Oregon
Kate Brown, Governor

Water Resources Department
725 Summer St NE, Ste A
Salem, OR, 97301
Phone: 503-986-0900
Fax: 503-986-0904

April 24, 2020

STEPHEN J SCHNEIDER WWC# 649
SCHNEIDER WATER SERVICES
21881 RIVER ROAD NE
ST. PAUL, OREGON 97137

SUPERSEDING FINAL ORDER

Dear Mr. Schneider:

This Final Order supersedes the Final Order issued for the Special Standards Request Form submitted on April 22, 2020. The amended Special Standards Request Form you submitted for owner: Townsend Farms Inc., Start Card number 216490 is hereby approved for the following: You may decommission this water supply well as described on your amended Special Standards Request Form dated April 24, 2020 and attached email decommissioning description dated April 14, 2020. ***The stipulations for this special standard request approval are; All cased intervals shall be thoroughly ripped or perforated so that grout, applied under 50 psi pressure, may migrate outside the casing and effectively prevent the vertical movement of water. Perforations are not required in the wirewound stainless screened interval. However, perforations are required in the following cased intervals:***
25 to 145 feet
145 to 155 feet (An attempt shall be made to perforate this interval)
155 to 205 feet
245 to 260 feet
If grout losses are encountered, then additional cement grout shall be placed in the well using a suitable method and pressure applied again until grout loss subsides. Placement of cement grout shall continue until there is no more grout loss. The casing may be cut and crushed rock placed within a few feet of ground surface as consistent with future work to be done on site. All other well abandonment standards apply as required under Oregon Administrative Rules 690-220. A copy of your Special Standards Request Form is enclosed.

If you have any questions concerning this letter, I may be contacted at (503) 986-0852, or by e-mail at Travis.N.Kelly@oregon.gov.

Sincerely,

Travis Kelly, Coordinator
Well Construction Program
Well Construction and Compliance Section

enclosure

cc: Tommy Laird, Well Inspector, NW Region

This is a final order in other than contested case. This order is subject to judicial review under ORS 183.484. Any petition for judicial review must be filed within the 60 day time period specified by ORS 183.484(2). Pursuant to ORS 536.075 and OAR 137-004-0080 you may either petition for judicial review or petition the Director for reconsideration of this order. A petition for reconsideration may be granted or denied by the Director, and if no action is taken within 60 days following the date the petition was filed, the petition shall be deemed denied.

Oregon Water Resources Department
725 Summer Street NE, Suite A
Salem Oregon 97301-1266
(503) 986-0900
www.wrd.state.or.us

Special Standards
Request Form

REQUEST FOR WRITTEN APPROVAL TO USE CONSTRUCTION METHODS NOT INCLUDED IN OREGON ADMINISTRATIVE RULES 690-200 THROUGH 690-240

Before the request can be considered, this form must be completed. Requests shall be submitted to the Well Construction Program Coordinator, Water Resources Department, 725 Summer Street NE, Suite A, Salem OR 97301-1266. Requests may also be considered by the appropriate Regional Manager.

Date of request: 4/24/20 (amended) **Oral approval date (if applicable):** _____

Bonded Well Constructor (**name, license #, and mailing address**): Steve Schneider, 649 21881 River Road NE, St. Paul, OR 97137

(1) Location of Well: SW of 1/4 NE 1/4 Tax lot 701 Section 27,

Township 1 N, Range 3 E, Multnomah County

Address at well site: 23303 NE Sandy Blvd, Fairview, OR 97024

(2) Start Card Number(s)(for work to be done): 216490

(3) Name and Address of Land Owner: Townsend Farms Inc 23400 Townsend Way, Fairview, OR 97024

(4) Distance to the nearest septic tank, drainfield, closed sewage line (if water supply well)

>100'

(5) The unusual site conditions which necessitate this request: Gravel pack well abandonment requires special standard (OAR 690-220-0090)

(6) The proposed construction methods that the bonded well constructor believes will be adequate for this well: (attach additional pages if needed)

See attached 4/14/20 email. Casing has a plate bottom as verified in 4/24/20 telecom between Roy Jannsen and Steve Schneider. Drilling/milling through the plate bottom has similar risk to over-drilling in that the wire wrap screen will likely get damaged (unravel) resulting in damage/disconnection to/with the casing below it; all of which will add more complications that will be counter-productive toward protection of the groundwater resource. This request proposes leaving the material below the casing as is.

(7) Diagram showing the pertinent features of the proposed well design and construction: (attach additional pages if needed)

See MULT 63478 for existing condition and attached 4/14/20 email to Joel Jeffrey, WRD, for proposed completion (permanent abandonment).

PLEASE NOTE:

(1) The Well Construction Standards serve to protect ground water resources. By approving and issuing this special construction standard the Oregon Water Resources Department is not representing that a well constructed in accordance with this condition will maintain structural integrity or that it meets engineering standards. The well constructor/or landowner is responsible for ensuring that a well is constructed in a manner that protects ground water resources as required under Oregon Administrative Rules 690-200 through 690-240.

(2) If it should be determined at some future date that the well, due to its construction, is allowing ground water contamination, waste or loss of artesian pressure, the undersigned shall return to the site and rectify the problem.

(3) If oral approval was granted, a written request must be submitted to the Department either within three (3) working days of the date of oral approval or prior to the completion of the associated well work. Failure to submit a written request as described above may void prior oral approval.

I have read and understand the above information. I further attest that the information provided is accurate to the best of my knowledge.

Bonded Constructor Signature: _____

Steve Schneider

From: Steve Schneider
Sent: Tuesday, April 14, 2020 5:15 PM
To: 'JEFFERY Joel W * WRD'
Subject: TFI well abandonment

Joel,
We completed a new well for Townsend Farms, Inc. (TFI) early this year and about a week ago additional work on the well, including installation of a pitless unit, pump discharge and electric connection was completed. The water quality was tested with no EDB or other contaminants found. The well is now on line. TFI refers to it as their well #4. The log of this well is in the state well log data base along with its alteration log for the pitless installation. I believe they are MULT 133885 and MULT 134403 respectively.

TFI is now wanting to abandon the well that was replaced, which is MULT 63478. This well has a gravel pack and accordingly, we need WRD's concurrence as to how to proceed. As you are aware, previous discussions related to this well included varying interpretations as to the existance of one or more confining units, in particular the clay identified on the log as existing from 233-238. TFI's replacement Well #4 is located only about 30' away from MULT 63478 and is sealed continuously to a depth of 342'. As you can see from its formation log, no confining unit was found anywhere within the upper 297', the total depth of MULT 63478. A registered geologist was on site during the drilling of Well 4, as was I for most of it. None of us saw evidence of the confining unit in the cuttings or evidence of such by the drilling action; it simply was not there. As such, it appears the alleged confining unit identified in MULT 63478 is discontinuous since it was not evidenced at a distance of only about 30' away.

In light of this information, we believe an appropriate approach for abandonment of MULT 63478 would be to remove the pump, bail sediment, perforate the cased portion of the well from the bottom up to approximately 145' (just below the existing lower cement seal), pressure grout the lower hole (using neat cement grout with a retarder), allow the grout to migrate for at least 30 minutes under pressure, perforate the remaining casing to within a few feet of the surface (except at intervals that might exhibit perforator refusal from existing seal), finish grouting to within a few feet of surface. We would apply and maintain a head of water on the well during the perforating and grouting of the lower part of the hole to minimize potential of slough. Pressure grouting would include a temporary mechanical seal of the grout pipe to the casing at the surface in order for the grout to be applied under pressure to the lower perforated interval. We would attempt a pressure of about 50 psi at the well head to allow the grout to migrate. At the conclusion, we would cut off the casing a few feet below ground and backfill the hole above the cut off casing with crushed rock since TFI intends to pave over this location.

We believe this approach affords far less risk of an unsuccessful abandonment that could easily occur if attempts at over-drilling the whole casing and screen in order to remove it and the gravel pack are attempted. We fear that the casing and/or especially the screen may fail during the over-drill resulting in a damaged or destroyed path for installation of abandonment grout.

Please review and let us know what you think. We hope that our proposed approach, or something similar, will meet with WRD's approval and will afford the best chance for a successful abandonment that protects the resource.

Regards,

Steve Schneider
MGWC, VP
SCHNEIDER
WATER SERVICES

MULT 63478

STATE OF OREGON
WATER SUPPLY WELL REPORT
(as required by ORS 537.765)

Instructions for completing this report are on the last page of this form.

WELL I.D. # L 47470
START CARD # 139288

(1) LAND OWNER Well Number
Name TOWNSEND FARMS
Address 23303 NE SANDY
City FAIRVIEW State OR Zip 97024

(2) TYPE OF WORK
[X] New Well [ ] Deepening [ ] Alteration (repair/recondition) [ ] Abandonment

(3) DRILL METHOD:
[ ] Rotary Air [X] Rotary Mud [ ] Cable [ ] Auger
[ ] Other

(4) PROPOSED USE:
[ ] Domestic [ ] Community [ ] Industrial [X] Irrigation
[ ] Thermal [ ] Injection [ ] Livestock [ ] Other

(5) BORE HOLE CONSTRUCTION:
Special Construction approval [ ] Yes [X] No Depth of Completed Well 260 ft.
Explosives used [ ] Yes [X] No Type Amount

HOLE Diameter	From	To	SEAL Material	From	To	Sacks or pounds
12¼	0	260	Cement	0	25	10 sks
			Bentonite	25	35	10 sks
			Cement	145	155	4 sks
7-7/8	260	297				

How was seal placed: Method [ ] A [ ] B [X] C [ ] D [ ] E
[X] Other poured into annular
Backfill placed from 35 ft. to 145 ft. Material Drill gel
Gravel placed from 155 ft. to 260 ft. Size of gravel 1/4x3/8

(6) CASING/LINER:

	Diameter	From	To	Gauge	Steel	Plastic	Welded	Threaded
Casing:	8"	+2	205	250	[X]	[ ]	[X]	[ ]
	8"	245	260	250	[X]	[ ]	[X]	[ ]
					[ ]	[ ]	[ ]	[ ]
					[ ]	[ ]	[ ]	[ ]
Liner:					[ ]	[ ]	[ ]	[ ]
					[ ]	[ ]	[ ]	[ ]

Drive Shoe used [ ] Inside [ ] Outside [ ] None
Final location of shoe(s)

(7) PERFORATIONS/SCREENS:
[ ] Perforations Method
[X] Screens Type Wirewound Material Stainless

From	To	Slot size	Number	Diameter	Tele/pipe size	Casing	Liner
205	245	.020		8	pipe	[X]	[ ]
						[ ]	[ ]
						[ ]	[ ]
						[ ]	[ ]

(8) WELL TESTS: Minimum testing time is 1 hour
[ ] Pump [X] Bailer [X] Air [ ] Flowing Artesian

Yield gal/min	Drawdown	Drill stem at	Time
55	10		1 hr.
180		115	2 hrs.

Temperature of water 57°F Depth Artesian Flow Found
Was a water analysis done? [ ] Yes By whom
Did any strata contain water not suitable for intended use? [ ] Too little
[ ] Salty [ ] Muddy [ ] Odor [ ] Colored [ ] Other
Depth of strata:

(9) LOCATION OF WELL by legal description:
County MULTNOMAH Latitude Longitude
Township 1N N or S Range 3E E or W. WM.
Section 27 SE 1/4 NE 1/4
Tax Lot 800 Lot Block Subdivision
Street Address of Well (or nearest address) 23303 NE SANDY FAIRVIEW, OR

(10) STATIC WATER LEVEL:
57 ft. below land surface. Date 03/26/01
Artesian pressure lb. per square inch Date

(11) WATER BEARING ZONES:
Depth at which water was first found 205

From	To	Estimated Flow Rate	SWL
205	245	180 gpm	57

RECEIVED
MAR 30 2001
WATER RESOURCES DEPT.
SALEM, OREGON

(12) WELL LOG:
Ground Elevation

Material	From	To	SWL
Topsoil/silty clay	0	4	
Fine compact sand,brown	4	10	
Fine compact sand,gray	10	16	
Fine to med. compact sand,brown,occ gravel	16	63	
Med. to coarse sand, gravel/cobble	63	77	
Fine to med. brown gravel occ. coarse,some gray zones	77	233	57
Soft brown clay	233	235	"
Soft gray clay	235	238	"
Fine to coarse gravel	238	247	57
Fine to med. gravel w/clay	247	254	
Fine to med. gravel ,	254	267	
Coarse gray sand,some gravel	267	291	
Sticky lt. brown clay	291	297	
WELL COMPLETED @ 260 FT.			

Date started 03/14/01 Completed 03/26/01

(unbonded) Water Well Constructor Certification:
I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon water supply well construction standards. Materials used and information reported above are true to the best of my knowledge and belief.
WWC Number
Signed Date

(bonded) Water Well Constructor Certification:
I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon water supply well construction standards. This report is true to the best of my knowledge and belief.
WWC Number 1266
Signed Date 03/26/01

ORIGINAL – WATER RESOURCES DEPARTMENT FIRST COPY – CONSTRUCTOR SECOND COPY – CUSTOMER