

COMPLIANCE SNAPSHOT

Rural Winery Wastewater and Grape Marc Monitoring



MARLBOROUGH DISTRICT COUNCIL

KEY POINTS



74%

Proportion of grapes grown in NZ



323,290

Tonnes of grapes processed in 2016



28%

Increase in total tonnage processed in 2016 when compared with 2015



37

Wineries discharge to land in the rural area



NO

incidences of non-compliance at the on site inspection



23.5%

Of wineries complied with all consent conditions



64.8%

Of wineries had at least 1 consent condition rated significantly non-compliant.

Snapshot of the 2016 monitoring programme

What was found during the 2016 inspections and annual report Monitoring

Marlborough District Council monitors all wineries which discharge wastewater to land under the permitted activity status or resource consent. Wineries which have small production volumes, no previous onsite compliance issues and no changes to their wastewater system did not have an onsite inspection in 2016.

23 wineries had an annual wastewater inspection during harvest 2016, there were no on-site issues noted during this inspection at any wineries and disposal fields for 2016. Following harvest, many wineries are required to provide an Annual Report which discusses in depth, the compliance of each consent condition. A compliance report is provided to all wineries detailing the compliance status for each consent condition or plan rule.

23.5% of winery wastewater discharges were rated as compliant with all conditions/rules. 8.8% of wineries were rated as technical non-compliance, 2.9% of wineries were assessed as orange with one or more conditions. More than half (64.8%) of wineries had at least one condition rated as significantly non-compliant.

Common Areas of Non-compliance:

Exceedances of permitted ranges on one or more occasions for:

- Faecal Coliforms (13 wineries)
- Discharge volume/ rate (4 wineries)
- pH (9 wineries)
- Total Nitrogen loading (2 wineries)
- BOD (5 wineries)

Industry Issues and Challenges

- **Stormwater diversion**
Reduce the volume of wastewater created
- **Contingency plans**
The majority of wineries have little or no storage
- **Grape Marc storage**
The location and facility must be suitable

Summary of Compliance Rating System

Results reported in this snapshot reflect the compliance of each permitted activity standard or resource consent condition, the lowest rated condition is the overall compliance level. For example a wastewater discharge consent could have 25 conditions of which 23 are rated compliant (green), 1 is rated minor non-compliance and 1 is rated significant non-compliance – the consent is rated significant non-compliance.

Full Compliance	Technical non-compliance	Environmental non-compliance	Significant non-compliance
100% compliance with all consent conditions/ permitted activity standards assessed	Non-compliance with condition which are considered to only have minor or no adverse environmental effects. E.g. failure to keep records	Breach of effects based/ best practice conditions/ rules that cause minor actual or potential environmental effects. E.g. ponding of wastewater remediated immediately	Persistent breach of orange grade. Significant breach of effects based/ best practice conditions/ rules that cause actual or potential environmental effects. E.g. multiple exceedances of parameters or wastewater reaching a waterway.

Winery Wastewater

Winery wastewater consists of water used for:

- Cleaning floors
- Equipment
- Fermentation tanks and barrels



Grape Marc

Grape Marc is the seeds, skins and stalks left once the juice is squeezed from the grapes.



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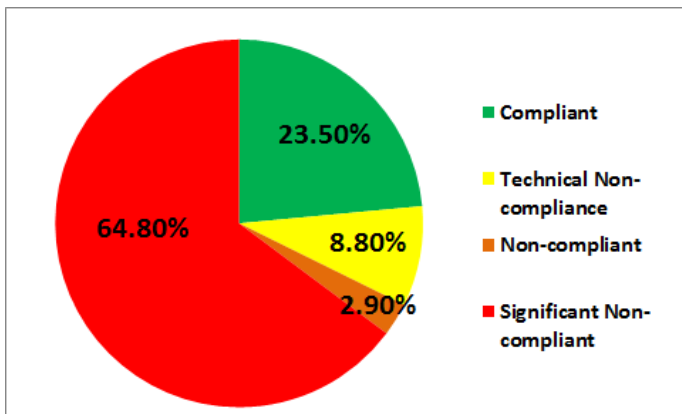
Compliance snapshot

During the on site wastewater and grape marc inspection, Council officers check the wastewater systems at the winery and the disposal area receiving the wastewater or grape marc.

The types of wastewater systems vary throughout Marlborough due to the range in production sizes at each winery. The systems vary from basic settling systems to complex systems using automotive aeration and microorganism selection for treatment.

Wastewater is spread in a variety of locations including in wood lots, under grape vines or in pastoral paddocks. Grape marc is stored in a 'compost' type facility on site at the winery, spread immediately under vines or in pastoral lots or it is sent to other rural locations.

Compliance Levels 2016 vintage



Wastewater Spread to Land -examples of compliance and non-compliance from previous surveys



Overwatering causing ponding



Overwatering causing ponding

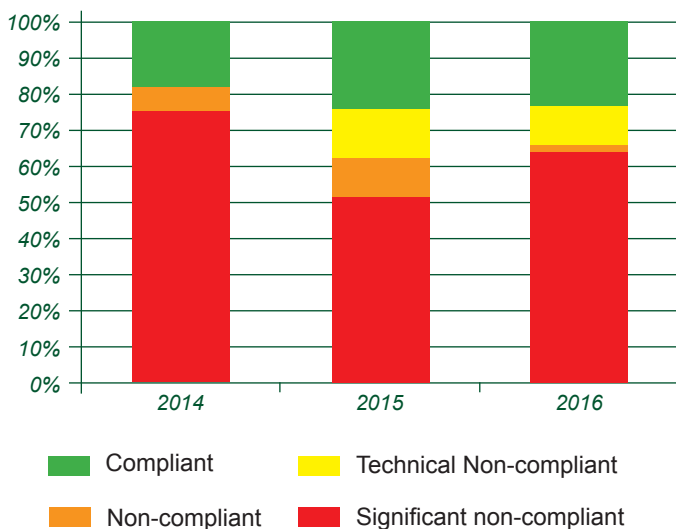


Low rate application system



Well monitored application

Compliance Levels over the last three vintages



Grape Marc Storage



Grape marc stored to land with no leachate collection



Sealed storage area with leachate collection

For More Information

For more information on compliance and enforcement monitoring undertaken by Marlborough District Council, contact the Environmental Protection Group

Phone: 03 520 7400
 Email: monitoring@marlborough.govt.nz
 Website: www.marlborough.govt.nz



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