled by the States addressing the inventory of Class V wells, as well as the contamination potential, and existing state practices and procedures for Class V wells. The Sierra Club sued EPA in about 1994 due to the lack of specific Class V regulations in print, and because authorization by rule was in effect. As a result of a consent decree, EPA proposed a rule in 1995 based upon using existing authority supplemented with a broad management strategy. EPA did not pursue that approach.
- Instead, EPA entered into a modified consent decree with the Sierra Club in 1997. This strategy breaks the wells program into three phases. The phase I requirements, due by October 29, 1999, include regulation for highest risk wells. The three types of Class V wells in phase I are large capacity cesspools, the motor vehicle wells, and industrial waste disposal wells. The second phase of the decree requires EPA to do further research on the remaining classes of wells in the Class V category. This research effort is planned to be completed by September 1999. The final step involves proposing additional regulations as a result of new information determined from Phase II. The final regulations are to be put forth by May 2002.

- The four basic requirements of the Source Water Protection Program are for the States to: compile a source water assessment program; identify the boundaries of source water areas for public water supplies across the state; identify potential contamination; perform a susceptibility analysis and make all information available to the public. The states had until February 1999 and with extensions May 2003, to complete their source water assessment. The proposal states that all new large cesspools will be prohibited and existing ones will be phased out over five years. All waste disposal wells will have to meet standards or health limits at the point of injection. The owner/operator would have to comply with the drinking water standards within 90 days of completion of a local source water assessment program and the state would have the option of giving the owner/operator an additional one-year extension. There are two proposed options for the motor vehicle waste disposal sites. Either they will be banned completely or a ban with a waiver permit issued by the State Director or EPA must be obtained for them to remain open. A waiver permit may be obtained if drinking water standards are met at the point of injection. Again, a 90-day requirement to comply and the option of a 1-year extension to comply. The states have until 2003 to develop their own regulations for Class V wells. If they do not have regulations by then, Federal Class V regulations would apply.
- The information in the proposal seems consistent with current practices for trucking operations and small business in which they have antifreeze and oil and are hooked to sewer systems. The contaminants must be separated, recycled, pretreated, and in some cases filtered and skimmed.
- The magnitude of contamination as a result of Class V wells remains unknown. There is anecdotal information and little other available information. This proposed regulation would only affect those wells in areas which have been identified by each state to be within the source water protection area. The number of facilities which will be affected by this regulation is unknown.
- Educational programs would help to improve the situation. —

B. Discussion and Vote on Recommendations

The Council's two working groups, UIC/Source Water Protection and the Right-To-Know presented their reports. The recommendations from these two groups were passed on by the Council to the Agency are included in these minutes as Attachment 1.

IV. UPDATES ON UPCOMING RULES-BILL DIAMOND

- The NDWAC's role in the review of standards is as follows, "In proposing and promulgating regulations, the Administrator will consult with the Secretary of Health and Human Services and the National Drinking Water Advisory Council." At a minimum NDWAC will review the proposed rule within the comment period. Additional activities which could be applied to certain rules include, regular briefings, meetings and, establishment of workgroups. Stakeholders should be involved in rule-making earlier and more extensively. Regulations should be data and science driven. The rule-making process has been improved over the past few years.
- Suggestions for improving the rule-making process even further include: (1) stakeholder involvement early, often, more extensive; (2) get the rule out in time, not court-order driven; (3) space out implementation for adequate funding; (4) don't use regulations to push science, be reasonable; (5) target rules to highest risk; (6) provide guidance and training to make implementation easier.
- The proposal for Radon will be completed by August of 1999 and promulgation by August of 2000. To date, the processing of this rule has involved early stakeholder involvement, small business consultation, and Health Risk Reduction and Cost Analysis. The current issues, especially small system impacts, will be included in the proposal for comments to be issued in the summer. Congress attempted to control the amount of radon in indoor air, because this pathway is influential to the number of cancer cases in a given area, as well as useful in decreasing radon contamination in the water supply. Comments have been made on the calculation of benefits, in terms of the consideration of cancer, and coverage for non-community systems. The National Academy of Sciences (NAS) supported EPA, although it had issues about the percent of negative effects from two exposure pathways. The group discussed the Multimedia Mitigation Program portion of the rule.
- The most controversial issue with the Arsenic standard is the extent and severity of risk. NAS has been consulted. There will be a stakeholder meeting in the beginning of June and a follow up conference call to discuss various issues, such as occurrence information, recent cost information, treatment information, and the NAS report.
- The Long Term Enhanced Surface Water Treatment Rule proposal target is November 1999. The key elements involved, combined filter effluent limitations, profiling in terms of trying to prevent any backsliding for microbial protection, requirements that all new finished water reservoirs be covered, and the inclusion of Cryptosporidium in ground water under the influence determinations.

- Rule number 4 is the **Filter Backwash Rule** which requires taking the filter sludge, removing impurities, then adding it back into the head of the system so that the water gets treated again as it is recycled. This is not a no-cost rule.
- The **Unregulated Contaminant Monitoring Rule** focuses on collecting additional data for 30 to 35 identified contaminants which are currently unregulated. The development of the National Contaminant Occurrence Data Base is scheduled to be published in the **Federal Register** this summer along with the final Unregulated Contaminant Monitoring Rule. The database will include information primarily from SDWIS, the National Water Information System (NWIS), and from occurrence data collected by USGS. Some important issues which need to be dealt with are data quality and the most useful presentation format for the information. It should be available for use in August 1999 with data from SDWIS and NWIS initially. There was a concern raised about data quality.
- The **Ground Water Rule** proposal is planned for November of 1999. The draft proposal is currently being updated with incorporation of comments. Main components of debate are identifying where the risks are, identifying and prioritizing sensitive systems. The use of viral indicators as a monitoring tool is very helpful to this process. Research is currently being done to develop a cheap and effective coliphage monitoring method; if successful, this will drive down the price of monitoring and detection.
- The **Futures Forum** was created to try and ensure safe drinking water for all in the next 25 years. This can be done by meeting deadlines for the rules, as well as determining the best way to keep these rules useful in the future. This forum is to brainstorm and come up with possible improvements for the process such as achieving goals by changing practices, changing priorities, changing investments, and increasing public credibility. There will be a public meeting in June, in Washington, D.C. to discuss the research done by the Forum.
- There was a discussion on the topic of research and what constituted good science, the optimum size of research projects, and the best combination of private/public efforts. Many participants expressed concern with applying information collected from adult males and extrapolating it into research on females. It was stressed that sensitive and vulnerable populations need to be included in information gathering.

V. PRESENTATION NETTIE MYERS, SECRETARY, SOUTH DAKOTA DEPT. OF ENVIRONMENTAL AND NATURAL RESOURCES

- The State of South Dakota is very rural, and represents a number of very small public water systems. The compliance of drinking water standards in South Dakota may be a bit different than for states which have larger facilities. Of the drinking water systems in

South Dakota, 98.5 percent serve less than 10,000 people; the average number of customers per system is 864. There are 476 community systems, 240 transient non-community systems, 31 non-transient/non-community systems, totaling 747 drinking water systems. Additional support to the systems is provided by the state because the systems are so small. This assistance includes: a web site, annual monitoring schedules, certification training, financial assistance, public notices of violations, and in extreme cases, notices of violation, orders, and lawsuits. After research, the state concluded that there appears to be no public health impact from the sulfates, and thus, no need to regulate. The state has concerns that the new regulations will not substantially improve public health, and thus justify the additional costs. A suggestion of consolidating water systems was presented, so that they are under a public water board or something of that nature. This would place a group of facilities under the jurisdiction of one manager or one operator. Overall compliance rates were 95 percent for MCLs and 94 percent compliance for monitoring.

VI. GROUND WATER REPORT TO CONGRESS-ROBERT BLANCO

- Section 1429 of the SDWA Amendments of 1996 specifies the need for EPA to compile and submit a report to Congress every 3 years. This report needs to detail the current status of ground water regulation in individual states and the country as a whole. The Comprehensive State Ground Water Protection Program (CSGWP) has been implemented to aid states to manage all of the various required ground water activities. A workgroup has been formed combining representatives from the Ground Water Protection Council, The Association of State and Interstate Water Pollution Control Agencies, the Association of State Drinking Water Administrators, USGS, and EPA to compile and write the 1999 ground water update report. The report is scheduled to be ready on or around August 6, 1999.
- The general messages which have been considered to present to Congress were discussed. There is a need for a better definition of the roles and responsibilities at the local, state, and federal levels of government. An improvement of the roles of the involved agencies will allow the industry to move quickly with the pace of technology. The states are very motivated to protect their ground water. A demand remains which exceeds the existing resources in the ground water industry. The measurements used to make a determination whether adequate protection is occurring in ground water, could be dependent on a few factors. The first factor, is the number of states with approved wellhead protection programs and the extent to which they are used in local communities. A suggestion was made to determine whether individual states are protecting recharge areas of aquifers.
- The report will have individual states' perspective on various drinking water quality issues. There will also be a short section using U.S. Geological Survey (USGS) data to

present the situation nationally. Both quality and quantity data will be included in the report. A critical issue which was raised was that different regions and areas present their data in different forms in different databases, making the consolidation of data across the country impossible. A standardized data base and data collection format would be useful. Participants supported the use of recommendations at the end of the report in order to add focus for the readers.

VII. BRIEFING ON GAP ANALYSIS-ROBERT BLANCO

- An effort is currently being made to estimate the gap between costs for safe drinking water, clean water, and infrastructure needs and available funding . A joint EPA/Association of State Drinking Water Administrators (ASDWA) study estimated the gap to be \$83 million in 1999. This is after using funds from the SRF program. There is uncertainty on how much of the set aside funds can be utilized by each state to keep the facilities running. The Council was asked for possible solutions to decrease the gap. Some possible solutions are a simpler rule package, and possibly creating a program like the State Program Priorities. The latter would recognize the gap, and help the states to prioritize which programs to approach in what order.
- The gap analysis could be used to further assist the states. There were suggestions that Congress should increase funding up to the amount which has been authorized. The current authorization level is \$100 million. There is a disparity between funding going into the UIC program (\$10 million) and the drinking water program (\$33.5 originally, now increased to \$90 million). The UIC program has remained at the same funding level.
- The possibility of simplification of the rules was discussed. Small systems need to remain in the spotlight because that is where the biggest workload is. The actual ground water rules may be difficult to simplify, but the processes involved could be streamlined. The importance of public outreach was stressed. This type of public involvement will force Congress to support further research efforts and increase funding.
- It is difficult to predict the effect the new UIC legislation will have on cost gap estimates. The new operator certification requirements could have a substantial effect on each state budget. These new requirements will increase the need for certified operators and the number of required certified operators within each state.

- A participant suggested the use of a treatment with the potential to wipe out a number of different contaminants rather than continuing with our contaminant-by-contaminant approach. This would elevate the need for 75 different analyses on each specific chemical. A discussion ensued noting that if a treatment were available which created ultra clean water, the existing distribution pipe systems would not be adequate for the transport of such ultra clean water.

VIII. NDWAC AGENDA FOR UPCOMING YEAR

- The NDWAC needs to be consulted on all the National Primary Drinking Water regulations. Feedback on the Radon and Arsenic rules will be solicited at the next meeting. The agenda for a fall meeting would include recommendations from the Right-to-Know workgroup, the Health Providers workgroup, the Small Systems workgroup, and the UIC/Source Water workgroup. The Containment Candidate List workgroup will be relaunched after the next meeting. The need for so many workgroups may diminish as the workload decreases.
- Suggested issues to be discussed at the fall meeting include alternative drinking water systems and the general security of drinking water systems. The FDA has been invited to speak at the next meeting. The 2001 budget will also be discussed.
- The Futures Forum will be held on December 16, 1999.
- The NDWAC fall meeting will be held November 2nd through 4th, 1999 in Baltimore, Maryland.
- The Meeting was adjourned at 5:45 p.m.

I certify that, to the best of my knowledge,
the foregoing minutes are complete and
accurate.

L.D. McMullen
L.D. McMullen, Chair, National Drinking
Water Advisory Council

8/23/99
Date

Charlene E. Shaw
Charlene E. Shaw, Designated Federal
Officer, National Drinking Water Advisory
Council

8/24/99
Date

ATTACHMENT 1

NATIONAL DRINKING WATER ADVISORY COUNCIL RECOMMENDATIONS RESULTING FROM A MEETING HELD MAY 5 AND 6, 1999

The National Drinking Water Advisory Council (NDWAC) held its Spring 1999 meeting at the State Game Lodge, Custer State Park, Custer, South Dakota. The major focus of the meeting was to discuss small and Tribal systems, take action on the Underground Injection Control (UIC)/Source Water and Right To Know Working Groups' reports, and to update the Council on the Environmental Protection Agency's (EPA) upcoming regulations. Council recommendations were made on the following:

Right-To-Know Working Group Report

The Council discussed and made recommendations to EPA as follows:

Recommendation 1: Information Dissemination

NDWAC recommends that EPA should make information about Consumer Confidence Reports (CCRs) available to Health Care Providers.

1. Given the October 19, 1999, deadline for the distribution of CCRs by drinking water suppliers (and the fact that some water suppliers are already releasing CCRs), NDWAC strongly recommends that the EPA prepare and disseminate the following information to Health Care providers prior to the CCR release date:
 - General health effects questions and answers
 - General CCR one-pager (why this is important to Health Care Providers)
 - Questions specifically addressing health impacts for vulnerable populations including recommendations for prevention, information for pregnant and nursing women, immunocompromised persons, etc. (See Note 1 below for example)
 - Contaminant fact sheets

Note 1: Examples of questions and answers for persons with special needs:

2. What if I have special health needs?
 - A. People whose immune system is weakened are likely to get infections from bacteria or viruses that may be in your drinking water. Your immune system can be weakened if you:
 - are HIV positive or have AIDS;
 - are an organ transplant recipient;
 - are on chemotherapy for cancer treatment

- are taking steroids for a medical condition (some medical conditions for which steroids may be prescribed include arthritis, lupus, colitis, and some skin disorders).
- B. This information when developed, should go onto its own place on the web site.
 - C. Therefore, the Right to Know Working Group should be given materials to review and comment on in a timely fashion to ensure adhering to the October 19, 1999, deadline.
1. NDWAC recommends that EPA quickly:
 - A. - Inventory upcoming meetings of major health care provider (HCP) organizations and state and local health departments.
 - The Agency should then partner with key members of the NDWAC Right to Know Working Group and the NDWAC Health Care Provider Outreach and Education Working Group to make presentations on the CCR at the meetings and to distribute HCP “tool kits.”
 - B. Work with partner HCP groups and others (CDC, ASTDR) to place very brief notes/updates in journals and newsletters (e.g. JAMA, Pediatrics, MMWR, Harvard and Tufts newsletters, etc.)
 - C. Work with partner organizations who can reach vulnerable populations and the general public (HCPs, vulnerable subpopulation groups, conservation, community groups, etc.) To do active public education on CCRs through national/regional meetings before the October 1999, deadline for CCRs and thereafter.

Recommendation 2: Working with NDWAC’s Health Care Provider Outreach and Education Working Group

NDWAC recommends that the Right to Know Working Group seek comments and advice from the NDWAC Health Care Provider Outreach and Education Working Group

1. NDWAC recommends that messages and materials developed on Consumer Confidence Reports and health effects for the general public, pursuant to recommendations from the NDWAC Right to Know Working Group, be reviewed by the NDWAC Health Care Provider Outreach and Education Working Group.
2. NDWAC recommends that materials prepared for the general public on CCRs be distributed by EPA and its partners to health care providers (to whom the public will be directed with questions). Distribution channels and strategy should be coordinated between the Right to Know Working Group and the Health Care Provider Working Group; therefore, there should be an opportunity for representatives of the two working groups to meet together as soon as possible.

Recommendation 3: Need for Other Than English Materials

NDWAC recommends that EPA should, as quickly as possible, translate basic materials on the CCR into languages such as Spanish, Russian, and Chinese (e.g. languages spoken by sizable numbers of new immigrants and other non-English speakers.)

Recommendation 4: Listing of Non-EPA Sources for Additional Drinking Water Information

NDWAC recommends EPA collect and provide a list of sources for CCR Information, as identified by the NDWAC Right to Know Working Group members. EPA should maintain this bibliography in the Water Resource Center.

Recommendation 5: Completion and Distribution of Recommended Materials

NDWAC recommends that products drafted pursuant to recommendations forwarded after the November 1998 Council meeting be edited in accordance with the Right to Know Working Groups' comments and made available to the public as soon as possible. Products include: "Where To Go For More Information About Your CCR," "It's Your Drinking Water- Get to Know It and Protect It," and "Public Drinking Water Information."

UIC/Source Water Working Group Report

After much discussion the Council made the following recommendations:

ISSUE: The proposed regulation would regulate motor vehicle wells in Source Water Protection Areas for Community Water Systems and NonTransient-NonCommunity Water Systems that use ground water. EPA sought comment in the preamble as to whether or not limiting the rule to the Source Water Protection Areas (SWAPs) was appropriate.

Recommendation 1: The Council recommends that new motor vehicle wells would be regulated on a statewide basis immediately. Regulate existing motor vehicle wells according to a State specific plan which would phase in additional priority areas over time. A State's plan would follow the outline below:

- Apply rule in SWPAs by May 2003
- Add other sensitive areas, as designated by the State, according to a plan and schedule developed by the State.

ISSUE: The proposed regulation provides 90 days for owners and operators of existing wells to comply with the rule. The 90 days would begin after a State has completed the local source water assessment. States could grant a one year extension under certain circumstances.

Recommendation 2: The Council recommends that owners and operators of existing wells should have one year to comply and States should have the authority to grant a one year extension.

ISSUE: If a State does not complete its local assessments by May 2003, the proposal would require that the rule be applied statewide.

Recommendation 3: The Council recommends that the rule apply statewide by January 1, 2004 or 42 months after SWPA approval. If the State completes SWPA, it reverts back to implementation set forth in Recommendation 1.

ISSUE: EPA co-proposed two alternatives for the regulation of motor vehicle wells and the working group proposed a third option.

Recommendation 4: The Council recommends the following:

- Ban new motor vehicle wells
- Ban existing motor vehicle wells in SWPAs
- Ban existing motor vehicle wells in sensitive areas
- Existing wells in other areas, ban with waiver

ISSUE: The proposed use delineates minimum conditions for motor vehicle owners and operators to receive a permit under the waiver option: (1) The permit must include a sampling plan for liquid and sludge; (2) The permit must include operation and maintenance requirements; and (3) To receive a permit, injected fluids must meet MCLs or other health-based standards.

Recommendation 5: The Council recommends that permits must include the following additional provisions:

- A. The owner or operator must sample to determine the baseline quality of ground water.
- B. The permit must specify that injection of waste must not degrade the current quality of the water, or must meet MCLs, whichever is most stringent.
- C. To ensure non-degradation of ground water, the permit must include continued ground water sampling.
- D. The permit must specify, based on the baseline quality of ground water, that no new substances can be introduced.
- E. The permit must specify that MCLs, other health-based standards, or Best Available Technologies (BATs) are utilized, whichever is most stringent.

ISSUE: Regulated entities indicated a need to dispose of snow and ice melt from cars, as well as carwash wastewater, into injection wells. They wanted to know how they can continue this practice without having the well designated as a motor vehicle well.

Recommendation 6: The Council recommends that a well inside a motor vehicle facility could be reclassified if:

- A. The owners and operators follow steps required for well closure prior to well conversion, including:
 - Cleaning all flow lines leading from the sump/dry well discharge point.
 - Testing sludge to determine whether it is hazardous
 - Disposing of sludge properly
- B. Recycling of waste materials (such as oil, solvents & antifreeze) is documented.
- C. Maintenance bays and chemical storage are physically separated from the converted well by a curb or berm
- D. No maintenance activities are conducted in the area of the converted floor drain
- E. No chemicals are stored in the area
- F. Permanent signs are posted indicating well conversion
- G. If contamination is known to have occurred, remediation will be needed.

It is further recommended that the well can receive rainwater, snowmelt and/or carwash waste water.

ISSUE: The proposed regulation required industrial wells in SWPAs to meet MCLs at the point of injection. Industrial wells as defined in the proposed rule as “wells used to inject non-hazardous waste waters generated by industrial, commercial, and service establishments.”

Recommendation 7: The Council recommends the rule be implemented as follows:

- Phase-in the rule to areas beyond the SWPAs using the same approach as with motor vehicle wells in Recommendation 1.

ISSUE: Should exceedences of MCLs and other health-based standards be allowed for motor vehicle and industrial wells?

Recommendations 8: The Council recommends that industrial wells be handled the same as motor vehicle wells as stated in Recommendation #4:

- Ban new industrial wells statewide
- Ban existing industrial wells in SWPA
- Ban existing industrial wells in sensitive areas
- Meet MCLs at the point of injection in all other areas

ISSUE: Should large capacity cesspools be banned in SWPAs?

Recommendation 9: The Council recommends a ban on new and existing large-capacity cesspools statewide.

ISSUE: The proposed rule requires owners and operators in Direct Implementation (Primacy) States to (1) Notify the UIC Program Director of their intent to close their well at least 30 days prior to closure, and (2) submit new inventory information to EPA if they convert their well in a SWPA (new conversions to cesspools and motor vehicle wells would be prohibited).

Recommendation 10: The Council recommends that pre-closure notification and inventory requirements for Primacy States be required.

ISSUE: The proposed rule seeks to differentiate wells at industrial and motor vehicle facilities that accept industrial waste from wells that receive primarily storm water runoff. Storm water wells are not subject to this regulation.

Recommendation 11: The Council recommends that storm water wells at industrial sites be separate from industrial wells. Use a list similar to the no-exposure checklist (Attach to identify which wells are storm water wells and would not be subject to this rule. The list should be in guidance.

ISSUE: The proposed rule did not identify the point of injection, the place compliance would be measured. For septic systems, the point of injection is currently considered to be before the waste enters the tank.

Recommendation 12: The Council recommends that the point of injection be defined by the UIC Director.

ISSUE: Funeral homes are currently included in the industrial well category. In March 1998, the National Funeral Directors' Association submitted a report requesting that these wells be placed in the "other industrial" category currently included in the Class V Study and not subject to the proposed rule. Should funeral homes be kept within the industrial well category?

Recommendation 13: The Council recommends that funeral homes should be kept within the industrial well category, as currently proposed.

ISSUE: What topics should be addressed and how should the membership change in future meetings of the working group?

Recommendation 14: The Council recommends that in addition to the general Class V and Source Water issues in the mission, the working group continue to assist the Council in advising EPA on:

- A. Making recommendations concerning technical/programmatic guidance to implement the final Class V Underground Injection Control program regulation.
- B. Establishing a strategy for assisting States and communities with the completion of their drinking water source assessments and their transition to prevention programs. Elements of the strategy would include: "alignment" with other PWSS policies, regulations and

programs; determination of technical needs including economical, yet effective, methods for identifying sources of contaminants found by PWSs at the treatment facility; means for institutionalizing stakeholder partnerships, particularly between upstream water users and downstream drinking water consumers; support from other water and environmental protection program to address point and nonpoint sources of drinking water contaminants; incorporation into smart growth initiatives, etc.

- C. Publishing a manual on the necessary elements of drinking water source protection programs to assist States and communities in developing and implementing such programs, particularly including public involvement, land-use management and contingency planning approaches.
- D. Creating technical methods that will facilitate inclusion of drinking water source assessment findings into the updating of the unified watershed assessments.

Furthermore, the Council recommends that the revised working group expand membership to include farmers and other up-stream businesses along with local watershed-based environmental organizations.

CHECKLIST FOR NO-EXPOSURE CERTIFICATION FOR NPDES STORM WATER PERMITTING

Instructions - EPA Form XXX-X

Who May File a No-Exposure Certification

not know your site's latitude and longitude, call 1-800-USA-MAPS).

In accordance with the Clean Water Act, all industrial facilities that discharge storm water meeting the definition of storm water associated with industrial activity must apply for coverage under a National Pollutant Discharge Elimination System (NPDES) permit. However, permit coverage is not required at facilities that can certify a "no-exposure" condition exists. This document may be used to certify that at the facility described herein, a condition of no-exposure exists. This certification is under the auspices of the EPA only and must be made at least once every five years. Should the industrial activity change such that a condition of no-exposure no longer exists, this certification is no longer valid and coverage under an NPDES storm water permit must be sought.

Definition of No-Exposure

No-exposure exists at an industrial facility when all industrial materials or activities, including, but not limited to, material handling equipment, industrial machinery, raw materials, intermediate products, by-products or waste products, however packaged, are protected by a storm-resistant shelter so as not to be exposed to rain, snow, snowmelt, or runoff. Adequately maintained mobile equipment (trucks, automobiles, trailers or other such general purpose vehicles found at the industrial site which themselves are not industrial machinery or material handling equipment and which are not leaking contaminants or are not otherwise a source of industrial pollutants) may be exposed to precipitation or runoff.

Completing The Form

You must type or print in the spaces provided only. One form must be completed for each facility or site for which you are seeking to certify no-exposure.

Section I. Facility Operator Information

Provide the legal name (no colloquial names) of the person, firm, public organization, or any other entity that operates the facility or site described in this certification. The name of the operator may or may not be the same as the name of the facility. The operator is the legal entity that controls the facility's operation, rather than the plant or site manager. Enter the complete address (P.O. Box numbers OK) and telephone number of the operator.

Section II. Facility/Site Location Information

Enter the facility's or site's official or legal name and complete street address (directional address OK if no street address exists). Do not provide a P.O. Box number as the street address. In addition, provide the latitude and longitude of the facility to the nearest 15 seconds of the approximate center of the site (if you do

Section III. Exposure Checklist

Circle "Yes" or "No" as appropriate to describe conditions at your facility. For the purposes of this document, "material" is defined as any raw material, intermediate product, finished product, by-product or waste product, however packaged. "Material handling activities", by definition, include storage, loading and/or unloading, transportation or conveyance of a raw material, intermediate product, finished product, by-product or waste product.

Interpretation of Results

If you answer "Yes" to ANY of questions a. through r. in Section III, a potential for exposure exists at your site and you cannot certify a no-exposure condition exists. You must obtain (or already have) coverage under an NPDES Storm Water permit. After obtaining permit coverage, you can institute modifications to eliminate the potential for a discharge of storm water exposed to industrial activity, and then claim no-exposure and terminate coverage under the existing permit.

Section IV. Certification

Federal statutes provide for severe penalties for submitting false information on this application form. Federal regulations require this application to be signed as follows:

For a corporation: by a responsible corporate officer, which means: (i) president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions, or (ii) the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars) if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures [note, wording subject to change as a result of NPDES streamlining, rnd. II];

For a partnership or sole proprietorship: by a general partner or the proprietor; or

For a municipality, State, Federal, or other public facility: by either a principal executive officer or ranking elected official.

Where To File This Form

Mail the completed form to:

XXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXX
U.S. Environmental Protection Agency (4203)
401 M St. SW
Washington, DC 20460

CHECKLIST FOR NO-EXPOSURE CERTIFICATION (Continued)

I. Facility Operator Information

Name:		Phone:																																																							
Address:																																																									
City:		State:	Zip Code:																																																						
II. Facility/Site Location Information																																																									
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County Name:	Latitude:	Longitude:																																																							
III. Exposure Checklist																																																									
<p>Are any of the following items exposed to precipitation, now or in the foreseeable future, AND is the drainage from these areas discharged from the site to surface waters of the US or to a municipal separate storm sewer system?</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%; padding: 5px;">a. vehicles used in material handling (excepting adequately maintained mobile equipment)</td> <td style="width: 10%; text-align: center; padding: 5px;">Yes</td> <td style="width: 10%; text-align: center; padding: 5px;">No</td> </tr> <tr> <td style="padding: 5px;">b. industrial machinery or equipment</td> <td style="text-align: center; padding: 5px;">Yes</td> <td style="text-align: center; padding: 5px;">No</td> </tr> <tr> <td style="padding: 5px;">c. residue from the cleaning of machinery or equipment</td> <td style="text-align: center; padding: 5px;">Yes</td> <td style="text-align: center; padding: 5px;">No</td> </tr> <tr> <td style="padding: 5px;">d. materials associated with vehicular maintenance, cleaning or fueling</td> <td style="text-align: center; padding: 5px;">Yes</td> <td style="text-align: center; padding: 5px;">No</td> </tr> <tr> <td style="padding: 5px;">e. materials or products during loading/unloading or transporting activities</td> <td style="text-align: center; padding: 5px;">Yes</td> <td style="text-align: center; padding: 5px;">No</td> </tr> <tr> <td style="padding: 5px;">f. materials or products at uncovered loading docks</td> <td style="text-align: center; padding: 5px;">Yes</td> <td style="text-align: center; padding: 5px;">No</td> </tr> <tr> <td style="padding: 5px;">g. materials or products stored outdoors (excepting products intended for outside use, e.g., cars)</td> <td style="text-align: center; padding: 5px;">Yes</td> <td style="text-align: center; padding: 5px;">No</td> </tr> <tr> <td style="padding: 5px;">h. materials or products handled/stored on roads or railways owned or maintained by the certifier</td> <td style="text-align: center; padding: 5px;">Yes</td> <td style="text-align: center; padding: 5px;">No</td> </tr> <tr> <td style="padding: 5px;">i. materials or spill/leak residues accumulated in storm water inlets</td> <td style="text-align: center; padding: 5px;">Yes</td> <td style="text-align: center; padding: 5px;">No</td> </tr> <tr> <td style="padding: 5px;">j. residuals on the ground from spills/leaks (including subsurface residuals from percolation)</td> <td style="text-align: center; padding: 5px;">Yes</td> <td style="text-align: center; padding: 5px;">No</td> </tr> <tr> <td style="padding: 5px;">k. materials contained in open or deteriorated storage tanks/drums/containers</td> <td style="text-align: center; padding: 5px;">Yes</td> <td style="text-align: center; padding: 5px;">No</td> </tr> <tr> <td style="padding: 5px;">l. industrial activities conducted outdoors</td> <td style="text-align: center; padding: 5px;">Yes</td> <td style="text-align: center; padding: 5px;">No</td> </tr> <tr> <td style="padding: 5px;">m. materials or products from past outdoor industrial activity</td> <td style="text-align: center; padding: 5px;">Yes</td> <td style="text-align: center; padding: 5px;">No</td> </tr> <tr> <td style="padding: 5px;">n. waste material</td> <td style="text-align: center; padding: 5px;">Yes</td> <td style="text-align: center; padding: 5px;">No</td> </tr> <tr> <td style="padding: 5px;">o. process wastewater disposed of outdoors (unless otherwise permitted)</td> <td style="text-align: center; padding: 5px;">Yes</td> <td style="text-align: center; padding: 5px;">No</td> </tr> <tr> <td style="padding: 5px;">p. particulate matter from roof stacks/vents not otherwise regulated (i.e., under an air quality control permit) and in quantities detectable in the storm water outflow.</td> <td style="text-align: center; padding: 5px;">Yes</td> <td style="text-align: center; padding: 5px;">No</td> </tr> <tr> <td style="padding: 5px;">q. visible deposits of residuals near roof or side vents</td> <td style="text-align: center; padding: 5px;">Yes</td> <td style="text-align: center; padding: 5px;">No</td> </tr> <tr> <td style="padding: 5px;">r. spills/leaks resulting from maintenance of stacks or air exhaust systems</td> <td style="text-align: center; padding: 5px;">Yes</td> <td style="text-align: center; padding: 5px;">No</td> </tr> </table>				a. vehicles used in material handling (excepting adequately maintained mobile equipment)	Yes	No	b. industrial machinery or equipment	Yes	No	c. residue from the cleaning of machinery or equipment	Yes	No	d. materials associated with vehicular maintenance, cleaning or fueling	Yes	No	e. materials or products during loading/unloading or transporting activities	Yes	No	f. materials or products at uncovered loading docks	Yes	No	g. materials or products stored outdoors (excepting products intended for outside use, e.g., cars)	Yes	No	h. materials or products handled/stored on roads or railways owned or maintained by the certifier	Yes	No	i. materials or spill/leak residues accumulated in storm water inlets	Yes	No	j. residuals on the ground from spills/leaks (including subsurface residuals from percolation)	Yes	No	k. materials contained in open or deteriorated storage tanks/drums/containers	Yes	No	l. industrial activities conducted outdoors	Yes	No	m. materials or products from past outdoor industrial activity	Yes	No	n. waste material	Yes	No	o. process wastewater disposed of outdoors (unless otherwise permitted)	Yes	No	p. particulate matter from roof stacks/vents not otherwise regulated (i.e., under an air quality control permit) and in quantities detectable in the storm water outflow.	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Yes No

Have you paved or roofed over a large, formerly exposed, pervious area in order to qualify for no-exposure?
Please indicate approximately how much area was paved or roofed over from the choices below. *(Completing this question does not influence your qualifying for the no exposure exemption and is for informational purposes.)*

none

less than one acre

one to five acres

more than five acres

CHECKLIST FOR NO-EXPOSURE CERTIFICATION (Continued)

IV. Certification

I certify that there are no discharges of storm water contaminated by exposure to industrial activities or materials from the facility identified in this document.

I understand that I am obligated to make this certification once every five years to the NPDES permitting authority and, if requested, to the municipality (or other local government) in which this facility is located providing the facility discharges storm water into the local municipal separate storm sewer system (MS4). I understand that I must seek coverage under an NPDES storm water permit prior to any point-source discharge of exposed storm water from the facility. I understand that I must allow the permitting authority, or municipality where the discharge is into the MS4, to perform inspections to confirm the condition of no-exposure and to make such inspection reports publicly available upon request.

Additionally, I certify under penalty of law this document was prepared under my direction and that qualified personnel gathered and evaluated the information submitted. Based upon my knowledge of the personnel directly involved in gathering the information, the information is true, accurate and complete. I am aware there are significant penalties for providing false information, including the possibility of fine and imprisonment.

Signed: _____

Date: _____

Print Name and Title: _____