BEFORE THE DEPARTMENT OF WATER RESOURCES

OF THE STATE OF IDAHO

IN THE MATTER OF APPLICATION FOR TRANSFER NO. 5639 IN THE NAME OF K & W DAIRY	))))	**PRELIMINARY ORDER ON REMAND**

On April 9, 2001, the hearing officer for the Department of Water Resources ("Department") issued a SECOND AMENDED PRELIMINARY ORDER in connection with the above captioned matter. The Preliminary Order became a FINAL ORDER on April 23, 2001. The protestants subsequently sought judicial review of the Final Order and on November 30, 2001, the Fifth Judicial District Court ("Court") issued an ORDER ON JUDICIAL REVIEW remanding the matter to the Department for further proceedings and findings on the issue of odor.

On April 11, 2002, the hearing officer for the Department conducted the hearing on remand as directed by the Court. Based upon the evidence presented in the matter and the hearing officer's understanding of the law, the hearing officer enters the following Findings of Fact, Conclusions of Law and Preliminary Order On Remand:

FINDINGS OF FACT

1. The Snake River Basin Adjudication ("SRBA") District Court has issued partial decrees for the following ground water rights to be used for irrigation from April 1 to October 31 each year:

Ident. No.	Priority	Rate
36-02087A	01-23-50	4.31 cfs
36-02113A	03-12-51	2.23
36-02161A	01-11-52	1.31
36-02289D	12-02-55	0.36
36-02311A	11-23-56	2.68
36-02500A	07-18-61	1.78
36-02614A	06-07-65	3.66
36-07307A	02-26-73	2.78
36-07362A	08-02-73	4.45
36-07477A	05-28-75	1.43

36-07606A	02-04-76	1.34
36-07779A	02-22-78	4.19
36-07832A	12-11-78	0.36
36-10225A	05-01-85	1.27
36-15169A	12-11-69	12.46

Limited to: 42.52 cfs

2. On August 31, 2000, K&W Dairy ("applicant") filed Application for Transfer No. 5639 ("application") with the Department proposing to change the point of diversion, nature of use, period of use and place of use of portions of the above listed water rights. The parts of the rights sought to be transferred are as follows:

Ident. No.	Priority	Rate
36-02087	01-23-50	0.19 cfs
36-02113	03-12-51	0.10
36-02161	01-11-52	0.06
36-02289	12-02-55	0.02
36-02311	11-23-56	0.12
36-02500	07-18-61	0.08
36-02614	06-07-65	0.16
36-07307	02-26-73	0.13
36-07362	08-02-73	0.20
36-07477	05-28-75	0.06
36-07606	02-04-76	0.06
36-07779	02-22-78	0.19
36-07832	12-11-78	0.02
36-10225	05-01-85	0.06
36-15169	12-11-69	0.56

Limited to: 1.92 cfs

The water rights involved in the application are a proportionate share of the rights appurtenant to land that the applicant has purchased.

3. The application proposes to change 1.92 cfs and 295.2 AF of the rights shown in Finding of Fact No. 1 to year-round stockwater and commercial use to be diverted from four (4) wells located in the SE1/4NE1/4 Section 32, T8S, R15E, B.M., Gooding County, for use at a proposed dairy in the NE1/4 Section 32, T8S, R15E, B.M. The applicant proposes to dry up approximately 98.4 acres in the NE 1/4 to construct the dairy site for 5,750 milking cows and 840 non-milking cattle.

(Note: The "1/4" designations will be omitted from subsequent legal descriptions

in this order).

4. The Department published notice of the application that was subsequently protested by Lee Halper and Bill Chisholm.

5. Issues identified by the protestants are as follows:

a. The proposed changes will injure other water rights.
b. The proposed changes will constitute an enlargement in use of the original right.
c. The proposed changes are not in the local public interest.
d. The proposed changes are not consistent with the conservation of water resources within the state of Idaho.

6. Exhibits premarked, offered or accepted as a part of the record are as follows:

a. Applicant's Exhibit 1 - Vicinity Map of K & W Dairy
b. Applicant's Exhibit 2 - Vicinity Map of K & W Dairy (Enlargement of Applicant's Exhibit 1)
c. Applicant's Exhibit 3 - Well Interference Analysis
d. Applicant's Exhibit 4 - Water Use Worksheet
e. Applicant's Exhibit 5 - Analysis of Water Right Transfer to Dairy
f. Applicant's Exhibit 6 - Analysis of Nutrient Management Practices
g. Applicant's Exhibit 7 - NRCS Soils Data and Soils Maps
h. Applicant's Exhibit 8 - Copy of letter dated June 13, 2000 to Robert E. Williams from Ronald L. Belliston
i. Applicant's Exhibit 9 - Gooding County New CAFO Siting Permit
j. Applicant's Exhibit 10 - Letter dated June 14, 2000 from Larson Magic Farms
k. Applicant's Exhibit 11- Letter dated June 14, 2000 from Chris Pratt
l. Applicant's Exhibit 12 - Aerial Map of Dairy Site and Surrounding Area (small map and larger map of same area)
m. Applicant's Exhibit 13 - Schematic - Liquid Waste Handling Map - Boer Dairy
n. Applicant's Exhibit 14 - Boer - Niagra Dairy System Comparison
o. Applicant's Exhibit 15 - Letter dated December 21, 2001 to Adrian Boer from Marv Patten together with a list of odor nuisance complaints in Gooding and Jerome Counties for 1999, 2000 and 2001
p. Applicant's Exhibit 16 - NOT OFFERED
q. Applicant's Exhibit 17 - House Bill No. 726
r. Applicant's Exhibit 18 - IDAPA 02.04.16 - Rules Governing Agricultural Odor Management
s. Applicant's Exhibit 19 - Natural Resources Conservation Service

Conservation Practice Standard - Nutrient Management Code 590; NRCS Conservation Practice Standard - Composting Facility Code 317; ASAE EP379.2 Nov 97 - Control of Manure Odors

t. Applicant's Exhibit 20 - Wind Direction Data - Jerome Golf Club
u. Protestant's Exhibit A - Draft Report titled Cumulative Impacts Assessment, Box Canyon Area of the Eastern Snake River Plain, Idaho prepared by Idaho Division of Environmental Quality - June 2000
v. Protestant's Exhibit B - Literature Review of the Health Effects Associated with the Inhalation of Hydrogen Sulfide, Idaho Department of Environmental Quality, by Pat McGavran, June 19, 2001
w. Protestant's Exhibit C - NOT ADMITTED
x. Protestant's Exhibit D - NOT ADMITTED
y. Protestant's Exhibit E - NOT ADMITTED
z. Protestant's Exhibit F - NOT ADMITTED
aa. Protestant's Exhibit G - NOT ADMITTED
ab. Protestant's Exhibit H - Large Map - Magic Valley Dairies active on 5-22-01, Idaho Department of Agriculture
ac. Protestant's Exhibit I - USGS Quadrangle Sheets showing Gooding County CAFO Registration information
ad. Protestant's Exhibit J - Part of Gooding County Ordinance No. 70 - (2 pages)
ae. Protestant's Exhibit K - 2001 CAFO Registrations
af. Protestant's Exhibit L - NOT OFFERED
ag. Protestant's Exhibit M - Minimum Risk Levels (MRLs) for Hazardous Substances - ATSDR
ah. Protestant's Exhibit N - NOT ADMITTED
ai. Protestant's Exhibit O - NOT ADMITTED
aj. Protestant's Exhibit P - NOT ADMITTED
ak. Protestant's Exhibit Q - NOT ADMITTED

7. The applicant owns about 1,100 acres located approximately 11 miles west and 1 mile south of Jerome where the new dairy is proposed. The southwestern corner of the property is located about 1/8 of a mile from the rim of the Snake River canyon and the site for the dairy is located about 1 mile north of the canyon rim.

8. The applicant operates two other dairies in Magic Valley, one with 1,150 cows and the other with 950 cows.

9. Tremblay Consulting of Jerome, Idaho prepared a Nutrient Management Plan for the proposed dairy utilizing a "flush system" of waste removal which plan has been approved by the Idaho Department of Agriculture (See Applicant=s Exhibit 6). The applicant, however, has not revised the Nutrient Management Plan to utilize a "scrape

system" for removal of dairy waste from the holding pens and alleys but would have to revise the plan as part of the proposed dairy operation.

10. To control odor from the proposed dairy, the applicant proposes to compost solid waste in order to keep the bacterial action on the solid waste as aerobic. The compost site is planned about 4 miles east of the dairy site on land owned by the applicant. The applicant plans to land-apply liquid waste during the summer months, emptying the lagoon at least every week to prevent the generation of odors through anaerobic bacterial action and to store the liquid waste during the winter while the land is frozen. The proposed pivot location for land application of the waste is within the NW1/4 and SE1/4 of Section 32 and SW1/4 section 33, T8S, R15E, B.M. These tracts are within 1/2 mile to 3/4 mile from the rim of the Snake River canyon. The applicant claimed that he would not generate odor beyond the boundaries of the 1,100 acre dairy site but later stated that his "intent" was to keep odors within the ownership boundaries of the proposed dairy site. The applicant, however, did not provide specific facts to show that the applicant would likely be successful in accomplishing the "intent" and did not offer a design that would allow evaluation of the proposed odor management plan.

11. The applicant's expert witness stated that there are some dairy facilities in California that successfully follow the odor control measures he recommends for the applicant's dairy, but that he was aware of only one dairy in Idaho that practiced odor control similar to what he has recommended for the applicant. He also stated he has not designed odor control measures for dairies as large as that of the applicant and that workable plans may need to be site specific to be effective.

12. On October 1, 1999, the Gooding County Planning and Zoning Commission approved a New CAFO Siting Permit for 6,600 animal units at the proposed dairy site. (See Applicant=s Exhibit 9).

13. Testimony conflicted on the direction the wind blows in the vicinity of the proposed dairy, but most witnesses testified that the wind sometimes blows from any direction. In addition, colder air tends to sink into the Snake River canyon together with odors that may be in the sinking air.

14. About 90 percent of the feed needed for the dairy cattle will be purchased locally. Annual expenses associated with the dairy are estimated to be in excess of $15 million generating about $92 million dollars of economic activity in the area.

15. The site will be graded and berms will be constructed to prevent wastewater from entering a canal owned by Northside Canal Company, which crosses the southern part of the applicant’s property.

16. The applicant plans to dispose of liquid waste and some of the composted solid waste on the dairy site although 60% to 70% of the solid waste will be removed from the dairy site in a composted form and hauled down the Clear Lakes grade.

17. The applicant proposes mechanical scraping for cleaning solid waste from the holding pens and alleys.

18. The applicant proposes to conserve water by using the same water for cooling, stockwater, and for washdown water in the milking parlor of the new dairy.

19. The rate of diversion, consumptive use and total volume of water diverted under Transfer No. 5639 will not be larger after the transfer than before the transfer. (See Applicant=s Exhibit 5).

20. The applicant proposes to cease using ground water for irrigation on 98.4 acres located as follows:

T8S, R15E, B.M., Section 32

NENE	-	9.2 acres
NWNE	-	9.2 acres
SWNE	-	40.0 acres
SENE	-	40.0 acres
TOTAL	-	98.4 acres

21. Using an average annual pumping rate of 0.41 cfs, which is the continuous diversion rate to provide the required annual volume of water for Transfer No. 5639, and a pumping period of 80 days, the estimated drawdown in a well 1/4 mile distant from the dairy wells is 0.07 feet. Using a maximum pumping rate of 1.92 cfs for 80 days, the estimated drawdown in a well 1/4 mile distant from the dairy wells is 0.34 feet. (See Applicant=s Exhibit 3).

22. There are two monitoring wells in the vicinity of the K & W Dairy. One well monitored as part of the INEEL Oversite Program is located about 2 mile southwest of the dairy site and shows the following nitrate concentrations: 1.7 mg/l (1989), 1.6 mg/l (1990), 1.9 mg/l (1996) and 1.8 mg/l (2000). The other well monitored as part of the Statewide Program is located about 2 mile easterly of the dairy site and shows the following nitrate concentrations: 1.8 mg/l (1991), 2.1 mg/l (1995), and 2.5 mg/l (1999).

23. The protestants are concerned about the cumulative impact of dairies in the general vicinity of the applicant=s dairy and believe there is a great potential for the dairy operations to adversely affect water quality, air quality and the overall environment. The protestants believe the application is not in the local public interest.

24. The hearing record shows that the proposal of the applicant will enhance the economy of the area by creating jobs and generating economic activity through the purchase of cattle feed and other needs of the dairy.

25. The hearing record contains substantial evidence to show that the proposal of the applicant, will not injure other water rights, will not enlarge the use of water, and is consistent with the conservation of water resources within the state of Idaho.

26. Several homeowners who live near the Clear Lakes Country Club located approximately 3.5 miles southwesterly from the proposed dairy site described that odors from existing dairies in the area decrease their quality of life, especially when the wind is relatively calm during summer afternoons and evenings and limit outdoor activities. The homeowners described that intolerable smells occur from 1 to 2 times a week. The homeowners also stated that real estate activity and sales of homes and property in the Clear Lakes Country Club area was slow and was directly related to objectionable odors from dairies in the area. Steve Katz, president of the Buhl Chamber of Commerce and president of the Rural Magic Valley Economic Development Association, representing 3 counties and 13 cities, testified that economic development activities, such as attracting new business ventures to the area, are adversely affected by dairy odors which have become increasingly more noticeable each year. He specifically stated that he did not drive prospective business representatives down Bob Barton Road because of the undesirable dairy odors.

27. There presently are about 97,000 dairy cattle in Gooding County with about 72,000 being located within an approximate 5-mile radius north of the applicant's proposed dairy site. This general area was also described in the hearing as a triangular area beginning along the Niagara-Wendell road to Wendell, then to Hagerman and then south along the Snake River to the Niagara-Wendell road. (See Protestant's Exhibit I).

28. Witness David Erickson testified that within the Snake River canyon located just one mile south of the proposed dairy is a reach of public access to the canyon ("reach") that begins at Clear Lakes and extends upstream more than 6 miles. He testified that the reach is probably the best public access to the canyon from Hagerman to Burley being a distance of about 70 river miles. The reach is used for upland bird hunting, waterfowl hunting, hiking, photography and wildlife viewing. An existing equestrian trail extends through most of the reach that also includes the Magic Springs Wildlife Management Area and Niagara Springs State Park. Part of the proposed dairy site is located as close as 1/2 mile north of the reach and is about midway through the reach. He described that existing dairy odors came from the north toward the Snake River canyon and that he first started noticing odors in the early 1990's.

29. Protestant Bill Chisholm lives about 7 miles west of the proposed dairy site and testified that existing dairy odors near the Bob Barton Highway located along the north boundary of the proposed dairy site are so bad that he drives an alternate route from his home to Wendell. The thrust of his testimony was that proposed projects should not be considered without consideration of the "cumulative impact" an additional dairy may have on the odors in a given area.

ANALYSIS

The Order On Judicial Review issued by Judge Wood on November 30, 2001, provides guidance relative to issues the Department should consider under the local public interest criterion for applications to change the use of water rights to dairy purposes. Such detailed guidance has not previously been available to the Department.

In the present matter, the Court held that the applicant needs to provide "evidence as to <u>what</u> level the undesirable odor will be <u>reduced</u>." Stated another way, the Court stated that a showing is needed of "what is reasonable vs unreasonable (acceptable vs unacceptable) level of odor and that this proposed dairy, of this size, with the system (mechanical) authorized, will be in this reasonable (acceptable) category." The judge specifically stated, "What is required is a finding that the odors which are emitted are at a level no greater than what is allowed to satisfy the local public interest standard. …the applicant has this burden."

Judge Wood also stated that the cumulative impact of the dairy must be taken into account or "one is not attributing much substance to the legal impact of the local public interest."

The applicant claimed that there will not be any odor generated by the 6,600 cow dairy that would leave the applicant's property and later stated that it was the applicant's "intent" that no odor will go beyond the boundaries of the applicant's property. The applicant, however, did not make a showing of "what is reasonable vs unreasonable (acceptable vs unacceptable) level of odor from the proposed dairy." The applicant also did not provide a design for review and analysis by the hearing officer or by any of the protestants. Statements of the applicant's expert that the planned odor control measures will work does not mean that the measures actually <u>will</u> work. Certainly, a zero discharge of odor from the proposed dairy operation would meet the "reasonable level" of odor standard, but the likelihood of success of zero discharge of odor from the dairy facility has not been demonstrated by technical information submitted by the applicant.

Odor originates from solid dairy waste, liquid dairy waste and from the cows themselves. Considering the wind and air movement, it is unlikely that an additional 6,600 cows will not contribute to the cumulative effect of undesirable odors in the area. The odor control measures proposed by the applicant are basically untested in Idaho

and may or may not work effectively. The Department must have technical information to assure that the odor control measures for a dairy of the size proposed by the applicant in the location proposed by the applicant will be successful. Without a "track record" that the measures will definitely work, the risk to the local public interest of approving the application is not justified. The applicant did not show that the proposed measures definitely will work and will not aggravate the existing odor problem in the vicinity of the proposed dairy.

The hearing officer has weighed potential detriment and decrease in the quality of life to neighbors living and recreating in the vicinity of the dairy if the measures do not work with approval of the transfer to authorize construction of the new 6,600 cow dairy. Additional odor will contribute to the odor problem that protestants already complain of in the vicinity of the proposed dairy. It is highly probable that the dairy will generate odor and that odor from the dairy will leave the dairy site. The applicant has not met the burden to show that odor from the dairy operation will not cumulatively cause a dairy odor problem in the area.

CONCLUSIONS OF LAW

1. Section 42-222, Idaho Code, provides in pertinent part as follows:

> The director of the department of water resources shall examine all the evidence and available information and shall approve the change in whole, or in part, or upon conditions, provided no other water rights are injured thereby, the change does not constitute an enlargement in use of the original right, and the change is consistent with the conservation of water resources within the state of Idaho and is in the local public interest as defined in section 42-203A(5), Idaho Code.

2. The applicant carries the burden of coming forward with evidence that the proposed change will not injure other water right holders, that it will not constitute an enlargement of the use and will be consistent with principles of conservation of the water of the state of Idaho.

3. Both the applicant and the protestant have the responsibility of coming forward with evidence regarding matters of public interest of which they are each most cognizant.

4. The applicant has the ultimate burden of persuasion for all of the criteria of Section 42-222, Idaho Code.

5. The increase in nitrate concentration in the observation wells has not been specifically associated with any particular source. The observed concentrations are below the Maximum Contaminant Level for public drinking water established at 10 mg/l

by the Environmental Protection Agency.

6. The proposed changes will not injure other water rights.

7. The proposed changes do not constitute an enlargement in use of the original right.

8. Mechanical scraping of solid waste from alleys will reduce the amount of undesirable odor emanating from a dairy operation as compared with flushing of the alleys. The applicant has not submitted a revised Nutrient Management Plan to the Idaho Department of Agriculture to utilize a "scrape system" for the removal of dairy waste from the alleys and has not provided technical information to show that the mechanical method will control odors so that the local public interest will not be adversely affected.

9. Gooding County has granted approval for the jurisdictional elements for operation of the dairy within its jurisdiction.

10. The proposed changes are consistent with the conservation of water resources within the state of Idaho.

11. The proposed dairy is the closest dairy of its size to the 6-mile reach of public access to the Snake River canyon described in Finding of Fact No. 28. The dairy would further degrade aesthetic and recreational activities if odors in addition to the existing odors from other dairies were generated by the applicant's dairy. (See protestant's Exhibit 12).

12. Having evaluated and weighed the evidence and testimony relative to the applicant's proposed odor management methods and the local public interest, the proposed dairy operation most likely will contribute to the cumulative effect of undesirable odors in the vicinity of the dairy and, hence, is not in the local public interest.

13. The Department should not approve the application.

ORDER

IT IS THEREFORE ORDERED that Application for Transfer No. 5639 in the name of K & W Dairy is **DENIED.**

Signed this _____ day of June, 2002.

_____
L. GLEN SAXTON, P.E.
Hearing Officer

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that on this _____ day of June, 2002, the foregoing PRELIMINARY ORDER ON REMAND was served by placing a copy of the same in the United States Mail, properly addressed and postage prepaid to the following:

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_____
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