

MEMORANDUM

DATE: May 20, 2009

TO: Water Right File 36-16156

FROM: Shelley W. Keen *ShW*

RE: Mitigation may not be required

To meet federal safe drinking water requirements, Clear Springs Foods, Inc., (Clear Springs) filed Application 36-16156 to appropriate 2.0 cfs of ground water for industrial and domestic purposes. Clear Springs subsequently agreed to limit the proposed appropriation to 1.34 cfs. The proposed diversion will provide an alternative to the spring water diverted pursuant to Right 36-7201 for industrial use. In a 1972 agreement with another water user, Clear Springs agreed to limit the consumptive use under Right 36-7201 to 0.5 cfs.

In its application, Clear Springs proposes to divert ground water from a well located in the ESPA moratorium area. Normally, mitigation is required for new appropriations of ground water for consumptive uses in the ESPA. The purpose of the mitigation requirement is to protect the flow of water in the Snake River and tributary springs for senior surface water right holders. Mitigation may not be necessary, however, based on the following three-step analysis.

1. Spring Flows

The applicant's engineering consultant, Charles E. Brockway, reported in a January 24, 2007, letter that pumping water from the applicant's well has "no significant impact to the spring flows in the immediate vicinity of the new well." Brockway also reported the well bore penetrates "a significant amount of clay layers" that impede vertical water movement, and the first open screen interval in the well is 250 feet below ground surface. The well driller's report indicates the first screen starts at 240 feet below ground surface. Based on Brockway's report, mitigation is not required to protect spring flows as long as the well is maintained so that water is not diverted from any water bearing zone closer to the surface than 240 feet. Because changing the point of diversion within the same 40-acre tract could result in a significant change in ground surface elevation, I recommend restricting the applicant's ability to replace the well without permission from IDWR. I propose a condition saying:

The authorized point of diversion for this right is a well with tag no. D0023615. This right authorizes the diversion of ground water from geologic formations located at least 240 feet below ground surface. The right holder shall receive approval from the Department prior to changing the point of diversion to a different well.

2. Snake River Flows

Pumping from the new well may reduce flows in the Snake River. An ESPA model analysis should be prepared to determine which river reaches will be depleted by the proposed diversion. Because return flows are likely to accrue via surface flow to only one river reach, the model analysis should look at the entire diversion volume, not just the consumptive use, as depletionary. Mitigation should be required for any river reach where depletion exceeds 2.0 AF per trimester and the depletion in that reach is more than 10% of the total depletion to all reaches. If the only reach meeting these criteria is the reach where the source for Right 36-7201 is tributary, then mitigation still may not be required, as described below.

To prevent impacts to the reach of the river where the source for Right 36-7201 is tributary, the applicant can limit the combined diversion and usage under Right 36-7201 and the proposed use to the amount authorized to be diverted pursuant to Right 36-7201. The combined limit would ensure that the two rights are operated as alternatives to each other, not as additive to each other. Because the two water rights are not additive, the total impact of the two rights to the Snake River would not increase. In this circumstance, I would recommend the following condition:

Rights 36-7201 and 36-16156 when combined shall not exceed a total diversion rate of 2.00 cfs for industrial and domestic purposes.

3. Consumption

To avoid mitigation, the applicant must also avoid consuming water in connection with the proposed use. Although Clear Springs established a consumptive use limit of 0.5 cfs for Right 36-7201 in the 1972 agreement, there is no consumptive use limit stated on the water right itself. The agreement is separate from the water right and is not administered by the State of Idaho. The agreement could be terminated by the parties without state involvement. Theoretically, then, Clear Springs could intensify its industrial use of water under Right 36-7201 up to 100% consumption. Therefore, as long as the diversion and use authorized in connection with the new application is alternative to the use under Right 36-7201, and not in addition to it, overall consumptive use will not increase.

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JUL 17 2006

DEPARTMENT OF WATER RESOURCES

DEPT. OF WATER RESOURCES
SOUTHERN REGION

WELL DRILLER'S REPORT JUL 13 2006

1. WELL TAG NO. D 0023615
DRILLING PERMIT NO. 294502
Other IDWR No. Well ID - 365439

2. OWNER:
Name Clear Springs Foods, Inc
Address P.O. Box 212
City Buhl State ID Zip 83316

3. LOCATION OF WELL by legal description:

Sketch map location must agree with written location.

N
W
E
S

Twp. 9 North ☐ or South ☒
Rge. 14 East ☒ or West ☐
Sec. 2 1/4 NW 1/4 SE 1/4
Gov't Lot County Granting
Lat. Long.
Address of Well Site Clearlake Rd
City Buhl

(Give at least name of road + distance to road or landmark)

Lt. Blk. Sub. Name

4. USE:

☐ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☒ Other Test

5. TYPE OF WORK check all that apply (Replacement etc.)

☒ New Well ☐ Modify ☐ Abandonment ☐ Other

6. DRILL METHOD

☐ Air Rotary ☒ Cable ☐ Mud Rotary ☐ Other

7. SEALING PROCEDURES

SEAL/FILTER PACK			AMOUNT		METHOD
Material	From	To	Sacks or Pounds		
portland cement	0	20	3,300 lbs	dry pour	
portland cement	20	60	6,000 lbs	dry pour	

Was drive shoe used? ☒ N Shoe Depth(s) 392 - cut off and
Was drive shoe seal tested? ☐ Y ☒ N None left in hole

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
16	1	237	325	steel	☒	☐	☒	☐
12	237	240	325	steel	☐	☒	☒	☐
12	240	292	325	steel	☐	☒	☒	☐

Length of Headpipe Length of Tailpipe 18'

9. PERFORATIONS/SCREENS

Perforations.

Method

Screens

Screen Type 304 stainless steel

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
240	260	40		12	stainless	☐	☒
292	297	80		12	stainless	☐	☒

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WESTERN REGION

11. WELL TESTS:

☒ Pump ☐ Bailer ☐ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
650	128	232	26 Hour

Water Temp. 62.2 Bottom hole temp. 66.6

Water Quality test or comments:

12. LITHOLOGIC LOG: (Describe repairs or abandonment) Water

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
24	0	1	gravel fill		☒
	1	2	top soil		☒
	2	7	soil - sandy brown		☒
	7	12	black basalt - broken		☒
	12	36	black basalt - fractured with blue clay		☒
	36	51	black basalt		☒
	51	57	brown clay - sandy		☒
24	57	60	brown clay		☒
16	60	81	brown clay - water in seams		☒
	81	87	brown clay - sandy - water in seams		☒
	87	105	gray clay		☒
	105	109	brown clay		☒
	109	124	brown clay with coarse sand		☒
	124	131	brown clay		☒
	131	149	gray clay - sandy		☒
	149	174	gray sand - dry		☒
	174	203	gray clay		☒
	203	218	gray clay - thin sand layers		☒
	218	238	gray clay - tight & sticky		☒
	238	245	gray clay		☒
	245	251	black sand & gray clay layers		☒
	251	260	per gravel - black sand - gray clay layers		☒
	260	275	black sandy clay & sand layers		☒
	275	294	gray clay - some sand streaks		☒
	294	295	per gravel		☒
	295	319	gray clay		☒
	319	326	per gravel & gray clay layers		☒
	326	330	fractured basalt & hard gray clay		☒
	330	339	brown clay		☒
	339	351	per gravel & coarse sand - dry		☒
	351	363	brown clay		☒
	363	370	brown clay - sandy		☒
16	370	399	brown clay - coarse & sandy		☒

Completed Depth 400 (Measurable)
Date: Started 10-28-05 Completed 6-12-06

13. DRILLER'S CERTIFICATION

I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Company Name Dushan Well Drilling Firm No. 399

Firm Official Date 7-8-06

Driller or Operator Date

(Sign once if Firm Official & Operator)

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

104'6" ft. below ground Artesian pressure lb.
Depth flow encountered ft. Describe access port or control devices: steel plate on top of 12" casing

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#2 JUL 17 2006 IDAHO DEPARTMENT OF WATER RESOURCES

DEPT. OF WATER RESOURCES
SOUTHERN REGION

WELL DRILLER'S REPORT

1. WELL TAG NO. D 0023615

DRILLING PERMIT NO. 29 45 02

Other IDWR No. Well ID 365439

2. OWNER:

Name Clear Springs Foods, Inc

Address P.O. Box 712

City Buhl State ID Zip 83316

3. LOCATION OF WELL by legal description:

Sketch map, location must agree with written location.

N

W E S

Twp. 9 North ☐ or South ☒
Rge. 14 East ☒ or West ☐
Sec. 2 1/4 NW 1/4 SE 1/4
Gov't Lot 10 County Gooding
Lat: Long:
Address of Well Site Clear Lake Rd
City Buhl

(Give at least name of road + Distance to Road or Landmark)

Lt. Blk. Sub. Name

4. USE:

☐ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☒ Other Test

5. TYPE OF WORK check all that apply (Replacement etc.)

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7. SEALING PROCEDURES

SEAL/FILTER PACK			AMOUNT		METHOD
Material	From	To	Sacks or Pounds		
best quality grout	0	20	3300 lbs	dry pour	
39 bentonite chips	20	60	6,000 lbs	dry pour	

Was drive shoe used? ☒ N Shoe Depth(s) 392 - cut off and

Was drive shoe seal tested? ☐ Y ☒ N ☒ left in hole

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
12	297	317	375	steel	☐	☒	☒	☐
12	332	377	375	steel	☐	☒	☒	☐
38	382	400	375	steel	☐	☒	☒	☐

Length of Headpipe Length of Tailpipe 18'

9. PERFORATIONS/SCREENS

Perforations

Method

Screen Type 304 stainless steel

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
317	332	80		12	stainless	☐	☒
317	382	80		12	stainless	☐	☒

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

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control devices: steel plate on top of 12' casing

11. WELL TESTS:

☐ Pump ☐ Bailor

Office Use Only

Inspected by

Twp Rge Sec

1/4 1/4 1/4

Lat: Long:

☐ Air ☐ Flowing Artesian

Yield gal/min.	Drawdown	Pumping Level	Time
650	128	232	26 Hour

Water Temp. 62.2

Bottom hole temp. 66.6

Water Quality test or comments:

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Water
16	379	381	pea gravel	☒
	381	398	brown clay-sandy	☒
	398	414	brown clay	☒
	414	415	coarse black/brown sand	☒
	415	427	gray clay-imbbed with black sand	☒
16	427	432	black basalt	☒

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Company Name: Dush Well Drilling Firm No: 399

Firm Official: [Signature] Date: 7-8-06

and Driller or Operator: [Signature] Date:

(Sign once if Firm Official & Operator)

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