State of Idaho
DEPARTMENT OF WATER RESOURCES
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ADMINISTRATOR'S MEMORANDUM

APPLICATION PROCESSING MEMORANDUM NO. 61

TO: WATER ALLOCATION BUREAU, ADJUDICATION BUREAU AND REGIONAL OFFICES

FROM: NORM YOUNG

SUBJECT: WATER RIGHT FILING REQUIREMENTS FOR INDUSTRIAL WASTE WATER USE AND TREATMENT (INTERIM POLICY)

DATE: September 27, 1996

PURPOSE OF MEMORANDUM

Because much of southern Idaho is included within areas covered by moratoriums or other designations that prevent or limit approval of new applications to appropriate water, water users are seeking innovative ways of using water for new and expanded projects. The waste water from industrial processes is one source of water for such uses. In addition, more restrictive water quality requirements are causing industrial water users to implement land disposal methods, create wetlands, capture and reuse waste water, and to provide for on-site containment of waste water.

The administrative requirements addressing the use of industrial waste water have not been clearly set forth. Direction is needed to guide staff and water users concerning the types of applications, if any, that need to be made, the criteria for considering such applications, and conditions that may be appropriate for approved applications. This memorandum addresses the water right filing requirements for the treatment of waste water and the reuse of waste water from industrial processes.

This memorandum provides interim guidance pending additional determination of policy and requirements through changes to law, adoption of rules or court rulings. Because a basic premise of this memorandum is that the consumptive use authorized by a water right for industrial purposes can be 100% of the amount diverted, depending on particular factual issues, this memorandum does not apply to waste water from uses which could not be 100% consumptive.

For purposes of this memorandum "waste water" is effluent, treated or untreated, from authorized beneficial uses under an industrial or other potentially 100% consumptive water right, prior to its being returned to a public water source. Waste water may contain solid waste and other contaminates, but for purposes of this memorandum it is a liquid, fluid enough to flow in an open channel or unpressurized pipeline.

AN EXAMPLE OF A TYPICAL SITUATION

An industrial user has for many years disposed of waste water diverted from the aquifer under a licensed right through a series of ponds which evaporate part of the water with the remainder seeping to the regional aquifer. In this instance, DEQ is requiring that water not be allowed to seep to the aquifer and has suggested land application. The land available for disposing of the waste is in sagebrush and does not have an irrigation water right. Each gallon of waste water land applied will have to be diluted with 3 to 4 gallons of fresh water. The net depletion from the aquifer will be increased 400 af/yr by the new water treatment requirements. Are water right related approvals required from IDWR to authorize surface disposal of the waste water?

LEGAL PRINCIPLES

The continuum of options for considering this mattter is bounded by two principles. At one end of the continuum, the treatment necessary to comply with water quality requirements may be a part of the diversion and beneficial use authorized under the industrial water right. If the industrial right is a fully consumptive right, then as water quality requirements require a change in treatment, the amount of the water consumed can be increased. However, the diversion rate, annual volume diverted, and season of use established under the right cannot be increased. Any fresh water needed to dilute the waste water must be within the quantity elements of the industrial right or be covered by another water right.

At the other end of the continuum, the industrial right may be construed to authorize only the beneficial use established and historically used under the industrial right. Any increase in consumptive use (or other element of the right) would require a new water right. Depending upon the availability of water for appropriation, this may require the holder of the industrial right to mitigate injury to other users or obtain an existing right to cover the expanded consumption.

A brief review of the legal and administrative precedents (see Phil Rassier's attached memorandum) indicates that the existing law in Idaho does not provide strong guidance as to whether the land application of industrial waste water initiated to comply with water quality requirements should be considered to come within the original purpose of use of the industrial right, whether it should be treated as an added beneficial use of the water requiring a new water right, or whether some intermediate consideration should be used.

APPLICATION OF PRINCIPLES

IDWR will apply the following policies until or unless further guidance is provided:

1. Waste water treatment necessary to meet adopted state water quality requirements will be considered to be a part of the use authorized under the industrial right. The method of treatment must be "reasonable." IDWR will consider a treatment method to be reasonable if it is in accordance with best management practices recognized by Idaho Division of Environmental Quality, the U.S. Environmental Protection Agency, or other responsible state or federal agency.

2. Consumptive use can increase up to the amount determined to be consistent with the original water right as reasonably necessary to meet treatment requirements. Diversion rate, annual volume diverted, and season of use cannot exceed the permitted, licensed or decreed amounts for these parameters.

3. If the treatment method for industrial waste water is changed to land application on cultivated fields or any other method that beneficially uses the water, the industrial right must be changed to include the new use. This will require a transfer application to be filed, processed and approved in accordance with Section 42-222, Idaho Code, to include a new location for a waste treatment practice, such as land application, and other conditions of approval that may be necessary to prevent injury to other valid water rights.

4. For new uses of industrial waste water that are not necessary to meet water quality requirements, an application for permit to appropriate water should be filed as required by Section 42-107, Idaho Code.

5. Fresh water required to dilute the waste water for treatments such as land application must be diverted in accordance with a water right. This can be the industrial right if adequate rate and volume are available under the right. If not, another right must be provided. In areas where new allocations are limited or prevented by moratorium orders or other designations, establishment of a new right will require appropriate provisions to mitigate the depletion from the source.

Attachment: P. Rassier's Memorandum

MEMORANDUM

TO: Norm Young

FROM: Phil Rassier PJR

RE: Land Application of Industrial Effluent

DATE: September 5, 1996

You have asked for legal guidance regarding the water right implications created when a private industrial water user elects to land apply its industrial effluent because the company is required by environmental constraints to prohibit its waste water effluent from continuing to reach a public water source. The water rights issue created when an industrial water user adopts a land-application method of disposing of its effluent is whether the change results in an impermissible enlargement of its underlying water right by increasing the amount of water consumptively used. Previously, some percent of the water in the effluent was returned to a public stream or allowed to percolate into the ground water. The goal of land application of the effluent is that it all will be absorbed by the growing crops or evaporated to the atmosphere. The use of water under the industrial water right thus becomes 100 percent consumptive where before it was not.

The case law addressing this issue appears to deal almost exclusively with the disposal of municipal effluent. In the case of municipalities, the majority view is that the proper disposal of effluent from waste treatment facilities comes within the parameters of the beneficial use of a municipal water right. One of the most frequently cited cases is *Arizona Public Service Co. v. Long,* 773 P.2d 988 (Ariz. 1989). In this case, the owners of downstream junior water rights that had historically used the effluent for irrigation following upstream discharge sued the City of Phoenix alleging that the city had no right to contract with a utility for the transport and use of the effluent in the cooling towers of a nuclear power plant. The court upheld the contract, holding that sewage effluent was neither surface water nor ground water, but was simply a noxious by-product which the city must dispose of without endangering the public health and without violating any federal or state pollution laws. In reaching it decision, the Arizona Court quoted from a much earlier Wyoming decision which upheld the sale by a city of effluent discharged directly into the buyer's ditch, but also held that effluent discharged into a stream became public water subject to appropriation. *Wyoming Hereford Ranch v. Hammond Packing Co.,* 236 P.2d 764 (Wy. 1925). The *Arizona Public Service* case generally holds that cities may put their sewage effluent to any reasonable use that would allow them to maximize their use of the appropriated water and dispose of it in an economically feasible manner. Beck, *Waters and Water Rights*, § 16.04(c)(6) (1991).

In an even more recent Arizona case, the court upheld a city contract for the disposal of its effluent noting that the effluent from the city of Bisbee delivered to Phelps Dodge for copper leaching operations was not useable for drinking water, irrigation, or fire protection purposes and

that it was only useful for the leaching operation. The city contract had been challenged by the local water utility that otherwise would have provided water for the leaching operation.

Other cases reviewed have reached results similar to that in Arizona for municipal entities without as much emphasis on the distinct character of effluent. In a more recent Wyoming case, the court held that the City of Roswell could recapture its sewage effluent before it is discharged as waste or drainage and reuse it for municipal purposes. *Reynolds v. City of Roswell*, 654 P.2d 537 (Wy. 1982). The court characterized sewage effluent as artificial water and therefore primarily private and subject to beneficial use by the owner and developer thereof because treated sewage effluent depends upon the acts of man.

In the early Colorado case of *Pulaski Irrigation Ditch Co., et al v. City of Trinidad, et al*,203 P. 681 (Colo. 1922), the court held that where a city had voluntarily chosen to treat its effluent in a manner that produced surplus water, it did not have the right to sell its purified water. The court went on to recognize, however, that where there is no other practicable method of disposing of the sewage, public policy might permit its disposal by the evaporation of the water. 203 P. at 683. A more recent Colorado case, *Metropolitan Denver Sewage Disposal District No. 1 v. Farmers Reservoir & Irrigation Co.*, 499 P.2d 1190 (Colo. 1972) merely holds that changes in the points of return of waste water to a stream are not governed by the same rules as changes of points of diversion and that there is no vested right in downstream appropriators to maintenance of the same point of return of irrigation waste water or effluent from a municipality or a sanitation district. In *Barrack v. City of Lafayette,* 829 P.2d 424 (Colo. App. 1992), the court held that impossibility of performance relieved the city from any obligation to deliver effluent to plaintiffs after state regulation made such delivery illegal. The court concluded that plaintiffs had no property right to the delivery of untreated water that could no longer be legally delivered.

In 1991, Nevada and Oregon each enacted legislation addressing the reuse of effluent or reclaimed water. The Oregon statute defines "reclaimed water" as "water that has been used for municipal purposes and after such use has been treated in a sewage treatment system and that, as a result of treatment, is suitable for a direct beneficial purpose or a controlled use that could not otherwise occur. OR. REV. STAT. § 537.131. The new legislation requires any person who is using or intends to use reclaimed water to file a Reclaimed Water Registration form with the Oregon Water Resources Department. The statute provides the circumstances under which potentially affected water users must be notified of the proposal and of their rights of preference to the use of the water under certain circumstances. The Nevada statute, by contrast, merely provides a statement of legislature policy encouraging and promoting the use of effluent, where that use is not contrary to the public health, safety or welfare, and where that use does not interfere with federal obligations to deliver water of the Colorado River. N.R.S. § 533.024.

The review of existing case law provides significant guidance with respect to the handling

of municipal effluent. None of the reported cases I have reviewed, however, address whether the same or some different analysis should be applied when the effluent is produced by a private industrial user rather than by a municipality. This issue was raised but not addressed in *Wyoming, et al v. Husky Oil Company*, 575 P.2d 262 (Wy. 1978). The case arose as an action for declaratory relief by Husky Oil seeking a determination that its plan to impound and evaporate effluent water rather than continue to discharge it to a natural stream was not subject to the jurisdiction of the State Engineer and did not infringe upon any rights of downstream water appropriators. The majority of the Court voted to remand the case to the trial court for a full factual trial and to join other indispensable parties to the action. A lengthy dissent, however, proceeded to analyze the merits of the case. The dissent characterized the proposed change as an expansion of the original industrial water right for the refining process to now include the additional use of pollution abatement. The dissent concluded that Husky should be required to apply to the State Engineer for a permit for the additional use.

Before the Department, we have the precedence of issuing waste water permit nos. 29-7437 and 29-7431 to the J.R. Simplot Company and to the City of Pocatello respectively in 1978. The two permits were for the use of waste water from the city's sewage treatment plant and from the Simplot Fertilizer Plant at Pocatello. The waste water from both facilities was previously discharged to the Portneuf River. The applications specified 3,124 acres of land on which the water would be used for irrigation. Some 1,613 of these acres were not owned by the city or the J.R. Simplot Company but were covered by user agreements with the owners of the land. The decision does not address any concern that may have existed about discontinuing the practice of discharging the effluent to the river. The concerns with the project revolved more around the health and safety implications of the project.

Existing law in Idaho does not provide strong guidance as to whether the land application of industrial effluent initiated to comply with water quality requirements should be considered to come within the original purpose of use of the industrial water right, or should be treated as an added beneficial use of the water requiring a new water right to be obtained or established. If the Department determines that a new separate water right should be required, the option of allowing the user to appropriate the industrial waste water for the new purpose of pollution abatement through land application of the effluent should be considered. This approach is consistent with that taken by the Department in 1978 with the City of Pocatello and J. R. Simplot filings.

Please let me know if you desire further review or discussion of these issues.