



# 1400A & 1400B Permit Renewal

Response to Comments

November 30, 2017 through February 2, 2018

CommenterID	Comment	DEQ Response
1	Request for a Winery specific permit.	DEQ recognizes the potential benefits associated with a general permit focused on wineries. However, for resource efficiency, DEQ has developed a general permit that covers other discharges with wastewater characteristics that are similar in nature.
1	Request for extension of the permit renewal process by two to four months	The 1400A and 1400B permits have expired. DEQ has concluded that further delays could adversely affect businesses and operations needing permit coverage. Moreover, DEQ has been engaged in renewing the 1400A and 1400B general permits since February 2017 and engaged with interested persons during the process, including a focused meeting with permit registrants as well as the public notice process. DEQ extended the renewal process twice during the development process to provide additional opportunities for engagement with interested parties.
1	A higher de minimis threshold is defensible and would allow smaller wineries to be exempt from coverage under the 1400 permits. Recommend 6,000 cases/year (84,500 gall/year wastewater) or 7,500 cases/year (107,700 gall/year wastewater).	DEQ reviewed the technical information and potential environmental impacts and determined a de minimis threshold for wineries that produce less than 6,000 cases of wine per year (86,000 gall/year wastewater) would be allowable provided a facility properly manages their wastewater. This production volume was identified as the limit for de minimis exemption using comments received from stakeholders and current literature. The harvest and crush season typically starts in late summer to early fall and continues for about two months for these facilities. This is the period when the winery produces approximately 50% of its total volume of wastewater. The wine industry has identified an average winery of this size discharges approximately six gallons of wastewater for every gallon of wine produced. Using these estimates, a winery producing 6,000 cases (14,268 gallons) of wine produces approximately 86,000 gallons of wastewater a year of which it discharges approximately 43,000 gallons over approximately 60 days resulting in approximately 710 gallons of wastewater per day. The remaining 43,000 gallons is discharged over the rest of the year. DEQ determined this short duration of elevated flow (710 gallons per day) of winery wastewater followed by extended rest period provides the micro and macro organisms in the soil the opportunity to assimilate the beneficial constituents in the wastewater without overtaxing the native systems. Discharge above this

		level potentially can exceed the natural systems' ability to assimilate the biochemical oxygen demand load and the chloride concentration. DEQ will revisit this determination in the next permit cycle or when new information becomes available.
1	Incorporating tiering into the 1400 permits proportionately eases the burden on smaller wineries and is commensurate with posed environmental risk.	DEQ considered this proposal and concluded that the options within the 1400A and 1400B permits as well as the availability of individual permits provides a scaled regulatory approach that addresses the level of environmental risk. Specifically, DEQ has implemented a tiered approach in the 1400 series of permits. The current permit options include a de minimis threshold for small producers, the 1400A authorizes discharges for surface application, and the 1400B authorizes discharges for surface application and subsurface discharge for facilities below the benchmarks. DEQ concluded that discharges authorized under the 1400B that exceed the benchmarks represent higher environmental risk and has prescribed commensurate conditions, including a more robust process wastewater management plan review and approval, and an individual permit for very large or high environmental risk wastewater discharges.
1	Additional disposal discharge methods need to be built into the 1400A permit.	Wastewater reuse as identified in the 1400A permit has a lower environmental risk than disposal. The 1400A permit regulates the reuse of the process wastewater. Options for regulation of wastewater disposal, which represents a higher risk to the environment, can be obtained under the 1400B or an individual permit.
1	Draft 1400B unnecessarily requires wineries to pretreat their wastewater.	The limits that were identified in the draft 1400B permit Table A1 have been modified to include sodium adsorption ratio and electrical conductivity and changed to benchmarks. This modification allows facilities the option of incorporating pretreatment, alternative management activities, or providing documentation of how their particular system is protective of the environment. This may include additional information on the soil profile, specific geological features on their site, waste stream characterization data, groundwater monitoring or other sampling and monitoring. This information will be documented in their process wastewater management plan. Facilities that exceed the benchmarks must submit their process wastewater management plan to DEQ for review and approval prior to discharge.

1, 5, 6	<p>Current wastewater strength limitations in the 1400B permit (Table A1) are arbitrary, do not take into account natural background, natural cycles, crop needs, are too restrictive, and DEQ has not justified them.</p> <ul style="list-style-type: none"> <li>- BOD limit and calculations</li> <li>- Effluent pH limitations</li> <li>- Nitrogen loading</li> <li>- Sodium limit</li> </ul>	<p>DEQ selected the benchmarks based on information found in literature and academic research papers that indicated the concentrations of potential contaminants could be applied to a given field and would not likely result in an adverse effect on crop yield for the majority of agricultural fields in Oregon. These levels were selected to be easily implementable and were intended to be conservative. The intent was to provide relatively easily identified limits that are protective in a wide range of situations encountered across the state. DEQ is cognizant of the complexity of soil structure and the interactions of various constituents in the environment. However, based on the comments received, DEQ realizes this has resulted in more confusion. As a result, DEQ has modified the permit. Some of the parameters have changed and the limits in the 1400B Table A1 are now benchmarks. Facilities that exceed the benchmarks are required to develop a more robust process wastewater management plan and submit this plan to DEQ for review and approval as discussed above. Dischargers that seek permit conditions beyond what is presented in the 1400B general permit are encouraged to seek coverage under an individual permit.</p>
1, 5	<p>Prohibition of groundwater degradation. The restriction for groundwater to be four feet below ground surface is conservatively deep.</p>	<p>The prohibition of groundwater degradation is part of the Safe Drinking Water Act and DEQ is required by law (OAR 340-040) to ensure permitted activities do not adversely affect the water quality in the aquifers within the state. The restriction of four feet to groundwater was extracted from the recycled water best management practices. DEQ has reviewed current practices and has changed the permit language to state: "Permanent groundwater must be at least four feet below ground surface and temporary groundwater must be at least two feet below ground surface at the time of irrigation."</p>
1, 5	<p>Process Wastewater Irrigation restrictions - evapotranspiration exceeds precipitation language confusing. Request plain language for clarity.</p>	<p>DEQ has rewritten the section addressing irrigation restrictions to utilize more plain language. The more complicated terms have been removed and replaced with acceptable irrigation practices.</p>
1	<p>Setbacks – Explain the technical justification for the setbacks and modify setback requirements to be more workable. Create exception for facilities with existing 1400 permits.</p>	<p>As stated in the permit evaluation report, the setbacks were established to create a buffer between the areas receiving recycled water and sensitive receptors. These setbacks were extracted from the recycled water and graywater regulations identifying best management practices. DEQ views these as an integral part of best management practices for wastewater reuse and does not have current plans to create a grandfather clause for existing facilities. However, DEQ is allowing a 12 month period for existing facilities to modify their existing system to come into compliance with the setbacks.</p>

1	Process wastewater storage – recommend adding text explaining the design review will occur during the plan review process described in Schedule A condition 11 and Schedule F D1.	The permit text has been modified to include the recommended clarification.
1	A reasonable timeline is needed to implement the revised 1400 permits. Requesting three years for existing facilities to reach compliance.	DEQ realizes some existing facilities may need to modify their systems to meet the new standards identified in this updated permit. DEQ is including a condition that allow one year from the issuance of this permit for existing facility to reach compliance.
2, 3	The maximum discharge volume for this permit should be tied to the permit holder’s ability to agronomically apply their wastewater. This would be tied to the soil, time of year, volume of land.	DEQ recognizes the variability of facilities ability to utilize a wide range of water volumes. However, this permit is intended as general permit that covers a wide range of facilities to function under conservative conditions. In this case, DEQ has selected 82,000 gallons for the max discharge associated with this permit. Facilities that require more site-specific considerations should apply for individual permit coverage.
4	Current permit language in 1400 B Schedule A Condition d restricts permitted facilities options for treatment or pretreatment.	Permit language has been modified to remove potential restrictions for process wastewater treatment or pretreatment options.
5, 6	Definitions – Irrigation seasons “dry and wet” not aligned with ET vs. Precipitation patterns across Oregon	Permit language has been modified such that the definition of the irrigation seasons is not required. The definitions in question have been removed.
5	Schedule B, Table B1. Irrigation rate is listed as gallons per acre. The permittee should be required to convert this to inches per acre for comparison with irrigation requirements for the specific crop being grown.	The use of Gall/ac is to simplify calculations and reporting (simply calculate total gallons and divide by acres). Conversion options are available on the web If the facility wishes to identify their irrigation by inches per acre if they are comparing their water use with irrigation recommendations.
5	Schedule D, 1. The site evaluation criteria for the 1400A should be the same as for the 1400B. Currently, soils and groundwater information are not listed among the required elements in the 1400A language.	Permit text has been modified to include soil and groundwater information to the 1400A site evaluation requirements.

5	The increase in the flow limit from 25,000 gpd to 82,000 gpd seems to be based on a rather unusual line of reasoning (one acre, three inches deep). Even facilities that generate 25,000 gallons per day for any reasonable seasonal duration require large tracts of land for irrigation. The larger the site, the more complexities there will be to manage the system. Although many of the other limitations proposed may trigger a facility to require an individual permit, it seems like even a source with relatively clean and benign water with flows near the proposed 82,000 gpd limit may well represent conditions needing individualized permitting.	DEQ recognizes the flow rates from some facilities may require an individual permit even if they are within the levels identified in this general permit. DEQ will review each application and determine if the facility meets the criteria for this permit. If they do not, the facility will be instructed to pursue a more appropriate permit, which may include an individual permit.
6	BOD loading calculation should be by month and not by day.	The BOD loading is intended to reflect monthly loading, the permit text has been modified for clarity.

List of Commenters

Commenter No.	Name	Affiliation
1	Oregon Wine Growers Assoc	
2	Oregon Farm Bureau	
3	Hazelnut Assoc	
4	Orengo	Product manufacture
5	Brian Rabe	Consultant
6	Bill Fasth	Consultant