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## FISCAL IMPACT REPORT

ORIGINAL DATE 2/25/09

SPONSOR Ingle LAST UPDATED \_\_\_\_\_ HB \_\_\_\_\_

SHORT TITLE Dept. Of Agriculture For Water Quality SB 479

ANALYST Haug

### APPROPRIATION (dollars in thousands)

Appropriation		Recurring or Non-Rec	Fund Affected
FY09	FY10		
	None		

(Parenthesis ( ) Indicate Expenditure Decreases)

### ESTIMATED ADDITIONAL OPERATING BUDGET IMPACT (dollars in thousands)

	FY09	FY10	FY11	3 Year Total Cost	Recurring or Non-Rec	Fund Affected
<b>Total</b>		\$1.0	\$1.0			

(Parenthesis ( ) Indicate Expenditure Decreases)

\*See Fiscal Implications

### SOURCES OF INFORMATION

LFC Files

#### Responses Received From

Environment Department (ED)

Attorney General (AGO)

Department of Agriculture (NMDA)

### SUMMARY

#### Synopsis of Bill

Senate Bill 479 would amend NMSA 1978, Section 74-6-4 to grant the New Mexico Department of Agriculture, and not the New Mexico Environment Department, the authority to issue water-related permits to the “agricultural industry.” The bill defines the agricultural industry as “dairy farmers, milk producers, other livestock production and feeding facilities and farm crop production facilities.” The bill requires permitting fees charged to the agricultural industry to be paid to the “Department” instead of the Water Quality Management Fund.

## FISCAL IMPLICATIONS

The ED states that:

Ground Water Discharge permit fees collected from the agricultural industry would be remitted to the Department of Agriculture instead of to the Environment Department. The estimated average annual fee collections from the agricultural industry are approximately \$100,000. Fees pay approximately 20 percent of the cost of issuing and overseeing discharge permits, abatement plans and other water quality protection activities at agricultural facilities.

The costs of implementing an effective dairy permitting program far exceed the amount of collected fees. The Department of Agriculture would likely need at a minimum 7 scientists, 1 professional civil engineer, and 1 attorney in addition to their current inspection staff to handle the tasks of an effective and comprehensive ground and surface water quality protection program.

The Department of Agriculture will need to duplicate the expertise already available in the Environment Department in order to assume the responsibilities that would be transferred by this bill. There would be no FTE reduction or cost savings gained by this transfer, but costs of state government would likely increase due to the duplication of staff resources.

Additionally the Department of Agriculture will need to duplicate financial and administrative services for the assessment and collection of fees, administration of the extensive public notice and participation requirements required by the Water Quality Act and its attendant regulations. The Department of Agriculture will also have to duplicate technical staff resources and associated equipment and other costs that are required to administer an effective ground water contamination abatement program to ensure remediation of the extensive contamination caused by dairies in New Mexico.

NMDA asserts that:

NMDA would require additional FTEs with expertise in water quality management, water quality permitting, and water quality regulation. The depth and breadth of program requirements to manage water quality regulations for the agriculture industry is not clear. NMDA would require sufficient time to create and implement such a program. At this time NMDA estimates it would require at least four FTEs as a starting point for program implementation. NMDA may require at least one staff attorney as well. At this time NMDA anticipates it may need expertise in the following disciplines; civil engineer, geohydrologist, and permitting specialist. Travel (including vehicles), equipment, supplies, water testing and laboratory expenses, salary and fringe benefits would need to be estimated. NMDA has field staff throughout New Mexico who fulfill current statutory and related regulatory program requirements. Therefore, NMDA has existing protocols and standard operating procedures in place that would be used as a model for this program.

NMDA would require the equivalent number of FTEs that work for the program at the New Mexico environment department (NMED). In addition NMDA would need to receive the appropriate proportion of federal grants from the United States environmental protection agency (EPA) to run this portion of the water quality act.

Nothing in the bill speaks to the allocation of a portion of EPA grants currently made to ED.

## **SIGNIFICANT ISSUES**

The NMDA comments that:

NMDA would need to work with the NMED and the New Mexico water quality control commission to implement the new sections of the water quality act. A transition from NMED to NMDA would need to be designed in order to move functions currently under the purview of NMED. NMDA and NMED would be required to work out the details to manage the permitting and regulatory processes in a manner that would minimize, if not eliminate, duplication of effort. NMDA does not have information regarding the specific number of FTEs that NMED currently employs to carryout this portion of the program, but estimates NMED has at least four FTEs.

The water quality control commission will continue to set water quality standards for state waters which will provide both oversight and consistency in the state's water quality management program. EPA will also continue to provide review and oversight of the state's water quality standards pursuant to federal law.

Efforts by NMDA and NMED would be delegated to the appropriate lead agency in a manner that would avoid duplication of effort. NMDA is the lead state agency for pesticide use and management for New Mexico and interacts with its federal partner, EPA, to carry out its mandates per state and federal regulatory requirements. NMDA would be able to enter into additional cooperative agreements in order to meet its obligations under the amended water quality act.

NMDA has worked cooperatively and collaboratively with NMED over the last several years on a number of projects that include the non-native phreatophyte/watershed management plan, a recent watershed forum, the outstanding national resource water designation, the river ecosystem restoration initiative, and other water related issues. In addition NMDA sits on the water quality control commission and has staff well versed in the state's water quality act and management thereof.

NMDA also possesses unique access to academic expertise through its relationship to New Mexico state university. Scientific resources would be available to NMDA.

NMDA has expert knowledge of the agricultural industry in the state including the permitting and regulatory process to which it is subject. NMDA has established relationships with other federal partners including the United States agriculture department, natural resources conservation service, forest service, bureau of land management, etc., which all bring additional resources and knowledge to bear with respect to water issues in New Mexico (including water quality, fate and transport issues, point source and nonpoint source pollution, concentrated nutrient management plans, environmental mitigation, etc.).

The ED states that:

SB 479 transfers authority of the Environment Department to regulate water quality issues related to the agriculture industry to the Department of Agriculture. These responsibilities include issuance of ground water protection permits, abatement of ground water pollution, assuring compliance with state surface and ground water quality standards, and certification of federal Clean Water Act permits for National Pollutant Discharge Elimination System (NPDES) permits, and dredge and fill permits as required by the Environmental Protection Agency and the U.S. Corps of Engineers.

Permitting, federal permit certification and abatement of pollution activities for agricultural facilities that would be transferred from the Environment Department to the Department of Agriculture include approximately 220 dairies, 12 chili processing facilities, 6 cheese and milk processing facilities and several concentrated animal feeding operations such as feedlots. The number of regulated dairies fluctuates as some facilities exist only on paper and are in the process of being built or will be built in the future.

Consistency in permitting and regulatory oversight is necessary to ensure fair and equal treatment of all industries that fall under the jurisdiction of the Water Quality Act. SB 479 would transfer the water quality permitting and regulatory oversight duties of the Environment Department which relate to the agricultural industry to the Department of Agriculture. This could lead to inconsistency in water quality protection. This change would also result in duplication of effort because each agency would have to maintain a group of technical and administrative staff with all of the qualifications necessary to administer the responsibilities discussed in “Other Substantive Issues”.

The types of contaminants present in dairy wastewater in high concentrations include ammonia, other nitrogen species, chloride and total dissolved solids. As nitrogen species come in contact with oxygen (in lagoons or as wastewater moves through the subsurface) they convert to nitrate which poses a public health threat at concentrations above 10 parts per million (ppm). Typical dairy wastewater contains concentrations of nitrogen which range from 200 to 500 ppm. (For comparison, human waste contains approximately 40 to 60 ppm of nitrogen species)

Approximately 65 percent of dairies have caused exceedances of New Mexico's ground water quality standards. Dairy operations are responsible for nitrate contamination of a number of private domestic water supply wells in the state where no public water supply is available. The highest concentrations of nitrate in ground water in the state are attributable to dairy operations. (~200 ppm, 20 times the state's health-based ground water standard)

Once in ground water, nitrate is highly mobile and does not naturally degrade in most situations. Nitrate contamination in ground water persists beneath most dairies long after their environmental practices have improved. Therefore proactive pollution prevention strategies are necessary in order to protect ground water quality at dairies. Appropriate ground water pollution prevention strategies for these types of facilities are important since approximately 90% of the population of New Mexico relies on ground water as a source of drinking water.

Many dairy operations are near highly populated areas, especially along the middle and lower Rio Grande valley and near Roswell, and the Environment Department receives many complaints each year regarding the impact of dairies on these communities.

Many dairies are located in environmentally sensitive areas (areas where protectable ground water is less than 100 feet deep, areas where ground water is between 100 and 200 feet deep and subsurface sediments are predominately sands and gravels, or areas near rivers, streams and riparian zones).

Most dairies discharge their wastewater to concrete-lined sumps for solids settling, then to wastewater lagoons for storage and evaporation, and from the lagoons to land application of crops and/or rangeland. Some dairies do not have wastewater lagoons and directly land apply their wastewater from the solids settling sump.

Currently, one of the duties of the Water Quality Control Commission is to "assign responsibility for administering its regulations to constituent agencies" (74-6-4.E). SB 479 would seek to assume the Water Quality Control Commission's authority to delegate authority to constituent agencies as that authority relates to the agricultural industry. Other constituent agencies with responsibilities under the Water Quality Act have been assigned those duties by the Water Quality Control Commission through a "Delegation of Responsibilities" by the commission and include the Environment Department, and the Oil Conservation Division and the Parks and Recreation Division of the Energy, Minerals and Natural Resources Department. In each of these cases the delegated agency already had responsibility for protection of water quality for industries within their jurisdiction (the Oil and Gas Act and the Boating Act). The Water Quality Control Commission has responsibility to "assure adequate coverage and prevent duplication of effort" and to "hear and decide disputes between constituent agencies as to jurisdiction". It is unclear how the commission can retain these responsibilities if its delegation authority relating to the agricultural industry has been assumed by the legislature. No request has been made by the dairy industry to the Water Quality Control Commission to transfer responsibilities for agricultural facilities from the Environment Department to the Department of Agriculture.

The proposed revisions to Section 74-6-4E create another significant conflict. Under the current statute, the Environment Department provides all technical services to the Water Quality Control Commission and does all certification of permits (which, under the federal Clean Water Act, is the responsibility of the commission) for the commission. The responsibility for certification of permits is not in any other instance delegated to another agency, even where the Water Quality Control Commission has delegated some water quality regulation to another constituent agency, as it has to the Oil Conservation Division. Yet this provision states that the Department of Agriculture would be responsible for certification of permits relating to the agricultural industry. That means that, under the federal Clean Water Act, the Department of Agriculture would have to make 'highly technical determinations whether the permit would comply with the state Water Quality Act, the water quality standards, and the state water quality management plan, even though the Environment Department administers all of those requirements and makes those determinations in all other circumstances.

The Environment Department is part of the executive branch of state government and is under the direct authority of the Governor. The Department of Agriculture is part of New Mexico State University and reports to the regents of that university.

## **TECHNICAL ISSUES**

The AGO comments that the new language on Page 12, lines 22-25 reads: “that fees collected by the New Mexico department of agriculture as the constituent agency for the agricultural industry pursuant to Section 3 of this 2009 act shall be remitted to the department.” Is the “department” the New Mexico Department of Agriculture or New Mexico Environment Department? The language “Section 3 of this 2009 act” will likely have to be changed by future legislatures to reflect the correct section citation.

## **OTHER SUBSTANTIVE ISSUES**

The ED comments further that:

HB 479 is similar in scope to a bill introduced and debated in the 1997 legislative session. At that time the legislature did not pass the proposed legislation but requested that the Environment Department develop a program to more specifically focus on dairy and other regulated agricultural facilities. The Environment Department was responsive to this request and created an agricultural team with expertise and education in soil science, agronomy, horticulture, biology, and animal science.

Additionally the dairy team coordinates with Environment Department scientists who have expertise in hydrology, geology, environmental chemistry, civil engineering and other water quality protection disciplines. These disciplines are necessary for a comprehensive program to address the various aspects of agricultural discharges including evaluation of the subsurface hydrogeologic conditions, calculations to verify that the construction methods and capacity of holding structures is adequate to fully contain the planned discharge volume, analysis to ensure infiltration and crop nitrogen uptake rates in land application areas are adequate to prevent downward migration of contaminants, verification that the proposed method of treatment can achieve the specified results, contaminant transport and mixing calculations to verify that contaminants entering the subsurface will not cause an exceedance of ground water standards wastewater management, stormwater management, ground water monitoring, and contaminant transport.

The Environment Department has also worked with the dairy industry to develop and implement new policies which would more effectively protect water quality. The Environment Department created a dairy technical working group in 1997 that has addressed concerns of industry regarding consistency and duplication including creating a unified guidance document for the federal and state agencies that oversee water quality issues at dairies (U.S.EPA, National Resource Conservation Service, New Mexico State University’s Cooperative Extension Service, the department of agriculture). Other issues that have been address by the technical working group include development and standardization of nutrient management plans.

Most recently in 2008 the Environment Department engaged in numerous meetings with the Dairy Industry Work group to negotiate permit conditions for dairies. As a result of these meetings, the Environment Department modified a number of dairy permit conditions in response to the practical considerations and economic concerns of dairy owners.

In a recent dairy permit hearing the Department of Agriculture testified that it does not review the water quality protection activities at dairies, but only oversees such activities as proper handling and storage for milk products and antibiotic use and storage.

GH/mt:mc