

Water Resources Department

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March 6, 2015

VIA E-MAIL

Applicant

LADDI SINGH PO BOX 6820 HERMISTON, OR 97838 Agent

BILL PORFILY PO BOX 643 STANFIELD, OR 97875

SUBJECT: Water Right Transfer Application T-11786

Please find enclosed the Preliminary Determination indicating that, based on the information available, the Department intends to approve application T-11786. This document is an intermediate step in the approval process; water may not be used legally as proposed in the transfer application until a Final Order has been issued by the Department. Please read this entire letter carefully to determine your responsibility for additional action.

A public notice is being published in the Department's weekly publication and in the East Oregonian newspaper, simultaneously with issuance of the Preliminary Determination. The notice initiates a period in which any person may file either a protest opposing the decision proposed by the Department in the Preliminary Determination or a standing statement supporting the Department's decision. The protest period will end 30 days after the last date of newspaper publication.

If no protest is filed, the Department will issue a Final Order consistent with the Preliminary Determination. You should receive a copy of the Final Order about 30 days after the close of the protest period.

If a protest is filed, the application may be referred to a contested case proceeding. A contested case provides an opportunity for the proponents and opponents of the decision proposed in the Preliminary Determination to present information and arguments supporting their position in a quasi-judicial proceeding.

Please do not hesitate to contact me at 503-986-0886 or <u>Patrick.K.Starnes@wrd.state.or.us</u> if I may be of assistance.

Sincerely,

Kelly Starnes

Transfer Program Analyst

Transfer and Conservation Section

cc:

Transfer Application file T-11786

Greg Silbernagel, District 5 Watermaster (via e-mail)

Dale van Schoiack, CWRE #333 (via e-mail)

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BEFORE THE WATER RESOURCES DEPARTMENT OF THE STATE OF OREGON

In the Matter of Transfer Application)	PRELIMINARY DETERMINATION
T-11786, Umatilla County)	PROPOSING APPROVAL OF CHANGES
)	IN POINTS OF APPROPRIATION, PLACE
)	OF USE, AND CHARACTER OF USE

Authority

Oregon Revised Statute (ORS) 537.705 and 540.505 to 540.580 establish the process in which a water right holder may submit a request to transfer the point of appropriation, place of use, or character of use authorized under an existing water right. Oregon Administrative Rule (OAR) Chapter 690, Division 380 implements the statutes and provides the Department's procedures and criteria for evaluating transfer applications.

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Findings of Fact

- 1. On April 11, 2014, LADDI SINGH filed an application to change the points of appropriation, place of use, and character of use under Certificate 85536. The Department assigned the application number T-11786.
- 2. On May 7, 2014, the applicant amended the application and map to better clarify the place of use.
- 3. The Department proposes to process transfer application T-11786 simultaneously with transfer application T-11062. Transfer application T-11062 also submitted a request proposing to modify a portion of the same originating Certificate 85536. Certificate 85536 shall be canceled after both transfer applications are approved.
- 4. Notice of the application for transfer was published on April 22, 2014, pursuant to OAR 690-380-4000. No comments were filed in response to the notice.

Pursuant to OAR 690-380-4030, any person may file a protest or standing statement within 30 days after the last date of publication of notice of this preliminary determination.

- 5. On December 31, 2014, the Department sent a copy of the draft Preliminary Determination proposing to approve Transfer Application T-11786 to the applicant. The draft Preliminary Determination cover letter set forth a deadline of January 29, 2015, for the applicant to respond. The applicant requested that the Department proceed with issuance of a Preliminary Determination and provided the necessary information to demonstrate that the applicant is authorized to pursue the transfer (or amended the application or did not respond by the deadline).
- 6. The portion of the right to be transferred is as follows:

Certificate: 85536 in the name of DENNIS R. INGRAM (perfected under Permit

G-3702)

Use: IRRIGATION OF 4.5 ACRES

Priority Date: OCTOBER 4, 1967

Rate: 0.056 CUBIC FEET PER SECOND (CFS), BEING 0.02 CFS FROM

WELL 2, 0.03 CFS FROM WELL 4, AND 0.01 CFS FROM WELL 5, if available at the original points of appropriation being WELL 1 in the NW¼ NE¼, 2340 feet North and 330 feet East; WELL 2 in the NW¼ NE¼, 2400 feet North and 330 feet East, and WELL 4 in the SW¼ NE¼, 70 feet North and 1310 feet East, all from the C¼ Corner of Section 36,

T4N, R27E, WM.

Limit/Duty: The amount of water used for irrigation, together with the amount secured

under any other right existing for the same lands, is limited to a diversion of ONE-EIGHTIETH of one cubic foot per second, or its equivalent for each acre irrigated, and shall be further limited to a diversion of not to exceed 3.0 acre-feet per acre for each acre irrigated during the irrigation

season March 10 thru October 15, of each year.

Sources: WELLS 2, 4, AND 5, within the UMATILLA RIVER BASIN

Authorized Points of Appropriation:

Twp	Rng	Mer	Sec	Q-Q	Measured Distances		
4 N	27 E	WM	36	NE NE	WELL 5 - 270 FEET SOUTH AND 990 FEET WEST FROM THE NE CORNER OF SECTION 36		
4 N	27 E	WM	36	NW NE	WELL 2 - 2400 FEET NORTH AND 330 FEET EAST FROM THE C¼ OF SECTION 36.		
4 N	27 E	WM	36	SW NE	WELL 4 - 70 FEET NORTH AND 1310 FEET EAST FROM THE C¼ OF SECTION 36.		

Authorized Place of Use:

IRRIGATION							
Twp	Rng	Mer	Sec	Q-Q	Acres		
4 N	27 E	WM	36	NE NE	2.7		
4 N	27 E	WM	36	SE NE	1.8		
				Total	15		

7. Transfer Application T-11786 proposes to change the authorized points of appropriation for the above described right between approximately 860 and 2150 feet from the existing points of appropriation to:

	•				
Twp	Rng	Mer	Sec	Q-Q	Measured Distances
4 N	27 E	WM	36	NE NE	WELL TS1 - 1875 FEET NORTH AND 300 FEET WEST FROM THE E¼ CORNER OF SECTION 36.
4 N	27 E	WM	36	SW NE	WELL TS2 - 1460 FEET NORTH AND 380 FEET WEST FROM THE E¼ OF SECTION 36.

- 8. Transfer application T-11786 also proposes to change the character of use of 4.5 acres of irrigation to year round commercial use associated with a truck stop.
- 9. Transfer Application T-11786 proposes to change the place of use of the right to:

COMMERCIAL							
Twp Rng Mer Sec Tax Lot							
4 N	27 E	WM	36	100, 200, 400, 1600	NE NE		
4 N	27 E	WM	36	1600	SE NE		

- 10. The applicant amended the application requesting a year round season associated with the commercial use. The proposed change in character of use to commercial use associated with a truck stop operation would not result in enlargement of the right if properly conditioned. In order to avoid enlargement of the right, with the extension of the season to year round commercial use, the rate shall be limited to 0.034 cfs (15.2 gpm), to be appropriated in any combination from either of the proposed wells and shall be restricted to a maximum annual volume of water that can be beneficially used to being 13.5 acre-feet per year. The applicant has agreed to a diminished instantaneous pumping rate for the proposed commercial use.
- 11. The Department's Groundwater Section has determined that further review of the stratigraphy underlying the applicant's property was needed in order to specifically identify the parameters of the aquifers present and which authorized wells appropriate which aquifer. In order to proceed further with this transfer, compliance with OAR 690-380-2110 (2) regarding "same source" is required and the Department took a closer look at the authorized Well 2's hydrogeology (UMAT 55219). The Department has determined that the authorized wells that comprise Certificate 85536 appropriate one groundwater bearing zone. This source, the "shallow alluvial/basalt aquifer" is composed of inter-fingered sedimentary deposits and basalt flows which communicate water very easily between them. The hydraulic connection between these different strata provides pathways for groundwater movement between the younger sedimentary aquifer system and the upper Columbia River Basalt Group (CRBG) system.

- 12. The principal stratigraphic units underlying the applicant's property, from youngest to oldest, are Pleistocene catastrophic flood deposits, the Alkali Canyon Formation, and the Columbia River Basalt Group (CRBG) and interbedded Ellensburg Formation. The catastrophic flood deposits and the Alkali Canyon Formation are composed of fine- to coarse-grained sediments and together form the shallow alluvial aquifer. Flood basalt flows of the CRBG are found beneath the sediments and consist of a series of lava flows that are greater than 1000 feet thick in the vicinity of the applicant's property. In some instances, the time interval between basalt eruptions was long enough to allow sediments to accumulate in low-lying areas. The resulting interbeds are part of the Ellensburg Formation. Although unconfined groundwater occurs near the surface of the basalts, most water occurs in confined aquifers that occupy thin rubble zones (interflow zones) that occur at the contacts between lava flows. The thick interiors of the basalt flows generally have very low porosity and permeability and act as confining beds. This physical geometry generally produces a stack of thin, tabular aquifers (interflow zones) separated by thick confining beds (flow interiors). Because of the low permeability of the basalt flow interiors, there is very little (very inefficient) natural connection between the stacked aquifers. Locally, however, a series of roughly west flowing catastrophic floods during the Pleistocene epoch have removed the upper basalt flow (Elephant Mountain Member), the Ellensburg Formation interbed beneath it (Rattlesnake Ridge Interbed), and the top of the next CRBG flow (Pomona Member) forming several east-west trending troughs that were subsequently filled with sedimentary deposits from later floods. As a result, the sedimentary units that commonly overly the CRB flows in most other parts of the Umatilla Basin are locally juxtaposed against them (see attached cross-section). This juxtaposition is hydrogeologically significant as it provides pathways for groundwater movement between the younger sedimentary aquifer system and the upper CRBG system. The ability of groundwater to flow between these two naturally separate aquifer systems indicates that locally they are hydraulically connected and behave as one system, hereafter referred to as the "shallow alluvial/basalt" aquifer.
- 13. The main source of information used to estimate the thickness of the aquifer was hydraulic head data in the form of static water levels measured at each water bearing zone encountered during the drilling of nearby well UMAT 1580 as noted on the driller's log (also known as the neighbor's "fence" well). The static water level encountered below a depth of 350 feet below land surface was significantly different than static water levels measured in all water-bearing zones above 350 feet, indicating a separate, distinct deeper basalt aquifer. Therefore, the maximum depth that the applicant may construct a well as authorized by the current, existing authorized wells described in Certificate 85536 shall be limited to a total depth of 350 feet.
- 14. Department finds, based on the information provided, that the proposed (existing) points of appropriation, Well TS1 (UMAT 53899//re-conditioning 53916) and Well TS2 (UMAT 50179) develop the same (source) aquifer as that of the original authorized wells and complies with the Department's administrative rule under OAR 690-380-2110 (2) and OAR 690-380-4010(2)(e). In no instance shall the Umatilla Basalt aquifer be penetrated. Any reconditioning or future deepening of the applicant's wells requires the driller to stay within a total maximum depth of 350 feet below land surface.

- 15. The proposed (existing) wells likely penetrate the shallow alluvial/basalt aquifer, a groundwater source which acts as storage (a groundwater reservoir). Extending the season of use to year-round at a decreased rate for industrial use would not adversely impact other groundwater rights and other groundwater sources within the critical GW area. The Department also reviewed the timing and magnitude of impacts on streamflow from groundwater pumping (stream depletion) and proximity of the proposed wells in relation to the Umatilla River. At this distance, greater than 6,000 feet, impacts from groundwater pumping during the irrigation season are spread evenly throughout the entire year. Stream depletion outside of the irrigation season will not increase under the new use.
- 16. On December 31, 2014, the Department mailed a copy of the draft Preliminary Determination proposing to approve Transfer Application T-11786 to the applicant. The draft Preliminary Determination set forth a deadline of January 29, 2015, for the applicant to respond. The applicant requested that the Department proceed with issuance of a Preliminary Determination and provided the necessary information to demonstrate that the applicant is authorized to pursue the transfer.

Transfer Review Criteria (OAR 690-380-4010)

- 17. Water has been used within the five years prior to the submittal of Transfer Application T-11786 according to the terms and conditions of the right. There is no information in the record that would demonstrate that the right is subject to forfeiture under ORS 540.610.
- 18. Wells, pumps, pipeline, and sprinkler system sufficient to use the full amount of water allowed under the existing right were present within the five-year period prior to submittal of Transfer Application T-11786.
- 19. The proposed changes would not result in enlargement of the right, provided the rates of diversion for the year round commercial use do not exceed a combined instantaneous rate of 0.034 cfs (15.2 gpm) and total maximum volume diverted do not exceed 13.5 acre-feet. The water right is limited to the appropriation of the "shallow alluvial/basalt" aquifer, limited to the 350 foot below land surface as described in detail above.
- 20. The proposed changes would not result in injury to other water rights.
- 21. All other application requirements are met.

Determination and Proposed Action

The change in point of appropriation, place of use, and character of use proposed in Transfer Application T-11786 appear to be consistent with the requirements of ORS 537.705 and 540.505 to 540.580 and OAR 690-380-5000. If protests are not filed pursuant to OAR 690-380-4030, the application will be approved.

If Transfer Application T-11786 is approved, the final order will include the following:

- 1. The change in point of appropriation, place of use, and character of use proposed in Transfer Application T-11786 are approved.
- 2. The right to the use of the water is restricted to beneficial use at the place of use described, and is subject to all other conditions and limitations contained in Certificate 85536 and any related decree.
- 3. Water Right Certificate 85536 is MODIFIED. Certificate 85536 will be canceled upon final approval of Transfer Application T-11062 (Ingram) and upon final approval of this transfer, T-11786 (Singh).
- 4. The quantity of water diverted at the new points of appropriation, shall not exceed the quantity of water lawfully available at the original points of appropriation.
- 5. Water shall be acquired from the same aquifer (water source) as the original points of appropriation.
- 6. The former place of use of the transferred right shall no longer receive water under the right.
- 7. The appropriation of water from basalt Wells TS1 and TS2 shall be limited to a rate of 0.034 cfs (15.2 gallons per minute) for year round commercial use, not to exceed an annual amount of 13.5 acre-feet.
- 8. Water use measurement conditions:
 - a. Before water use may begin under this order, the water user shall install a totalizing flow meter, or, with prior approval of the Director, another suitable measuring device at each new point of appropriation (new and/or existing).
 - b. The water user shall maintain the meters or measuring devices in good working order.
 - c. The water user shall allow the Watermaster access to the meters or measuring devices; provided however, where the meters or measuring devices are located within a private structure, the Watermaster shall request access upon reasonable notice.
- 9. The former place of use of the transferred right shall no longer receive water under the right.
- 10. Full beneficial use of the water shall be made, consistent with the terms of this order, on or before **October 1, 2016**. A Claim of Beneficial Use prepared by a Certified Water Right Examiner shall be submitted by the applicant to the Department within one year after the deadline for completion of the changes and full beneficial use of the water.

11. After satisfactory proof of beneficial use is received, a new certificate confirming the right transferred will be issued.

Dated at Salem, Oregon this day of March, 2015.

Dwight French, Water Right Services Administrator, for

Thomas M. Byler, Director

Oregon Water Resources Department

This Preliminary Determination was prepared by Ken Dowden. If you have questions about the information in this document, you may reach me at 541-278-5456 or Ken.D.Dowden@wrd.state.or.us

Protests should be addressed to the attention of Transfer and Conservation Section, Water Resources Department, 725 Summer St. NE, Suite A, Salem, OR 97301-1266.