Garage Winemaking in South Africa
Less is More

Dissertation submitted in partial requirement for the diploma of Cape Wine Master

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December 2010
Abstract

For the intrepid few who want to set out to make their own wine on a tiny scale, welcome to the age of the garagiste. For those unfamiliar with the term garagiste, it originated in the Bordeaux region of France in the mid-1990’s. At the time it was a slightly derogatory term for winemakers who usually purchased grapes from other growers and made small lots of wine in equally small production facilities, which in some cases, were garages. These upstart winemakers were controversial at the time, for breaking out from the traditional chateau model of winemaking and styling their wines more towards the New World examples of rich ripe reds.¹

In this paper garagiste will refer to any small wine operation, whether it be someone who has made the transition from hobbyist to selling their wine commercially, or a well established winemaker, who in addition to their day job making wine for someone else, may be making 1000 ± cases of wine under their own label.

For the most part garagiste has lost any negative connotation it might have once had, and in places such as California, Australia and Chile, such small wine operations have become more than commonplace. The garagiste practice is also alive and well in South Africa and this paper is for all of you out there who are crazy enough to want to set up as a micro-producer.²

In this paper I will walk you through the essentials of becoming your very own garagiste. After a brief history of garagistes and meeting myself and the South African Garagiste Movement, we will continue through to the legal requirements and the logistics of setting up a “garage”. A wine making example will be followed by a brief look at packaging and marketing. My words of wisdom before reading any further; it has to be about the passion because the only way to make a small fortune as a garagiste is to start with a large one!
I, Mary-Louise Nash, declare that this dissertation is my own, unaided work. It is submitted in partial fulfilment of the requirements for the diploma of Cape Wine Master to the Cape Wine Academy. It has not been submitted before for qualification of examination in this or any other educational organization.

Signed _______________                    December 1, 2010
Acknowledgements

My biggest thank-you to Fa. Without you I wouldn’t be in South Africa and enjoying this wonderful world of wine.

Thank-you to Hana and Sissie for all the beautiful hair dos and make up jobs you gave me while I was sitting at the computer working on this paper.

Many thanks to Tanja Beutler for our Spur lunch and all your personal files you shared with me, as well as answering my many questions via email.

Thank-you to the numerous small producers who took the time to complete my questionnaire.
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1. Introduction

Brief History

The godfather of the garagiste movement was a man called Jean-Luc Thunevin. This former forestry worker, bank clerk, restaurateur, and disc jockey had set up as a successful wine merchant in picturesque St. Emilion, selling bottles with grand labels from the local vineyards. One day he thought to buy a vineyard without a grand label, one that history had never heard of. Zero reputation; total quality. Surely they’d be a market for that.3

He was not the first on the Right Bank to make what came to be known as garage wines; Francois Mitjaville did it with Tertre Roteboeuf; Jacques Thienpont with Le Pin. “But they were part of established families and did it quietly. I had to make a noise because I was unknown,” says Thunevin.4

In 1989, Jean-Luc and wife Murielle bought a few modest parcels of vines. In 1991, a former garage in the back streets of St. Emilion became his cellar, Chateau Valandraud, named after Murielle whose maiden name was Andraud. Garage wine was born. “The true garagiste is someone who has no other possibilities because he has no money, no big vineyards. He just has to do the best he can because he has to live off the sale of 3000 bottles. For me, that’s a garagiste; that’s the pure spirit of the garage.”5

In 1995 Valandraud got a better score from influential American wine critic Robert Parker than the legendary Chateau Petrus. Valandraud had in guts what Medoc powerhouses had in budget. Small was standing tall. “The recipe isn’t very complicated”, states Thunevin. Halve the normal yield; tackle the problems in the vineyard by physical labour rather than chemicals; pluck and arrange the leaves on the vines meticulously to make each one a high-performance ripening machine; take whatever risks are necessary with the weather to get the grapes fully ripe; pick and sort the grapes carefully; use wild yeasts; spotless wooden vats and new wooden barrels in the cellar.6

The garage gold rush has spread far and wide. Bordeaux over the past dozen years has been peppered with many brand new small scale outfits. Pingus from Spain, Tenuta di Trinoro from Italy, and Screaming Eagle from California are all micro-producers receiving cult status and high ratings these days, along with Eben Sadie with his Columella and Palladius wines right here at home. Many small-scale but ambitious and passionate winemakers in South Africa now describe themselves proudly as garage winemakers.
My Story

My name is Mary-Lou Nash and I started Black Pearl Wines in 2001. I graduated from University of New Hampshire in 1989 with a bachelor of arts, magna cum laude, and headed straight to Japan for two years to teach English. On completion of the two years, my sister and I hopped onto a slow boat to China and backpacked around Asia for another two years. While I was in Asia in 1994, my father came to visit an old friend who owned Rhenosterkop Farm in Agter Paarl in the Western Cape. My father enjoyed his visit so much that in 1995 he became the new owner of this very run down farm on the western slopes of Paarl Mountain.

Still in travel mode, I headed down the same year to check out the farm in Africa. My only wine experience up until this point was drinking $8 magnums of Chilean Cabernet whilst sailing off the coast of Maine. My introduction to South African wine was many bottles of special late harvest from Simonsvlei at every meal served by the Finnish lady who was managing the farm.

After further travels through Africa, I returned to the farm in the middle of January 1996 to meet Dad and his wife who were coming over from the States for a two week holiday. The farm was planted with 20 hectares of Chenin Blanc which was delivered to Windmeul Co operative. On walking through the vines and tasting the grapes, we questioned whether they should be picked. Maila, the Finnish manager, agreed they were ready to be picked but said she could not find anyone to pick them so she was just going to leave it. This sprung us into action and with the two farm workers that lived on the farm, we hooked up trailers with bins and bought some secateurs and we were off and running. With the workers Christopher and George and their wives and us “tourists”, we picked three tons of grapes which filled one bin that I drove off to the co-op that afternoon on the tractor. Agter Paarl did not know what hit them, with a bikini clad tractor driver with not a word of Afrikaans showing up on the ramp to weigh in and dump a load of grapes!

On awaking Saturday morning, all the “tourists” could barely move from bending to pick bush vines all day. We had to have a new plan and Christopher said on Monday we would go to the train station and look for help. When Monday came around, we were at the train station early and were bombarded by people looking for work. We ended up picking all the grapes that week and when going through a road block on Friday to drop everyone at the station, I was amazed to not get into trouble for having twenty people hanging out of a vehicle and be waved on, to then get pulled over going home because my front license plate had fallen off!

So Dad’s holiday had turned out to be more of a working holiday. He had bought the farm to eventually retire to and sit on the stoep sipping gin and tonics and watching the sun set over Table Mountain. But I had other plans. I offered my services and said if he paid for my food and wine I would stay and manage the farm.
for him for one year until he could retire and tie everything up at home. That was fifteen years ago!

The first few years I was here we continued delivering the Chenin Blanc to Windmeul, but the years of neglect made it unviable. In 1997, with expert advice from a viticulturist, we planted our own vineyard. We dug profile holes all over the farm and got the soil analyzed. In the report we saw that the farm was predominantly Oakleaf soil. This soil has a high degree of porosity and crumbles nicely with deep ploughing. It does not re compact quickly and effective depth is easily achieved. Drainage and water holding capacity is also favourable making the soil suitable for the planting of late ripening red grape varietals. In 1997 I planted 10,000 Shiraz vines and in 1998 I planted 6000 Cabernet Sauvignon vines. Red varietal vines were difficult to obtain in those years because everyone was ripping up their Chenin Blanc to plant red. Today there are many more choices of clones and various rootstocks to match, as well as a better chance of getting virus free planting material.  

In 2001 I had my first harvest of Shiraz after spending the previous year training the vines onto a trellising system. Initially I had asked Cathy Marshall who was at Ridgeback down the road to make my first vintage, but a week before harvest thought why not try myself. I had finished all my Cape Wine Academy courses through Diploma and had winemaking friends, so why not? Maybe I should have used Cathy since her Ridgeback Shiraz from that year got five stars in John Platter, but instead I made eight barrels of wine in a cool room on the farm myself.

Today I am the chief winemaker, viticulturist, tractor driver, marketer, and general “Jill of all trades” at Black Pearl Vineyards and I make fifty five barrels of wine with the exact same equipment and in the same hands on manner as I did that first year. I have just moved from a cool room to a converted pig shed. I have now added a Cabernet Sauvignon and a Shiraz/Cabernet blend to our line up giving us a mere 2000 cases of wine per vintage. Black Pearl Vineyards is unirrigated and the high trellising system, severe pruning and canopy management are all managed to ensure low-yielding, stress free, ripe fruit. On the adjoining land, a nature conservation area has been set up to preserve the last 4% of remaining renosterveld in the world. Being environmentally friendly is of utmost importance for us. Pest control is monitored rather than spraying chemicals, and our spray program for mildews uses chemicals with the least negative impact on the earth. I tend to the vineyard year round and make sure only premium, healthy, phenolically ripe grapes are delivered to the cellar door in March. The grapes are cooled before a gentle crushing, open fermented in half ton lots, basket pressed, and put straight into barrel where the wine matures for a year. The wine is further bottle matured for at least a year before release. I feel we have a unique site and the goal is to bottle what comes from the vineyard. Black Pearl Vineyard's aim is a limited edition, terroir driven wine that is drinkable now as well as able to mature further in the bottle.
The Garagiste Concept in South Africa

Garagiste, literally translated to garage mechanic or garage owner, is the name used for the growing number of winemakers who, for want of a farm or cellar, have found an outlet for their passion in their garages, backrooms, sheds and similar structures dotted around the Western Cape. These self-styled devotees lavish hours of love and attention on ten or perhaps thirty barrels of wine-in-the-making. With the utmost care and deep courage the garagistes are producing very distinctive wines.

In South Africa, the garagiste idea was pioneered by Cathy Marshall. With friends and family, she crushed her first grapes on Muizenberg beach in Cape Town and started the Barefoot Wine Company in 1995. Soon after, Clive Torr vinified the first grapes for Topaz Wines. Clive, a qualified winemaker having studied oenology at Elsenberg College in Stellenbosch, as well as a Cape Wine Master, had been making one barrel of wine in his garage for a couple of years, the first being called Chateau Street Garage Wine. Clive lived in Chateau Street at the time. Clive always promised himself that he would never make wine for anyone else in case a formalised job in winemaking would dissipate his passion. Hardly possible, but he wasn’t going to take that chance. He makes wine as a hobby, after hours and over weekends. When it comes to harvesting, pressing, bottling or labelling, he manages to get all his friends to help him by inviting them to either a harvesting party, pressing party, bottling party or labelling party, with the promise of a few delicious wines while you work! It is these friends that have also had a big part to play in his garage wine. For his 38th birthday, Clive’s friends all chipped in and bought him a brand new French oak barrel and suddenly production was up to two barrels a year. On his 39th birthday, which also happened to be a bottling party, he received a mock-up label with the promise of their help to develop it further.

Clive’s mate, Tanja, had also worked in the South African wine industry, mainly in administration, marketing and sales with the likes of renowned farms such as Thelema and Rustenberg. In May 2000, Clive and Tanja bought a quaint little house in Topaz Street, Somerset West, 15 km away from Stellenbosch and about 2 km away from the sea. The back garden hadn’t been developed so they planted Clive’s passion, Pinot Noir. Clive wrote his CWM’s dissertation on Pinot Noir, did a harvest in Oregon to understand the subtleties of this variety a bit better, and travels to Burgundy every year to make Pinot Noir at Domaine de Clivet in Beaune. Soil samples had to be taken and the results were perfect. They did, however, add another ton of lime for luck. In the first week of August 2000, the bulldozer came in to level out the soil and turn the lime in. By the second week there were 400 Pinot Noir vines planted in their 400 m² of back garden, enjoying the last of the winter rains and cool sea breezes.

Now, this is where Tanja decided to take Clive’s dream and turn it into a reality. She started her own business from home called Topaz Wines and racing straight
through the red tape of the South African wine industry, managed to register 26 Topaz Street as a farm (yes, they do indeed have a farm number for their 400m$^2$ of land) and as a producer of wine. As far as they know, they are the smallest registered producer and bonded warehouse in South Africa.\textsuperscript{11}

In 2010 they made 4368 litres of wine, up from 684 litres when they started out. These wines are all made from fruit bought in from the Stellenbosch region, mainly from the Simonsberg and Bottelary areas. Topaz wines are handcrafted and made totally naturally in their garage. No sprays or machines are used. Grapes are handpicked, carefully hand sorted and bucketed into an open-top bin, where they cold-soak for five days. Fermentation occurs spontaneously and colour is extracted gently, with wooden plungers. After fermentation is complete, the skins are lightly pressed in a basket press and run off into new French oak barrels. After 14 months, the wines are bottled directly from the barrel, using gravity only. Topaz wines are unfiltered, to retain maximum flavour, and therefore may need decanting. These hand-crafted wines are made with love and passion to reflect the true essence of this fine product.\textsuperscript{12}

With the inspiration and motivation of Torr and Beutler, many garagistes are now producing their own wines. “Often these are professionals with a passion for wine. I believe to make it as a garagiste it takes passion the first year and guts to do it a second year! Every wine created is unique, special and individual. These wines are made with the outmost care and attention to detail,” says Beutler.\textsuperscript{13}

The number of operations grew and a desperate need for technical guidance and a structured marketing and sales plan emerged. Torr and Beutler spearheaded the convergence and The Garagiste Movement was formed in July 2002. Tanja Beutler explains, “We got together for an informal tasting one night and were simply stunned by the awesome standard of product.” The movement supplies technical and moral support to aspirant garagiste winemakers, as well as a network of grapes for sale, dry goods and equipment.\textsuperscript{14}

Co-operation made sense. The sharing of resources amongst producers of these boutique volumes is fundamental. A lot of the members have other full time jobs and have let their hobby take over a little bit more than expected. Beutler elaborates, “Logistics are a nightmare and the pooling of equipment and dry goods would streamline operations for members. The Association also sees itself supporting members in their accreditation applications to SAWIS and compliance with customs and excise regulations. Ultimately, the coming together of like-minded producers is about marketing. Plans include promoting the members and their products to the local and international wine trade by gaining access to wine events such as Cape Wines, The Johannesburg Wine Show, etc.”\textsuperscript{15}

Whilst never failing to appreciate the importance of commercial considerations, Beutler adamantly maintains, “We have to carry the passion forward, extend the love
and dedication that defines garage winemaking. The movement’s most refreshing
collection will be that of authenticity.”\textsuperscript{16}

In the garagiste community, a distinction is made between certified producers
and those making wine for home consumption. Loosely defined by the movement; to
be considered a commercial garagiste your total production should not exceed 9000
litres, the operation must be certified with SAWIS, it must be fully funded by the
garagiste, and the garagiste must make the wine.\textsuperscript{17}
2 The Red Tape

The amount of paperwork may seem daunting at first, but rest assured, most of the organizations to be dealt with have superb websites with a mine of information. I have summarized the mandatory topics first, a liquor license and a South African Revenue Service (SARS) manufacturing license. In order for your wine to state origin, variety and vintage on the label, registering with the South African Wine Industry Information and Systems (SAWIS) for wine certification is mandatory. To use the new certification seal which takes sustainability into account, you must be an Integrated Production of Wine (IPW) member as well. Not mandatory but good practices are The Biodiversity and Wine Initiative (BWI) and Ethical Trading. Wines of South Africa (WOSA), The Department of Agriculture (DA), and The Department of Trade and Industry (DTI) all become important if you want to export. We end the red tape section with some information on registering your new and exciting wine brand.

Liquor License

Anyone wishing to manufacture or distribute wine needs a liquor license from the Provincial government. The easiest and most straightforward way to obtain a license is to use a lawyer. The change in the law with regard to small wine producers, as proposed by the new National Liquor Act No 59 of 2003, has not yet been implemented in the Western Cape and will only be implemented once the new Western Cape Liquor Act is brought into effect. This Act has been approved by the Western Cape Parliament, but is now subject to certain proposed amendments. In the meantime the old Liquor Act (Act 27 of 1989) continues to regulate the small wine production industry. Applications for licences are conducted under the category of Special Licence (off - consumption) or Producer's Licence; these licences will be converted to a registration as a micro-producer, once the new Act is implemented. Our fees and disbursements for such a licence application (on the basis that there are no objections and that the police report is favourable) usually amounts to approximately R12 000.00. However, should a commercial sales and tasting facility be intended, the zoning of the premises may have to be adjusted as well.\textsuperscript{18}

To proceed yourself, application forms (FORM 1) are available at the South African Library in Cape Town. Alternatively you can buy the regulations published in terms of the Liquor Act, which contain FORM 1. This application form comes in triplicate, with the original, a copy for the Designated Police Officer (DPO) and a copy for the Liquor Board. Include details to support your application, such as proof of occupation. Also include details of the premises, such as colour photographs or a
detailed description, a copy of the menu (if food is served) and a floor plan, showing the situation and measurements of doors, windows and counters and the placement of streets and exits. The application must be typed and not hand-written. The prescribed application fee must be paid to the local office of the South African Revenue Services (SARS) and proof of payment should be attached to the application. On the first Friday of the month, the completed form must be forwarded to the Magistrate in the district where the premises to be licensed is situated. Two weeks before the application is forwarded to the Magistrate, notice of intention must be forwarded to the Government Printers in Pretoria for publication in the Government Gazette on the first Friday of the month. The notice in the Government Gazette is the only notice of the application given to the public. The Designated Police Officer (DPO) for the district will lodge a report with the Magistrate within 35 days. The DPO will inform the local community police forum or local rate payers association of the application. You have 42 days in which to reply, in writing, to the police report with any objections. If there were no objections received and the police report has been received, the application can be forwarded to the secretary of the Liquor Board. The Liquor Board will consider each application in terms of the applicant, the premises and the public interest. The application fee is R200. When the license is issued a special license fee of R1000 must be paid to the Receiver of Revenue. Annual fees are then due before December 31 every year, which are currently R25 per annum.19

South African Revenue Service (SARS)

Everyone making wine must license as a manufacturer in terms of the Customs and Excise Act No. 91 of 1964. To license your cellar as a customs and excise warehouse an application form, DA 185, must be completed and submitted together with the applicable supporting documents. The form is available from the Controller/Branch Manager of Customs and Excise or from the SARS Website.20

There are no set rules regarding the suitability of buildings for customs and excise warehouses, but the following serves as a guideline. SARS prefers the main exit to lead on to a main thoroughfare. This need not be insisted upon if the Controller/Branch manager is otherwise satisfied with the warehouse. The door must be fitted to accommodate a SARS lock or seal. All other doors in the building must be able to be locked from within. As a general rule, walls of the building should be made of brick, stone or concrete and the roof of slate, tiles or iron. All windows need to be barred. The warehouse must be independent, self-contained and not be a thoroughfare for any other purpose. The licensee must make accommodation available for Customs Officers to carry out their inspections, i.e. office, desk, chair and telephone.21
Before a warehouse license may be issued, the applicant must provide security. The amount of such security will be determined by the Controller/ Branch Manager based on the risk posed by the specific licensee. The security will be reviewed by SARS annually and the licensee is responsible to inform the Controller/ Branch Manager on any significant changes that may affect the security amount.\(^{22}\)

After the premises have been approved, security provided and the relevant license fees made, a special manufacturing warehouse (SVM) license will be issued. A unique warehouse number will be allocated to the licensed premises. The warehouse will be licensed at the Controller/ Branch Managers office in which area of control the premises are located.\(^{23}\)

The following activities may take place in a SVM; manufacture of wine, duty paid removals to the local market, bonded removals to other warehouses, exports and rebated removals (losses, destructions). All licensees are required to keep up to date records of raw material received, yield from raw material, production, stock on hand, receipts of bonded products, removal of bonded products, removal of rebated products, removal for home consumption, returns of duty paid stock and exports.\(^{24}\)

All wine produced and removed must be recorded and declared on the excise account. The SVM account consists of the following; DA260 Excise Account, DA 260.01 Production, DA 260.02 Receipts from Other Warehouses, DA 260.04 Summary of Non Duty Paid Removals and DA 260.05 Duty Paid Removals. These accounts must be submitted monthly with proof of payment of duty, to your local SARS Controller/Branch Manager. As of mid-2010, these forms must be submitted in triplicate in hard copy form and cannot be submitted electronically, and duty is R2.14 per litre. No duty is payable on exports. It might all sound overwhelming, but if you sit down with an officer at your local SARS branch, they will walk you through it the first time and it’s quite simple.\(^{25}\)

**Certification of Wine**

The integrity of our wine is guaranteed by the Wine of Origin (WO) system, which is administered by the Wine and Spirit Board (WSB), a statutory board representing the wine industry and appointed by the Minister of Agriculture. The seal on the neck of the bottle means it has been certified by the WSB and the seal guarantees the trustworthiness of all information relating to origin, varietal and vintage as stated on the label. The identification numbers on the seal are an indication of the strict control by the Wine and Spirit Board, from the pressing of the grapes to the certifying of the final product.\(^{26}\)

The Wine of Origin scheme is administered by SAWIS (SA Wine Industry Information and Systems). To register as a producer with SAWIS, a SAWIS 3 form must be completed which is available from their website. SAWIS operates on behalf of the Wine and Spirit Board. They are responsible for verifying the vintage, origin and variety of every certified wine. The certification seal confirms that claims on
labels are correct and that the wine is of an acceptable quality. Wine can only be certified if it was registered at harvest with SAWIS and has been properly recorded and inspected throughout the production process.  

To qualify for the certification of origin, variety and vintage, the wine must contain at least 100%, 85% and 85% of the three claims respectively. The hierarchy of classification is, in decreasing order, geographical unit, a region, a district, a ward, an estate and a single vineyard. The certification process can be summarised as follows: Application for the pressing of the grapes intended for making of the certified wine followed by comprehensive bookkeeping of grapes received, wine produced, wine treatments and bottled stocks, with routine inspection of the records Approval and certification by SAWIS means the wine has also passed a sensorial tasting, undergone chemical analysis and had the label approved as complying with the Liquor Products Act. A complete certification manual can be found on the SAWIS website.  

The WSB currently runs two certification systems: Wine of Origin (WO) and IPW. For WO, a certification seal has been in existence for many years, but there has never been a seal for the much younger IPW system for sustainable, environmentally friendly production. After wide consultation it was decided to make an alternative seal, which covers both WO and IPW. The alternative seal is available from 2010 to those producers who qualify and who wish to use it. The current seal certifying origin, vintage and varietal will continue to be available for those producers who are not able to use the new seal.  

While some other countries have sustainability accreditation and are introducing seals on a limited scale, no other country has the ability to introduce and certify sustainability nationally through a government agency like the Wine and Spirit Board. This is another big step forward in South Africa’s eco-friendly practices. Not only are we certifying the integrity of the wine in terms of vintage, variety and origin, but also in the sustainability of the production.  

The new scheme is being named Sustainable Wine South Africa. This information will be on the seal and consumers will be able to go to the website and enter the seal numbers and trace their bottle of wine all the way back to the IPW practices in the vineyard. Sustainable Wine South Africa (SWSA) is the alliance between the Wine and Spirit Board (WSB), the Integrated Production of Wine (IPW) scheme, the Biodiversity & Wine Initiative (BWI) and Wines of South Africa (WOSA). Together these organisations are driving the South African wine industry’s commitment to sustainable, eco-friendly production.
The South African wine industry has become a world leader in production integrity, an important dimension of which is the focus on sustainability through the Integrated Production of Wine (IPW) scheme, an industry-wide, technical system of sustainable wine production. Compliance with the scheme provides buyers with a guarantee that grape production was undertaken with due consideration of the environment, and that the wine was produced in an environmentally responsible manner and is safe for the consumer.\textsuperscript{32}

IPW consists of a set of guidelines specifying good agricultural practices related to grape production (farm component), as well as a set of guidelines specifying good manufacturing practices related to wine production (winery component) and packaging activities (bottling activities). Compliance with IPW can be related to the different activities (farm, winery and bottling) separately or in combination.\textsuperscript{33}

Key elements of the IPW scheme for farms are that withholding periods of agrochemicals may not be exceeded; no unregistered chemicals may be used; non-permitted residues may not be present in grapes; introduction of natural predators in vineyards; and all relevant legislation pertaining to cultivation of virgin soil, registration and treatment of water use, and all aspects related to the health and safety of workers, and the handling, storage and disposal of agrochemicals and empty containers, must be complied with.\textsuperscript{34}

IPW guidelines for farms can be negated in the cellar by the wrong harvesting, winemaking and bottling procedures. Incorrect use of equipment and application of chemicals, using electricity and water wastefully and waste products being dumped in nature all have a negative impact not only on the environment but the image of the wine. The cellar practices must therefore carry the IPW principle through to the final product.\textsuperscript{35}

If grapes are bought from many growers, each and every production unit has to be IPW accredited. In order for cellars to be IPW accredited, they must have a rigorous and recorded IPW system in place with all the farms that supply them with grapes. Compliance with the IPW guidelines is assessed on an annual basis through the completion of a self-evaluation questionnaire and is independently audited.\textsuperscript{36}

The Biodiversity & Wine Initiative (BWI)

One of the most important principles of IPW is that production should proceed in harmony with nature and this principle is shared by the BWI. If you are buying in grapes and do not own land yourself, the IPW farm section as well as becoming a
BWI member does not apply to you. When selecting who you are going to buy your grapes from, though, their involvement with IPW and/or BWI can influence your purchasing decision.

The Cape Floral Kingdom is the smallest yet richest plant kingdom on earth, and has earned international recognition as a global biodiversity hotspot and as South Africa's newest World Heritage Site. However, it is under increasing threat from agriculture, urban development and invasive alien plant species, with less than 9% of the unique Renosterveld and Lowland Fynbos ecosystems remaining. Since 80% of this unique flora is privately owned, landowner participation in conservation efforts is essential.\(^{37}\)

South Africa is a large producer of wine, and approximately 90% of this wine production occurs within the Cape Floral Kingdom. Because of the growth of the South African Wine Industry in the years since 1994, concern began mounting that some of the region's most vulnerable natural habitat might be targeted for vineyard expansion. Following an initial study by the Botanical Society of South Africa and Conservation International, the wine industry and the conservation sector embarked on a pioneering partnership to conserve this rich biodiversity. The BWI was established as a partnership between industry and conservation in November 1994. It is an initiative based within the South African office of the global conservation organisation, World Wide Fund for Nature (WWF).\(^{38}\)

The BWI aims to prevent further loss of habitat in critical conservation priority sites, increase the total area set aside as natural habitat in contractual protected areas, and promote changes in farming practices that enhance the suitability of vineyards as a habitat for biodiversity. BWI also aims to reduce farming practices that have negative impacts on biodiversity, both in the vineyards and in surrounding natural habitat, through the sound management of all natural resources and maintenance of functioning ecosystems.\(^{39}\)

To become a BWI member, producers must have at least two hectares of natural or restored natural area on the farm that can be conserved. Members must be registered with the Integrated Production of Wine (IPW) scheme and will therefore be compliant with the industry-prescribed environmental responsibilities. Members might not necessarily have implemented all the required management actions for retaining biodiversity (i.e. alien clearing, erosion control, rehabilitation of wetlands and rivers, appropriate fire management, etc), but do have time-based plans and schedules in place to ensure a process of continual improvement. BWI members are committed to keeping their demarcated natural area conserved, and must not develop new vineyards in these areas.\(^{40}\)
The impact of the BWI on the vineyard-growing areas of the Cape has been phenomenal, and has become an international benchmark for conservation and business partnerships. As of March 2010, there are 15 champions, 12 producer cellar members and 142 members enlisted in BWI. The total area conserved among all the members and champions is 118 500 hectares, which represents almost 120% of the total vineyards in the Cape Winelands.41

**Ethical Trading (WIETA)**

The concept of sustainability must also embrace the people who work on farms, their livelihoods, their dignity, and their health and safety. The South African wine industry is keen to redress the wrongs of the past and has actively supported WIETA, the Wine Industry Ethical Trade Association. WIETA was formally established in November 2002. WIETA is a not-for-profit, voluntary association of producers, retailers, trade unions, non-governmental and government organisations who are committed to the promotion of ethical trade.42

WIETA's mission is to improve the working conditions of employees in agriculture by formulating and adopting a code of good practice governing employment standards for those involved in primary growing and secondary production operations, promoting the adoption of and adherence to the code of good practice among all producers and growers, educating producers and workers on the provisions of the code, appointing independent social auditors to ensure that members of the association observe and implement the code of good practice, and determining ways of encouraging implementation of and compliance with the code and determining measures to be taken in the case of non-compliance with the code.43

**Wines of South Africa (WOSA)**

Wines of South Africa (WOSA) is a fully inclusive body, representing all South African producers of wine who export their products. WOSA, which was established in its current form in 1999, has over 500 exporters on its database, comprising all the major South African wine exporters. It is constituted as a non profit company and is totally independent of any producer or wholesaling company. WOSA is funded by a levy per litre raised on all bottled wines exported.44

WOSA's mandate is to promote the export of all South African wines in key international markets. WOSA exhibits regularly at major wine shows including ProWein in Germany, the London Wine Trade Fair and Vinordic in Stockholm. WOSA also works closely with the tourism authorities to advance Cape wine tourism. In addition, WOSA holds regular marketing seminars for members, bringing international wine buyers and marketers to the country to communicate changing
international market needs, demands and opportunities. In addition, WOSA brings wine and lifestyle journalists to the Cape on an ongoing basis. The visiting groups are exposed to the physical beauty and cultural heritage of the region's winelands.45

To summarize, WOSA’s mission is to enhance the image and reputation of the South African wines in key international markets, assist with the development of new export markets, assist with capacity building among exporters and facilitate the development of SA wine tourism. All South African producers who export wine can become a WOSA member. The annual fee is R570.

Wine Online

Wine Online is collaboration between the Department of Agriculture, the Department of Trade and Industry, and the wine industry to facilitate the submission, processing and production of the documents required for the export of wine. If you intend to export you must register with the Department of Agriculture at their Wine Online site. Export and Exemption certificates, EU quota applications and certificates, notification of loading, declaration of loading and VI.1 documents are all on Wine Online. In the future it is intended to include SAWIS and Customs and Excise to have a one stop facility for processing all export documentation. To export anything over thirty litres, a wine must have an export certificate. Exports are mainly done by sea due to the high expense of air shipments. Shipping is usually left to freight forwarders. Not only do they organize movements and inspections, book space on ships and arrange clearing, they can also handle your documentation on Wine Online for you. You can decide the extent of service you require and they will meet your specific requirements.46

Department of Trade and Industry (DTI)

The DTI has funds and resources available from the government and offers incentives, financial assistance for overseas travel, and advice for prospective exporters. The DTI is also responsible for monitoring the BEE scheme.47

Black Economic Empowerment (BEE) is a program launched by the South African government to redress the inequalities of Apartheid by giving previously disadvantaged groups (only SA citizens) economic opportunities previously not available to them. It includes measures such as skills development, ownership, management, and preferential procurement.48

Companies with an annual turnover of less than R5 million are considered as exempted small and micro-enterprises and enjoy a 100% BEE contribution recognition. Once your turnover exceeds R5 million you will enter the qualifying small
enterprises category and will have to complete a scorecard rather than being automatically exempt. When your annual turnover is over R5 million you must visit the DTI website to complete and submit your scorecard.49

Trademark

A trademark is a capital asset of a company. It serves the purpose of enhancing a consumer’s relationship with your wine, thereby becoming a company’s most important marketing tool. The value in this relationship can be protected through the registration of your trademark. The advantage of registering your trademark is that it gives you exclusive rights for the wine you registered it for. Prior use is not a prerequisite for the registration of a trademark. This is helpful in circumstances when a new brand is being launched. Provided that a trademark registration is renewed every 10 years, trademarks can be protected indefinitely. Applying for a trademark is actually a very straightforward process. CIPRO administers the Register of Trade Marks which is the record of all the trademarks that have been formally applied for and registered in the Republic of South Africa. To get an application form to register a trademark, visit the Cipro website. I applied for my Black Pearl trademark in June 2005 and received my approval certificate in February 2010. The cost was R85 Rand in revenue stamps. Today the registration fee to apply on line is R590 per application.50
3 Practical

Your “Garage”

The first thing to think about when choosing your cellar location is that it is agreeable with the liquor license and SARS requirements. Other positive winery considerations would be ecologically responsible, healthy and sensible, operationally efficient, economically viable, good neighbours and aesthetically pleasing. Sustainability is the buzz word at the moment and can be important in brand identification. For a “green” cellar electricity and water use are your main issues. Refrigeration, pumps, fans, lighting and electricity used for packaging and bottling are all sources of energy consumption in the winery.

Following are some considerations for your venue. Create a cool roof by painting a metal roof with infrared reflecting paint. A cool roof will reduce heat absorption and cooling costs. Have a portion of the building if not all underground to take advantage of the earth’s constant temperature. Air conditioning in barrel cellars dries out the barrels and increases evaporation. Some winemakers use a humidifier. A barrel room that does not need cooling will promote less evaporation and not use electricity from a cooling unit or humidifier. Use local builders and materials to reduce transportation costs and lower the carbon footprint. Build with stone, masonry or concrete and have sandwiched insulation. Thick-walled buildings absorb heat all day long and release it at night with little impact on the inside temperature. Use recycled building materials. Take advantage of solar energy. Optimize the use of shading. Plant trees or grow vines or shrubs to shade walls. Reduce water use by collecting water used for washing, and use for irrigation. Have a tank to collect rain water. Establish a recycling program.51

When deciding on your venue, consider that more space will be required than initially expected. I started in 2001 with my 8 barrels in an existing cool room on the farm. It was only 5 m² but it was cool, and that is one of the requirements for your space. It gets hot at harvest time and you need a cool area for making your wine. In the converted pig shed that I now use as a cellar I got casual labour to come and build a second brick wall for both security and insulation. I insulated the ceiling with Isoboard and installed an air conditioning unit. You need to have the cooling to control your fermentation temperatures. If you have your grapes delivered at 26ºC which is very likely and your fermentation severely struggles at 30ºC, you have a great risk of a sluggish or stuck fermentation which is a nightmare! What I do now is chill my grapes down to 5ºC in my cool room before crushing since my main cellar runs at 18ºC. Having a plastic curtain to keep one section of your cellar cooler is also an option but not a necessity. Another option is to have an area for dry goods and a work area. The last thing you want is fermenting juice splashing all over your boxed
wine while punching down. Your presentation is ruined and the fruit flies will come in force. Lastly, make sure your cellar is easy to keep clean. Hygiene is of utmost importance in your new space to avoid spoilage of your wine.

If you are not interested in setting up your own cellar, many garagistes lease space at existing cellars. This could involve hiring just storage space or could involve using the cellars equipment as well.

**Filling your “garage”**

So you’ve chosen your building that you can keep cool and clean. Now we need some equipment to get busy. Basically you need something to crush and de-stem your grapes, containers to ferment the juice in, something to press the wine with, and storage tanks or barrels. You also need a means to move the wine whether this is gravity, a pump and pipes, or buckets. Other equipment which comes in handy is a balling meter so that you can measure your sugar every day, a wine thief to get samples out of your barrels, a barrel cleaner, and a pallet jack. There were three companies recommended by other garagistes as the best suppliers of small scale winery equipment, Bacchus Equipment, Wine Machinery and CDS Vintec. Ockie Nel of Bacchus explained to me that they can custom stock your cellar. You can tell them the amount of grapes you want to crush per vintage and the amount of money you want to spend and they will advice and source what you need. He also said it is hard to quote prices on equipment because most of it comes from overseas. This means you need to take both the exchange rate and transport costs into account.52

After speaking with all three suppliers, a ball park figure for the main equipment follows; a wooden bin and plastic bin liner to ferment half a ton of grapes goes for R1000, so R2000 per ton of grapes, crusher/de-stemmer that you can carry from bin to bin R9200, 1000 Litre stainless steel tank R12000, 500 litre hydraulic basket press R20000, and a pump R18000. There are a great number of cooperages selling barrels, but you must choose your preference from the style of wine you want to make and experimenting. For new barrels Nadalie, Vicard, Demptos, Sylvain, Taransaud and Francois Freres were recommended by many garagistes as well as Thales and FS Smit for used and reconditioned barrels. For the 2010 harvest you were looking at about 700 Euro for a new 225 litre French oak barrel and 400 Euro for American oak.53

**Grapes**

So we’ve spent a fortune setting up our cellar and filled it with expensive equipment but the bottomless pit isn’t filled! We now need the grapes. So where are we going to get the grapes from? Most garagistes, unless trained winemakers making their own label on the side, start with red wine because cooling isn’t as
critical and you can get away without buying stainless steel tanks preferable for
many white wines. Buying in grapes for many garagistes is also favourable to cherry
pick and get a diversity of grapes as well as avoid the viticultural aspect. Pick the
varietal and the area that you like. If you are looking to make a Pinot Noir, choose a
supplier from a cool region such as Elgin where this variety thrives. The Voor-
Paardeberg is very popular for supplying high quality Shiraz grapes. If you want to
make a traditional Bordeaux blend look to Stellenbosch. Almost all grape growers
are willing to sell grapes to private buyers. Pick up the John Platter Wine Guide and
contact a producer you enjoy and inquire if they sell small quantities of grapes. If
they don’t sell grapes themselves, nine times out of ten they will recommend a
contact. The Garagiste Movement is also frequently sending emails with grape
sellers before harvest time, so get on their mailing list. Wine Ads also advertise
grapes for sale on line. Ideally, you want to get from a reputable grower and be able
to see the vineyard during the growing season. Wine is predominantly made in the
vineyard, so do not expect to make a good wine without decent grapes.

Planting a Vineyard

The other option of course is to establish your own vineyard, which is a long term
capital investment. It is therefore of vital importance that the correct variety and
rootstock choices be made to have an economically viable wine business.

Although vines can be grown under a wide range of climatic conditions and on a
number of soil types, the quality of the grapes harvested can vary considerably. In
order to produce grapes successfully and of suitable quality, the terroir is of great
importance for your site selection. In order to produce high quality grapes, a number
of factors should be considered before planting a vineyard.

Soil preparation is important for correcting physical and chemical restrictions
which impede root development. Profile holes must be dug a meter deep on the
chosen site. Representative soil samples must then be sent off for chemical analysis
to determine the pH and the nutrient content of the soil. This will determine whether
lime should be applied to acid soil or gypsum to alkaline soil. If the analysis indicates
a deficiency in nutrients, especially phosphate, it can be supplemented during soil
preparation. Chemical adjustments can be done to a reasonable depth during soil
preparation.54

The most common physical restrictions are: soft layers of different textures as
found in alluvial soils, compaction as found in saline and/or soil with a high clay
content, hard layers in sub soil formed by concretions of Calcium, Magnesium and
Iron, shale/sandstone in the subsoil, clay subsoil, and free water forming a water
table within the desired root depth. Improvement of these restrictions requires heavy
machinery. Deep ploughing or ripping are the most common methods for soil improvement and contractors are usually hired to do the job.\textsuperscript{55}

When deciding which variety to plant, adaptability of the variety to the site and trends in the market are important considerations. Site selection and varietal choice go hand in hand. Each variety has its own characteristics such as time of ripening, time of budding, temperature requirements, etc. The properties of the site must be compatible with the requirements of the variety. Varieties more prone to fungus disease should be planted on less humid sites. Varieties susceptible to wind damage should be planted on less windy sites. Delicate and aromatic varieties should be planted on cooler sites. The biggest problem with vines in South Africa is the huge amount of leaf roll virus. You must get your vines from a reputable nursery and make sure the vines are certified virus free.\textsuperscript{56}

Grafted vines must be used when establishing a vineyard since phylloxera, an aphid which feeds on vine roots, is found in all soils where vines usually grow. The rootstock which is grafted on is resistant to this pest. In choosing a rootstock the physical and chemical properties of the soil as well as variety used for production should be taken into account. Some important rootstock properties to consider are: drought resistance for un-irrigated vineyards, affinity to variety, tolerance to high Calcium content of the soil commonly found in low rainfall areas, ability to grow in more saline soils found in low rainfall areas, ability to grow in poorly drained soil often encountered in low lying sites and in high rainfall areas, ability to grow in clay soils, ability to grow in sandy soils, growth vigour, resistance to nematodes.\textsuperscript{57}
In some ways winemaking is the easy bit, it’s only making a wine that tastes sensational and lasts forever that is difficult. If nurture and nature have provided ripe healthy grapes, there is really no excuse for bad wine. Ripe grapes contain sugar, which under the influence of minute organisms called yeast, can be converted into alcohol and carbon dioxide gas. It would be silly, though, to imply that winemakers were in anyway redundant. Wine left to make itself would in most cases be on its way to vinegar, because once it has finished fermenting it needs to be protected from oxygen. Following is a basic summary of the making of a red wine. In this case I’m making a Shiraz from grapes bought from Agter-Paarl for 4000 Rand a ton. This particular site yields 4 tons per hectare and gives a white pepper and herbiness that I love.

When to Pick

Until very recently grapes were picked by numbers, as soon as grape sugars reached an acceptable level in cool climates and in warmer climates before acids dropped dangerously low (and pH rose dangerously high). Today winemakers look more for physiological ripeness. CWM Andy Roediger does phenolic ripeness analysis but a walk through the vineyard tasting and examining your grapes is a big help along with your, sugar, acid and pH analysis. The pips should be brown rather than green. The peduncle attaching the grape to the shoot should also be browning. Chewing on the skins should leave no bitterness and the skins should be softening. I cannot stress enough how important it is to pick at optimal ripeness.

Transporting Grapes

Once picked, the aim is to get the grapes to the winery as quickly and as smoothly as possible. The 20 kg lug boxes are a good option to transport in because the grapes don’t get too squashed or damaged en route. I have bought some grapes from 15 km down the road before. I have bought empty lug boxes which would be filled with about 17 kilograms of grapes. After they were picked I would take my horse box and load it up with the filled boxes to bring back to my cellar. Not as heavy as a horse! The longer the grapes sit around between the vine and the winery, the more likely they are to be crushed by their own weight, to oxidise and to lose their fresh fruity flavours. It is ideal to avoid transport in the heat of the day and have your grapes picked as early as possible in the morning to receive them cold. Chilling
grapes helps to preserve fresh primary aromas and inhibits yeast, harmful bacteria and oxidation, allowing winemakers in a hot climate such as ours to delay fermentation until the must is in the proper state for the complex process to follow. In warm wine regions refrigeration is an important winemaking tool. Back at the cellar I leave all grapes in a cool room overnight to chill to 5ºC. If I can get my grapes in early in the morning when they are still cool I would skip this option, but only if they were 20ºC or below.

**Crushing**

I have made my initial work space outside the front door of my cellar where I de-stem, crush and fill my fermentation bins. I then clean any mess off my bin and use my most useful cellar tool, a pallet jack, to wheel the bin inside to the cooling. I have a camping tent I set up over the grapes and crusher to keep things as cool as possible. I let the stems fall onto a sheet of plastic which I drag to my compost heap after each bin.

A crusher/de-stemmer is usually one combined machine. Most grapes go through the de-stemmer to remove the stems which can impart harsh flavours and bitter characters. Practically all grapes go into a crusher before fermentation in order to gently break the skins and release the juice, putting the sugar in contact with the yeast. I have added a side tray onto the side of my crusher so that each basket of grapes is dumped onto this instead of straight into the crusher. This is a sorting tray which gives me a chance to pick through the bunches and remove the mildewed, raisined and mealy bug infected ones. Most crushers have rollers that you can adjust to make a gentle crush. Some winemakers like to leave some stems in their wine. I like to remove one of my rollers to have lots of whole berries present. The whole berries lend themselves to a fruity low tannic wine. Most winemakers add a small amount of Sulphur Dioxide (SO$_2$) at crush, as protection against oxidation and as an antiseptic. The amount to add depends on the condition of your grapes and the pH. The healthier they are and the lower the pH, the less SO$_2$ you need to add. An example would be 20 parts per million (ppm) to healthy grapes and 50 ppm to rotten or mildew infected grapes.

**Addition/Acid Adjustment**

After crushing, the must (the pulp of skins and juice) is fed into your fermentation vessel. My crusher sits on top of my fermentation bin, so I simply lift the crusher and move it onto the next bin. Gravity is your best option for this step. This is when most winemakers would do their first analysis, checking the sugar, acidity and pH of the grapes. You can check the sugar with your balling meter in the cellar and they also...
have home pH/acid meters. Most winemakers send samples to laboratories to have analysis done. The routine addition in warmer climates is acid, most usually in the form of tartaric acid. Many winemakers would rather harvest grapes a little late but with all the additional flavour compounds that develop late in the ripening process and then compensate for the reduced natural acidity level by adding acid. Some years I have had to add and other years have not. Age of vines and climatic conditions during the growing season both play a role in the grapes acid level. Adding at this early stage allows the acid to integrate better in the wine. Added acid in New World warm regions often appears out of balance and you taste it on entry rather than balanced throughout the palate. If your acid is too low your wine can appear flabby, thus the reasoning for adding. As the sugar rises in the grapes, the acidity drops, so in many New World wines where the grapes are picked very ripe, the acid can be extremely low. Most South African reds when bottled seem to have a total acidity (TA) of between 5-5.5 grams per litre (g/l). A simplification of this is if your initial analysis of TA is 4 and you want it to be 5.5 you need to add 1.5 g/l of tartaric acid. This is a simplification because it really depends how much is malic and how much is lactic, but we will leave this as a general rule of thumb. You should liaise with your grower to get the grapes at the sugar you want. The higher the sugar content of the grapes, the higher the eventual alcohol and a higher chance of problem fermentations. A general equation is multiplying your Balling by .57 to get your eventual alcohol, i.e. 26º Balling equals approximately 14.82% alcohol. The most important part is to make sure your grapes are physiologically ripe. Picking time is crucial. Too early and your wine tastes herbaceous and green, and too late and your wine tastes jammy. I can’t emphasize enough that you need to get your grapes in at ideal ripeness.

Soaking and Fermenting

When choosing a container to ferment in, stainless steel, concrete or plastic are the most common options. The most popular material selected is stainless steel due to easiness to clean and fit with temperature control, such as refrigerated cooling jackets. Expense is the drawback of stainless steel. Fermenting in wooden vats is popular among traditionalists. The greatest marriage of wood and wine occurs with taking the head off your new oak barrel, fermenting in it, and then getting the cooper to put the head back on. You’ll never forget the amazing aromas after doing this once! Common for garagistes is fermenting in plastic bins. I use plastic bins that fit in a wooden bin for support and can hold half a ton of grapes. This size allows for the heat generated during fermentation to dissipate more easily than with a larger vessel.

Now you have a choice to do a cold soak or start fermentation immediately. My grapes look like blueberries from my dry land vineyard so I have no problem extracting colour; therefore I skip the cold soak. I feel 90% of extraction comes
during the fermentation phase so a cold soak is not necessary. If you want initial extra extraction, it is important that you keep your must cool so the natural yeasts do not start fermenting until your desired time or until you add your cultured yeast. When it comes to yeasts, many traditional winemakers simply rely on the population of yeasts that have built up in the air over the years. Some producers in newer wine regions have experimented successfully with wild yeasts, showing that it does not take too long to build up a useful local wine yeast population. Wild yeast supporters argue they get a wider range of flavours than a single strain of cultured yeast. Many winemakers including myself choose to use cultured yeasts. These are much more reliable than wild yeasts that come into your cellar with your grapes. Some say you lose the regional identity of your wine in dispensing with the indigenous yeasts for laboratory-cultured ones. With an eventual alcohol of 14.5% from picking phenolically ripe due to my warm meso-climate, I feel I would be taking a big risk in fermenting the wine dry if I used wild yeast. Instead I purchase one that I know will manage the higher alcohols produced by the warm climate of South Africa.

The concept of inoculating wine fermentations with pure yeast starter cultures dates back to 1890 when Müller-Thurgau convinced some German winemakers of the benefits of the rapid and even rates of fermentation. About 75 years later, the first two commercial active dried wine yeast strains were produced for a Californian winery, and these two strains were offered worldwide as all-purpose yeasts. Soon it became evident that strains with specific characteristics for different types and styles of wine were needed. In addition to the primary role of wine yeast to complete conversion of grape sugars to alcohol without the development of off-flavours, today’s winemakers demand starter culture strains with a whole range of specialized properties, their importance differing with the type and style of wine to be made. Some desirable characteristics of different cultured yeasts might include high alcohol tolerance, low sulphite formation, high glycerol production, low foam formation, low volatile acidity production and low nitrogen demand.

Anchor Wine Yeast is just one yeast company and it offers over twenty different strains. For Cabernet Sauvignon alone they suggest seven different choices. Yeast WE372 is recommended for a Cabernet with enhanced red berry and floral aromas, FermicruXL for New World Cabernet - fruity with enhanced mouth feel and soft tannins, Collection Cepage Cabernet for a traditional style - enhanced blackcurrant, fresh tobacco and dark chocolate aromas. Yeast NT116 is for a wood matured Bordeaux style, NT202 enhances red berry and minty aromas, NT112 is recommended for wines which will undergo micro-oxygenation and NT50 for early release wines with spicy and mint aromas. Along with aromas, yeasts have different tolerances and demands which must be taken into consideration, such as nitrogen and complex yeast nutrient demands, alcohol tolerance and temperature requirements.

When fermentation is underway, it is crucial to stop the temperature of the must from rising too high. Over-hot musts produce coarse, stewed tasting wines, and
worse there is a chance your yeast could get killed off before converting all the sugar into alcohol. For most reds it is best to stay below 28ºC. I achieve this by adding my yeast at 17ºC and keeping my air conditioning on at the same temperature throughout the fermentation. Even in scorching Paarl this has worked for me. Dry ice is also an option, although expensive. If desperate, freezing loads of water bottles and putting them in your bin could help.

Many New World Winemakers routinely add nutrients to make the fermentation efficient and predictable. Most of these are special nitrogen-based yeast nutrients. There are a wide variety of nutrients available under many different brand names. The choice can seem overwhelming and confusing. Do I use yeast hulls, rehydration nutrients, vitamin mixes, mannoproteins, or just straight ammonia? The bottom line regarding yeast nutrients is it is not a clear cut science of what to use and when. The yeast strain chosen and the specific conditions of the must will greatly determine which product to use. As a winemaker you need to familiarize yourself with the products and decide what suits your needs. You should take the economics of it into account and contact your chosen supplier for recommendations and advice.61

Once your juice starts fermenting, the carbon dioxide given off by the yeasts constantly pushes the skins to the surface. You want to keep the skins submerged so that their colour, flavour and tannins are leached out into the eventual wine. (Remember, the juice of most red grapes is as colourless as white grapes before skin contact). For most garagistes this is done manually with a pole and a lot of muscle. I had a stick made out of stainless steel with a handle and a cross on the end that works pretty well and for 7-10 days doing this 5 times a day you definitely get fit!

Once the wine has fermented you can choose to leave your wine on the skins for a week or two longer to extract more tannins or you can press immediately. If leaving for an extended skin contact, I suggest you have an air tight lid for your tank or blanket your wine with carbon dioxide (CO2) to protect it from oxidation. You would then press after you have tasted and decided your wine has the added bit of tannin you are looking for. I choose to press just before my wine is dry and put the wine into barrels to finish the last little bit of the ferment. I prefer the soft tannins and knowing that my wine is safe from oxygen.

**Pressing**

There are many presses on the market including the horizontal press and the basket press. The typical modern horizontal press consists of an inflatable airbag inside a perforated rotating cylinder through which juice falls to a tray below. Whereas most horizontal presses can be worked and cleaned mechanically, the basket press uses up both time and manpower, but similarly squeezes juice through
slats to a tray below. Most garagistes use the traditional basket press due to price and small volumes. You can get both manual and hydraulic basket presses as well as an assortment of sizes. As with all equipment purchases, I would buy bigger than intended to leave room for possible expansion. I have a one ton manual basket press and can press up to five tons in a day. I have a small pump and pipes with an attachment on the end of the one pipe which I insert into my fermentation bin to allow the free run juice to flow to the barrels while leaving the skins and pips in my bin. I then use my trusty pallet jack to wheel my bin outside to the press. I park the bin as close as possible to the press and bring on the buckets. It’s only fifteen minutes of bucketing to fill the press and then an hour to press the skins reasonably dry. A hydraulic press is easier on the back but harder on the pocket. It does save a lot of time in the pressing operation. Pressing with a basket press is generally a soft operation and I wouldn’t worry about extracting bitter tannins from crushed pips because it is very difficult to press that hard. The gentle pressing leaves me with an average of 600 litres per ton, where a co-operative might be getting closer to 750 litres a ton.

**Malolactic Fermentation**

The final stage of fermentation for reds is the malolactic fermentation. Virtually all red wines undergo this second fermentation which under the influence of heat and a special lactic bacteria, takes place sometime after the main alcoholic fermentation. It is the conversion of astringent malic acid into softer lactic acid. You can induce with cultured bacteria available through yeast suppliers, but I have never had a problem with it starting on its own. Another option is phone a friend who makes wine and get some lees from a wine that has finished MLF. This option is less expensive than buying a culture and works well. As well as making the wine more stable, malolactic fermentation helps to make it taste softer, fuller and more complex. An analysis will tell you if your malolactic is complete or not. After malolactic fermentation, most winemakers add sulphur dioxide to protect the wine during its ageing phase.62

**Oak Maturation**

Most of the world’s serious red wines are matured in oak barrels to develop complexity. Oak gives flavour, especially vanillin and tannin, and, being porous, allows limited and beneficial interaction between air and wine. Both the species of oak and its geographic origin have an influence on the content of its compounds which then makes an impact on the sensory attributes of the wine matured in the wood. The reason for this is that both the genetic factors inherent to each species as well as the environmental factors, including soil type and nutrition as well as weather
patterns, determine how much and in what ratios compounds are synthesized in trees.63

Barrels for wine come mainly from France, America and Eastern Europe. French oak carries the highest reputation and price tag. French oak contains more extractables, polyphenols and tannins than American oak. American oak has a relatively low phenol count and a high concentration of aromatic substances in comparison to French oak species. American tends to give a less subtle, more pungent coconut, spicy and vanilla flavour. Prices of American oak are almost half the price of French, probably due to the fact that it is so dense that it remains watertight even after sawing. French oak needs to be split. Due to its obvious flavours, American Oak is used for powerfully flavoured red wines.64

The size of the barrel as well as the age of the barrel is fundamental. The smaller the barrel the higher the ratio of surface area to volume and the more impact the wood is likely to have on the wine in either physical or flavour sense. The newer the barrel, the more oak flavour and tannin it has to be leechet into the wine. After 3 or 4 years there is little left to impart flavour and the wood is merely a storage container.

Seasoning and toasting also affect the flavour the barrel imparts. Trees are dried either naturally or artificially. The wood can be seasoned naturally by being left outside for two to three years where it is exposed to the elements. This allows the wood to dry naturally while the rain gradually leaches out all the hard green tannins from the oak. Wood is artificially seasoned by keeping the oak staves in a ventilated drying oven at 40-60ºC for about a month. Natural seasoning is a far superior process due to years in the wind and rain washing out the harsh tannins and other unpleasant components. During this drawn out natural seasoning time the physical, aromatic and organoleptic qualities of oak for use in wine production improve. The oven drying process does not allow for the same amount of leaching to take place in the wood.65

Along with seasoning, the toasting of the barrel is a very important part of barrel-making. Not only does it set the barrel in its final shape, but the heat applied to the wood leads to the formation of aromatic compounds which are important in the maturation of wine. The heat source for toasting is ideally an open fire fuelled by oak but can be gas or electricity. There are generally three levels of toasting, light, medium and heavy. One cooper’s medium toast might not be like another’s, so winemakers need to select their wood carefully and build relationships with cooperages that produce a level of toasting that works with their specific wine style.66

There are lots of alternative wood products on the market today, but the conclusion still is that barrels reign supreme. The problem with most staves/chips is they are made from inferior wood to begin with. The other problem is that by putting the wood alternative in a tank, your wine is missing out on the importance of micro
oxygenation. Most garagistes are looking at high quality with limited quantity, so barrels are a must, although the percentage of new wood is not necessarily high.67

During maturation in barrel, you as the winemaker still have a few crucial tasks. Barrels need to be topped up periodically to compensate for evaporation. Racking, or moving wine from dirty barrels to clean barrels to separate the clean wine from the sediment must also be performed. Racking also introduces oxygen which helps with avoiding reductive wine as well as off odours from sulphides and mercaptans. The frequency of this depends on how long you age your wine and the type of wine you wish to achieve. Barrels need to be cleaned before being filled again.68

After you have aged your wine to your satisfaction, it’s time to stick that wine thief in the barrel and start tasting and possibly blending. You might choose to fine your wine to remove impurities or bitter tannins, either traditionally with egg white or with a clarifying agent. Fining agents do not remain in the wine, they merely serve to attract the larger solids to fall to the bottom of the container so that clear wine can be racked off. Pre bottling analysis can then be done to make sure your wine is stable and in balance. The analysis will also help you with your filtering choice before bottling.69

Analysis

Most garagistes that I have been in communication with agree with my winemaking motto of, “as little as possible but as much as necessary”. The trend is to make wine as naturally as possible. Monitoring the health of your wine is important with additions when needed. There are key things to analyze at different stages in the winemaking process. Most small producers do not have their own labs and the majority send samples for analysis to Vinlab in Stellenbosch. The garagistes who completed my questionnaire were in general agreement about the following tests.70

At crushing, the sugar level or degrees Balling (ºB), pH and Total Acidity are tested. The Balling reading will point you to your eventual alcoholic strength. The pH tells you the health of your grapes and how effective your sulphur dioxide will be, thereby determining how much to add at crush. If your Total Acidity is too low you can add your tartaric acid at crush resulting in a better integration with the eventual wine.

The next test for most is to check if malolactic fermentation is complete. Once it is 100% complete, it is a good idea to make your second addition of Sulphur Dioxide. Your addition at crush has been bound during fermentation and has no protective properties left. Bringing the free SO2 up to 30ppm was the general consensus.71
It is worth occasionally checking the Volatile Acidity during maturation. If it rises dramatically it is a sign that you have unwanted bacteria in your wine and action might be needed.

Most labs then offer a pre-bottling analysis to make sure your wine is healthy and if filtration is needed. Your Free and Total SO\textsuperscript{2} are tested so that you can adjust to your desired level. Total Acidity will say if last minute acid adjustments are needed. Volatile Acidity, pH, % Alcohol and Residual Sugar are also tested. A micro ID is also recommended. Making sure your wine is ready for bottling is vital to avoid disasters in the bottle.

**Garagistes Winemaking Examples**

I communicated with over two dozen micro producers for this paper. Most have day jobs that are not winemaking and are garagiste producers for the love of it. Some have cellars and some rent. Some have vineyards and some buy grapes. Following are a few examples.

Brett Chrystal lives in Parkhurst and Stuart Campbell in Parkmore, Sandton. They have teamed up to bring you Parks Winery, where they are currently processing half a ton of grapes in, what else, a double garage! They source their grapes from Esperon in the Helshoogte Pass, Stellenbosch. Brett explains how they get the grapes to Johannesburg. “We basically liaise with the wine-grower at Esperon, who advises us of the Balling. When we anticipate it will reach about 25ºB, we get him to harvest for us. These bunches are placed into a Kaymac double walled insulated container we bought, and which we have transported down to Rudi Schultz at Thelema. Once the lug boxes are full at Esperon, they transfer these to our Kaymac container, and Rudi stores it in his fridges until Stuart's brother (who lives in the Cape) can take this 500L Kaymac container to a depot in Stellenbosch the same day of the harvest. LMC, the courier company that we use, then transport this overnight in a refrigerated truck to a depot near Kempton Park (near OR Tambo airport) where my partner picks up the Kaymac container using a truck borrowed from his work, and then transports it to his house in Parkmore, Sandton. There is no more than 24 hours between harvesting and hand sorting / crushing, with the cold chain kept more or less intact for the duration.” They chose Shiraz because it is their favourite varietal and difficult to make a total mess of it. They hand sort, ferment in 200 litre food grade plastic bins, punch down 2-3 times a day, press with a 90kg manual basket press and use plastic buckets to move the wine to barrel. The wine matures in barrel for 9-12 months, they rack once, egg white fine, and bottle and cork by hand.\textsuperscript{72}

Moving from Gauteng to Kwa Zulu Natal, Ian and Jane Smorthwaite, from Abingdon Estate in the Midlands, planted their own grapes to produce their current
7500 bottles of wine. Their choice of varietals were Sauvignon Blanc, Chardonnay, and Viognier because whites are hardy and adaptable; and Syrah and Cabernet Sauvignon which are late ripening to harvest into their very dry autumn and winter. They are all single varietal wines able to stand alone without blending. The Sauvignon Blanc and Viognier are both de-stemmed and crushed into a settling tank with settling enzymes and pressing enzymes. Free run juice is drained off and the skins basket pressed after approx 9 –16 hours at 12ºC. Must is fermented in stainless steel and/or French oak barrels until dry, then kept on the lees, fined, sterile filtered and bottled when appropriate. Chardonnay as above except whole bunch pressed. Reds are de-stemmed and crushed into stainless steel jacketed tanks with enzymes to release colour, fermented dry on the skins with punch downs every 4 hours. Free run is pumped out and skins basket pressed and added back to free run. The wine is inoculated with lactic acid bacteria in the tank for Malolactic fermentation, racked to French oak barrels for ageing for a minimum of 1 year and up to 2 years. Their equipment consists of a de-stemmer/crusher, stainless steel jacketed tanks (various volumes), mono speed control pump, 212 lit basket press, 20 pad filtration system, 225 and 500 litre French oak barrels, a 3 head bottling unit and a hand corker.

Andy Mitchell, CWM, and owner of Andy Mitchell Wines, is currently making 3750 litres per vintage with his wife Vikkie and daughter Olivia. His “garage” was built as a dedicated cellar with a barrel cellar below the main cellar. The roof is thatch (good natural insulator) and they have a chiller unit with pipes circulating cold water/glycol to the tanks. The cellar is air conditioned as well. They were originally planning to plant their own fruit, but the relatively easy availability of good fruit and the fact that they don’t have enough time to look after vineyards led to the decision to buy in fruit for now. The Shiraz comes from Helvetica Vineyard in the Helderberg which Andy thinks is an excellent area for quality red grapes. The Chenin Blanc comes from JP Bredell in the Helderberg because they have 30 year old bush vine Chenin Blanc and their quality is consistently good. The Chardonnay is from Lismore Estate Vineyards in Greyton and the Pinot Noir from Stellenbosch as well as Bamboes Bay, a cool coastal area with excellent quality fruit. Andy chose to make Syrah because he loves Rhone varietals. Andy thinks the availability of old bush vine Chenin Blanc and the fact that the market is saturated with Sauvignon Blanc creates a unique opportunity for Chenin Blanc in South Africa. He also thinks it is a very versatile grape which responds well to different winemaking techniques. There is a good market for Rosé and bubbly, so Andy makes both of these, along with a Pinot Noir. Andy says, “Pinot is my favourite red varietal and it is a bit of a challenge to my winemaking skills, or lack thereof!”

On to winemaking, Andy continues, “except for the MCC base wine, we de-stem into stainless tanks and give some skin contact, time dependant on the varietal. Our red wines cold soak for 3 days on average and then we inoculate with cultured
yeasts. The red wines are punched down by hand every 6 hours until the Balling reaches about 2ºB. Temperatures are maintained below 25ºC. We generally post-macerate for 10–14 days depending on the vintage. The wine is then pressed, racked off into barrels and inoculated with MLF bacteria. After MLF, the SO² is adjusted to 25ppm free. Barrels are topped once a week and tasted at the same time. We generally mature our red wine in French oak for 18 – 24 months for Syrah and 12 months for Pinot Noir. Our oaking regime is generally 1/3 new, 1/3 2nd fill and 1/3 3rd and 4th fill barriques. The white wine and rosé get between 6 and 8 hours skin contact before pressing and settling in tanks. After settling and racking, the white wines are inoculated with different yeasts depending on whether they are to be fermented in barrel or tank. The tank portion of both white and rosé is made reductively and protected from contact with oxygen at all times. Temperatures are maintained at 13-15º C. Once fermentation has started, the barrel portion of the white wine is racked into barrels and is fermented with the aid of barrel coolers to keep the fermentation temperature down. After fermentation is complete the wines are kept on the lees and undergo weekly battonage. Our rosé stays on the lees for 3 – 4 months before stabilization and bottling, and our Chenin stays on the lees in barrel and tank for 10–12 months before stabilization and bottling.75

The MCC is made in the traditional Methode Champenoise way with whole bunch pressing, followed by settling, racking and cold fermentation followed by 8–10 months on the lees before inoculation and bottling for the 2nd fermentation. Their equipment consists of a de-stemmer, stainless steel tanks, and pneumatic bags that fit inside the tanks for pressing. No pumps since the cellar is on two levels so we can rack from one level to the other.76

Andries van der Walt of Katbakkies as of yet has no cellar of his own but uses the university cellar at Coetzenburg for crushing, Koelenhof for barrel storage, a low-tech shed in the Cederberg foothills and hopefully by end of this year his own facility in Devon Valley. All his wines are barrel fermented and matured so cooling is not a big issue, stable temperatures however are. His own facility will be super insulated and mostly underground as well as temperature regulated. “I have my own vineyards, but up until now I have been buying in grapes, cherry picking for quality, so to speak”, he tells me. He continues, “from whom I buy is closely guarded, all Stellenbosch origin, I buy the best quality grapes I can lay my hands on and I pay a premium for it.” Andries is currently making 10000 bottles a vintage of Chenin blanc, because it is a great noble grape with enormous character and makes wines that can last; Viognier, because it is such a great Asian food wine; Syrah, because it makes economic sense; and Cabernet Sauvignon because it is his favourite red wine. He sums up his winemaking as only using the best grapes, only free run juice and natural fermentations in barrel on white, inoculated fermentations for reds, minimal intervention in barrel, and minimal filtration on bottling.77

Andy Roediger, CWM, is currently crushing eighteen tons of grapes at Rust En Vrede Estate, opposite Eikendal, for his Boschheim brand. He buys in grapes from
Tjuks Roos (koffie stone is good for Shiraz), Elgin vintners (Pinot Noir cool climate), Miravel (High anthocyanins in Cabernet) and Wynand Hamman - Bamboes Bay (Pinot Noir from cool climate). He likes the fact that buying in allows a diversity of grapes without the hassle of the viticulture. His choice of varietals is Cabernet Sauvignon, Shiraz, Merlot, Pinot Noir, and Viognier - all grape varieties that can be handled without a nitrogen or argon atmosphere. He cold soaks for 2-3 days, takes advantage of natural yeast, punches down by hand, cool ferments with a light basket pressing followed by maturation in barrel. Equipment used includes a de-stemmer, Weideman cooling plates, hydraulic basket press, pumps, filtration unit, barrel washer, and high pressure cleaner.  

Jacoline Haasbroek is presently producing 7000 bottles a vintage on her Franschhoek property. She buys from La Motte, La Bri, Burgundy Plaas, and La Terra de Luc... only Franschhoek grapes. She chooses Shiraz as it reminds her of growing up on a farm; Petit Verdot being an interesting varietal on its own; Cabernet Franc because lovely eating grapes; Viognier because it is difficult to make the way she operates and Cabernet Sauvignon for port. She makes her wine the old fashioned way, having a de-stemmer, a 40 kg basket press, a 160 year old crusher and open barrels for maceration. Whites she de-stems through the press into barrels, reds are de-stemmed and crushed into open containers for a three week fermentation and maceration, then pressed and put straight into barrels. She gets help from her three day a week gardener David and husband Johan, who prefers more verbal help instead of physical assistance!  

Steve Richardson from Mellasat in Paarl started with 700 cases of wine and has doubled production in the past ten years. He buys in from local grape farmers in Klein Drakenstein as well as having some vineyards on his farm. He makes Cabernet Sauvignon, Shiraz, Pinotage, Tempranillo, Chenin Blanc, Chardonnay and Viognier – varieties suitable for the warm climate and granitic soils of the Paarl region. His white is picked, de-stemmed, lightly crushed, bag pressed, cold settled, racked, fermented (tank or barrel), lees stirred, protein stabilized, racked, fined, tartarate stabilized and bottled. The red is picked, de-stemmed, lightly crushed, possible cold soak then fermented in tank (with pump-over) or open bins (punched-down), pressed, transferred to barrel & inoculated with MLF starter, lees stirred, racked after one year, blended after appraising individual cultivars, transferred to barrel for further year or more, or prepared for bottling in tank, possible fining and further racking before bottling. Steve’s equipment includes a de-stemmer/crusher, bag press, mono & rubber impeller pumps, stainless steel tanks with cooling, open plastic fermenting bins and oak barrels. He uses university students looking for harvest experience for labour during the season.
Major Winemaking Problems

Winemakers must manage bacteria from the time that grapes are picked and crushed through fermentation and maturation. Bacteria that live in wine typically originate from vines, grapes, winery processing equipment and surfaces in the winery. The most common wine bacteria are lactic acid bacteria and acetic acid bacteria. Bacteria play a positive role in stabilising wine and shaping its sensory profile such as in malolactic fermentation. However, there is also trouble making bacteria that the winemaker needs to avoid. Unwanted bacteria can appear at any stage of the winemaking process and can cause a range of spoilage problems such as bitterness, geranium notes, and volatile acidity. When these undesirable aromas are at concentrations above sensory thresholds they become faults. The winemaker must understand how to control these faults by identifying the problem early enough. Since perception of aromas and flavours varies from one individual to another, it is important when monitoring for spoilage during winemaking that the tasting is done by more than one person.81

Bacterial-induced spoilage can also occur in the bottle. Acetic acid bacteria just hang around not causing problems unless introduced to oxygen. Poor management during prolonged barrel maturation and bottling as well as subsequent storage of wine can give rise to spoilage. Using sulphur dioxide (SO2) at different stages during vinification will minimise the growth of unwanted bacteria, along with filtration prior to bottling.82

Brettanomyces is a wine spoilage yeast found mainly in red wines. Its presence in wine is a fault. Wines that have been contaminated with Brettanomyces taint are often described as mousy, metallic, horsey, sweaty, medicinal or having a band-aid character. It occurs in pipes, drains, pumps, and pressing and bottling machinery that are not cleaned properly or regularly. The biggest occurrence of Brett is in old barrels. Infected barrels must be destroyed. When Brettanomyces grows in wine it produces several compounds that can alter the taste and bouquet. When the levels of the sensory compounds greatly exceed the sensory threshold, their perception is negative. As with bacterial spoilage, the sensory threshold can differ between individuals, so some find the compounds more unattractive than others. As with bacterial infection, the Brettanomyces yeast can be controlled with SO2 and sterile filtering.83

Stuck and sluggish fermentations are a major concern, waste of time and money, and worst case scenario could lead to irreversible wine spoilage. Problems are more likely to occur with high alcohol, but stuck fermentations are rarely caused by one factor in isolation. High sugar content, low available nitrogen for yeast, fungicide
residues, difficult varieties to ferment, and a lack of control over the winemaking process all increase the chance of your wine not fermenting to dryness. To avoid a sluggish or stuck fermentation base your yeast choice firstly on its fermentation performance and secondly on its suitability for the specific wine you want to make. Use the recommended dose of yeast and rehydrate correctly, avoid propagating from a mother tank, keep the maximum temperature of red wine under 30° Celsius, and add nitrogen and yeast nutrients in stages during fermentation.\textsuperscript{84}

If you do end up with a wine that has not fermented to the dryness you want, procedures to restart are difficult and certainly not guaranteed. It is essential to restart the fermentation in a timely fashion in order to avoid wine spoilage. Initially analyse the wine for alcohol content, residual glucose, residual fructose, volatile acidity, yeast count and yeast viability. These analyses will indicate whether the yeast will be able to finish the fermentation. For example, if the alcohol is above 14% and the percentage of viable yeast is 20%, chances of a stuck ferment are high. Whereas if the viable yeast count is above 50%, there is a good chance the fermentation will complete. For a red wine, press and rack off the stuck lees and add 100mg/l lysozyme as well as the maximum dosage pure yeast hulls to detoxify wine. The easiest way is to then rack on to the lees of a wine that has successfully completed fermentation. These can theoretically still ferment but have stopped due to sugar depletion. Adding the stuck wine with residual sugar can cause the stuck wine to ferment to dryness. If racking onto lees doesn’t work, then you need to re-inoculate with a strong alcohol tolerant yeast strain with a good ability to use fructose. Usually the fructose content of a stuck ferment is much higher than glucose. Since each situation is unique and there is a risk of increasing the problem, I highly recommend speaking to a consultant before proceeding with trying to correct a stuck fermentation.\textsuperscript{85}

Cork taint affects approximately 5% of all wines closed with cork, although some reports put it as high as 25%. The culprit for cork taint is trichloroanisole, or TCA, which imparts a musty, mouldy, wet cardboard aroma to the wine. Like the faulty aromas from bacteria and Brett, different people have different thresholds for picking up cork taint. Some consumers might not like your wine due to the taint, but not realize the taint is from the cork. If they were drinking a bottle that was not corked it would be fresher and how you intended it to taste. The TCA problem has given rise to research projects worldwide. To be safe at this stage your only choice is to go with a different closure.\textsuperscript{86}

**Winemaking and Environmental Issues**

The international concern about the environment has continued to increase over the past years. Consumers are increasingly demanding that producers must act in a manner that is sensitive towards the environment. This entails the proper use of
natural resources, the use of environmentally friendly production processes and the responsible handling and dumping of waste products.

Solid effluent like skins, seeds, and stalks can cause unpleasant smells and contaminate soil and water sources. The organic material in waste products is a serious source of pollution. If the organic material in waste water is dumped into rivers or dams the oxygen removal by increasing micro-organism growth will have a negative influence on the growth of the natural fauna. Waste water can cause salinization which can lead to the pollution of natural resources. Cellar equipment can lead to noise and air pollution.\(^{87}\)

The separation of waste and storm water is necessary for the control of effluent volumes. Cooling water used for temperature control during fermentation must be managed effectively by keeping it separate from washing water, re-using it is recommended. Staff training and awareness broaden the sense of responsibility. Free running water should be eliminated. More effective washing agents, high pressure spray pumps and automatic locking equipment must be used to save water.

Different winemaking practices have considerable effects on cellar wastes. The pressing process can have a serious impact on the environment. Stalks, skins, seeds, settling lees and centrifuge lees should be concentrated and reprocessed to be used in different manners. Racking yields lees which should rather be used for alcohol distillation or tartrate recovery. The normal practice of the removal of tartrates from the inner surfaces of containers can cause considerable pollution. The removal requires an alkaline product and the consequent solution contains dissolved tartar causing organic pollution as well as increasing pH due to the use of the alkali.

Filtration techniques must be selected. Filtration aids like diatomaceous earth will come under increasing pressure.\(^{88}\)

Although irrigation is the most popular disposal method of cellar effluent the following prerequisites exist. Good irrigation management, prior evaluation of the soil and plant holding ability, only the correct slopes must be used, pre-treatments might be necessary and irrigation premises must be as close as possible to the cellar.\(^{89}\)

Cellars must either have the permission or a permit from the Department of Water Affairs and Forestry (DWAF) to use water or dispose waste. The minimum actions which cellars should execute regarding its cellar waste is the following: Effluent and rain water should always be kept separately. The volume water used and liquid effluent generated by the cellar must be determined by suitable meters. Skins and pips which are kept on cellar premises must be kept on a concrete slab or plastic sheet to prevent the potential pollution of the soil. Skins, berry debris or pips which land in cellar waste must be separated from the water by strainers and added to the above-mentioned solid waste. Lees must be delivered for tartaric acid production. Liquid waste must be pumped to retainer dams or utilised for irrigation if possible. The pH of the liquid waste must be adjusted to 6-9 by the addition of lime.
as soon as possible. Caustic soda and citric acid as cleaning agents must be substituted by KOH (Potash soda) and phosphoric acid.\textsuperscript{90}

IPW addresses these issues in its farm and cellar evaluations but it is also worth contacting DWAF yourself to explain your set-up and get advice. DWAF can send someone to your “garage” and issue an exemption for many of their requirements that are unfeasible for a very small producer.

To end the practical section, all those people that volunteered to help you when you announced you were making wine; take them up on it. The more hands on deck the easier and more fun your experience will be. I made 54 barrels for the 2010 harvest in the same hands on way I made the 8 barrels in 2001. I had a protea farmer from down the road who was interested in the process as well as my Northwest Rep from the USA and restaurateur Bill from The Wild Fig in Cape Town all muck in. What a pleasure!
5 Wine Packaging

Bottles and Bottling

Packaging plays a huge role in marketing by communicating about the wine’s intrinsic properties. Glass has dominated the packaging industry for a long time but environmental concerns and inconsistent bottle supply is slowly changing this. Currently, bottle weight is a contentious issue. A new trend sees wineries using lighter bottles with a recycled content. Most top wineries, however, continue to use heavier bottles and fancy labels to distinguish their flagship wines. The Tetra Pak, PET, and the Wine Pouch are glass alternatives, with experiments underway with other materials such as aluminium. These glass alternatives have been used mainly for entry and mid level wines. Since garagiste should be synonymous with quality, we will only look at glass here.\textsuperscript{91}

The inert quality of glass makes it an ideal vessel, being transparent, strong and a good maturation vessel. There are also numerous colour choices as well as different sizes to choose from. Unfortunately the choice of bottles available in South Africa is limited due to only a few bottle companies existing. Anything exotic or different must be imported from overseas. Bottles can only be ordered by the pallet load. If you get them delivered, they expect you to have a forklift to take them off the truck. Otherwise, you need labour to off load by hand. The disadvantage of this besides time is you have taken the bottles out of their sterile environment, so you want to bottle soon after the delivery. There are also a couple of recycled bottling plants, Greens Recycling being the most popular. Although recycled bottles are about 60% the price of new bottles, scratches and lots of breakages are problems.

Bottling can be done with your own bottling unit. These usually come with 2 to 6 filling heads which you adjust to fill your bottle to the required height. The cork is then inserted with a hand corking machine. This method is fine for a few thousand bottles but there are drawbacks, mainly differences in filling levels and the level of the cork after inserting. Other problems would include uptake of oxygen while bottling, no bottle rinser, and having to buy a filtering system if you want to filter. I worked with this method for my first few years and a major problem I had was crimping of the cork by my corking machine. This left a narrow escape route for the wine which then stained the top of the cork. The corker also put some corks in too deep and some protruding from the bottle making the capsule look untidy. With this method you also need a machine to shrink your capsule on to the top of the bottle. There is no small scale screw cap equipment available at present.

Your other option without any capital outlay is to get a mobile bottling line in. Your main concern here is to get a reputable team. The drawbacks are some teams might
not want to come to your cellar for a small volume or you might not have space to fit their bottling unit onto your premises. The benefits are bottle cleaning is available, oxygen kept off the line, various filtering options available from course to sterile, quality control from the bottler, and it is quick and efficient. They will also apply your cork and capsule or chosen closure. I must emphasize that although you are paying someone to come and do your bottling, it is vital to be there doing quality control. It is a mistake to think these experts will do the job without active participation from you. At the end of the day these experts do their best for a fee, but it is your business. You have to manage all the details and take responsibility for their proper execution. For example, you have to make sure the proper bottles, labels, capsules and closures are there on time; the proper analysis is done beforehand; and that the right wine goes into the right bottles. No one will do all the checking for you.

Labels and Labelling

Wine labels are important sources of information as well as branding. The label is often the only resource a buyer has to evaluate the wine before purchasing it. The information you provide can guide the buyer to your wine and its quality. Wineries place varying levels of importance on the label design. Some change it annually, others hardly ever. Some like traditional with a coat of arms, others modern with bold shapes and colours, or straightforward and simple. People choose all sorts of names for their wine for all sorts of reasons. Part of the key is to make it stand for something. No matter how nostalgic or appropriate the name, if the consumer can’t pronounce it or remember it, there is little chance of a repurchase. Make a label that is simple and easy to remember and pronounce. You will be on a shelf with thousands of other wines and want to stand out. A small winery is most likely not going to sell in a supermarket so the label doesn’t need to be recognizable in five seconds. The wine will sell in boutique wine shops and restaurants so it is more important that the wine label live up to the price point and reputation rather than being recognizable from a metre away. At higher price points consumers usually buy first by the region then by the grape variety and then the brand. It is important to have this information in clear legible font. The label is merely one piece of a long strategy to create awareness and recognition for your wine.

Information generally included on the front label in South Africa is brand name, name of grape variety or blend, place of origin, vintage, alcoholic content and bottle size. The following requirements apply to SA wine sold locally. Labels on wines for export must also comply with the requirements of the country to which they are exported. All labels for certified wine must, prior to printing, be submitted to the Label Committee of the Wine and Spirit Board for approval. Except for the volume declaration, the expression “contains sulphites” and the health warning, all mandatory items must be within the same field of vision on one or more labels of a container - obviously not on the base of a container. In practice all mandatory
particulars usually appear on the back label, thus, all in the same field of vision. Mandatory items must be clearly distinguishable from each other and from any other particulars on a label. Each separate mandatory item must be in characters of the same colour, type and size. All characters must be clearly legible, and must be printed on a uniform and clearly contrasting background. Minimum character heights for all the mandatory items except the volume declaration and health warning are 2 mm on containers larger than 375 ml. For the health warning minimum character height is not prescribed, but a white background of a specified area is required. 

Mandatory items are as follows:

Alcohol Content - Alcohol content is defined as "a percentage ethyl alcohol per volume of the product" and must consist of a figure together with a percentage symbol and the expression "alcohol" or "volume" or abbreviations thereof. For example: "15 % alc" or "12, 5 % vol" or "Alc 12, 2 %" or "10, 9 % alc per vol", etc. A tolerance of 1 is permitted between the strength labelled and the alcohol strength determined upon analysis of the wine. A wine of 14, 5 % vol may thus be indicated as 13, 5 % vol up to 15, 5 % vol.

Name and full business address or A-number - A code number may be used in place of above-mentioned name and address. Code numbers are issued by the administering officer, Department of Agriculture, Directorate Plant Health and Quality, Private Bag X5015, Stellenbosch.

Volume Declaration i.e. 750 ml - The volume declaration must be in boldface, unless embossed or moulded on the surface concerned. If the net quantity is less than 1 000 ml, the unit millilitre(s) is used (or mL or ml). Use a single space between the number and the unit, e.g. "750" followed by a single space and then "mL". Minimum character height for 750ml is 4mm.

Contains Sulphites - The "contains sulphites" must be indicated if sulphur dioxide is present in a concentration of more than 10 milligrams per litre, measured as total sulphur dioxide.

Health Warning - Any of the following are acceptable, but the first three are preferred. Alcohol reduces driving ability, don’t drink and drive. Drinking during pregnancy can be harmful to your unborn baby. Alcohol abuse is dangerous to your health. Alcohol increases your risk to personal injuries. Alcohol is a major cause of violence and crime. Alcohol is addictive. Don't drink and walk on the road, you may be killed. The message must be in black on a white background. The white background must be at least one eighth of the total area of the selected label - usually the back label. No minimum letter height is prescribed but the font must be clear, not cursive or fancy.

The following applies to certified wine:

Wine of Origin - A wine of origin of a particular area of origin i.e. geographical unit
such as “Western Cape”, region such as “Coastal Region”, district such as “Paarl” or ward such as “Durbanville”, must be produced solely from grapes harvested in the area of origin concerned. Only the names of officially-demarcated origin areas may be used. The expression "Wine of Origin" or "W.O." must appear immediately above or below or next to the name of the origin area. It must be shown within the same field of vision as the mandatory items.  

Estate Wine - An estate wine of a particular estate must be produced solely from grapes harvested on the estate concerned. The wine must be grown, made and bottled on such estate. Only officially-registered estate names may be used.

Single Vineyard Wines - The term “single vineyard wine” may only be used for wine produced from grapes derived from a unit officially registered for the production of single vineyard wine. Such a unit must consist of a single variety and the area may not exceed six hectares.

Variety - Where a wine is certified as originating from at least 85 % of a particular variety, the other varieties, if any, in that wine may not be indicated. If a wine was produced solely from one cultivar this fact may be indicated. Where the varieties in a blended wine are indicated each variety in the blend must have been made on a separate production sheet (W.O. Scheme) and an official blending must have taken place. Percentages need not be indicated, but the varieties must appear in descending order according to volume. All varieties must be indicated except where two or more cultivars constitute 80 % or more of the blend and each of those two or more varieties consist of 20 % or more of the blend - then only those two or more varieties may be indicated in descending order.

Vintage - Vintage year can be indicated if at least 85 % of the wine consists of wine produced from grapes harvested during the year indicated.

Sugar Content of Wine - If the under-mentioned or similar expressions are used on wine, the following requirements apply: extra dry, a maximum residual sugar content of 2.5 g/l; dry, a maximum residual sugar content of 5 g/l; semi-dry, a residual sugar content between 5 and 12 g/l; semi-sweet, a residual sugar content between 5 and 30 g/l; sweet, a residual sugar content of more than 20 g/l.

Items prohibited - Origin, variety and vintage may not be mentioned on an uncertified wine. A certified wine means a wine produced in terms of the Wine and Origin Scheme. The word superior or translation thereof is forbidden, along with items that are derogatory, untrue, inaccurate, vague, or create a misleading impression.

As with bottling, labelling can also be done by hand or with a simple wooden machine. This is fine for small amounts, but takes a lot of time and quality control becomes difficult. Problems with skew labels, bubbling and aligning the front and back labels are common. Most mobile bottling units also have labelling machines.
This is a quick and efficient way of attaching your labels as well as your certification stickers to the bottles.

**Closures**

The much debated issue of the best way to seal a bottle of wine is one which causes endless discussion in the wine industry. Wine closures keep the wine inside the bottle and keep most oxygen out to prevent spoilage. The traditional and still most widely used for high end wine is cork. This is derived from the bark of the cork oak which is found mainly in Portugal and Spain. Corks advantages, besides tradition, are it is an effective insulating medium against heat, cold and vibration, as well as being impervious to liquids. Cork is also a vegetable product, free of toxic ingredients and does not impart taste or odour or cause deterioration of the wine unless it has been contaminated by fungi or bacteria of some kind. This brings us to the disadvantages. The high rates of cork taint from TCA are causing wine producers to look elsewhere. Generally 5% of your wine can end up corked from spoiled corks, which is an economic loss. The other issue is that the uneducated consumer does not know the wine is tainted by the cork and just thinks your wine doesn’t taste very nice and therefore does not buy another bottle. Another disadvantage is once the bottle is opened it is difficult to reseal effectively. Cork is also prone to shrinkage. Corked bottles must also be stored flat to keep wine in contact with the cork so it doesn’t dry out. This can be a problem in stores and during transport. Corks are sold by numerous companies and come in various sizes and price brackets.

Notwithstanding the romantic view in favour of cork, most of the newly developed closures which are not necessarily natural or aesthetically pleasing are definitely more efficient in hermetically protecting the wine, and they are also easier to reseal the bottle. Man made closures are also non perishable, lend no flavour to the wine, are not susceptible to shrinkage, and are cheaper to produce.

Synthetic corks are made from plastic materials either by a co-extrusion process where an inner core fills a second outer, small surface, or by polymer injection. The largest problem with synthetic corks is the greater transfer of oxygen into the bottle, which oxidises the wine. They also tend to get stuck in the bottle neck and lots of corkscrews struggle to get them out.

Vino-seal is a glass closure which sits on a synthetic O-ring and is held in place by a removable aluminium cap. Looks gorgeous and works wonderfully, but at ten rand a closure you better hope for the double gold.

Screw caps are closures made from aluminium that threads on to the bottleneck. These closures require special bottles. Concerns with screw cap are reductiveness in the bottle. Reduction involves the development of sulphur aromas due to the lack of oxygen. Most garagistes concentrate on red wines which are made in a more
oxidative environment so this shouldn’t be a problem. I switched to screw cap in 2005 for all my wine because my corked wine rate was pushing on 20%! The final straw was when I was a finalist for the Woman Winemaker of the Year in 2007. My wine was on every table at the awards ceremony and at the end of the evening when I tasted my bottles at numerous tables, every single bottle was corked (and drunk down to the last sip)! Screw caps are relatively inexpensive, easy to open, easy to reseal, prevents cork taint and allows the bottle to be stored upright. In England, America and Australia the screw cap is widely accepted. Slowly the South African consumer is starting to see that it is not just a closure for cheap wine.¹⁰

Boxes

Boxes come in various sizes and shapes. Wooden boxes are an upmarket choice, but generally wine is packed in corrugated cardboard. For garagiste producers, the six pack carton is preferred although packing in twelve saves money. Boxes are a necessity and generic boxes are readily available, but printed and coloured boxes can be a low cost form of advertising and creating brand awareness. With printed boxes, there is a once off cost to manufacture the printing stereo, which is then stored at your chosen manufacturer for future use. Die cutting is a process which uses steel rules to cut and crease the board to custom make to your individual requirements. This is another once off cost. Once paying the initial costs, your printed boxes will only cost you about a rand more per box than for generic. With both labels and boxes initial stereo and die costs apply, so it is best to choose the best suppliers from the beginning. If you want to switch to a different supplier, they must have the same machines to get your origination materials transferred. Otherwise, it’s paying the initial set up costs again.¹¹
6 MARKETING

Don’t quit your day job! Owning a little winery takes lots of time and capital. Many love the lifestyle of living in the country and producing something with both science and art from the land. Financial studies by Deloitte show few small wineries make a profit, so the working capital and cash flow have to come from somewhere else. Start small and keep it fun.\textsuperscript{112}

Invest in marketing in the same way you would invest in your vineyard. You don’t just go out and dig a hole and throw old cuttings in and expect a great vineyard. It is a long term proposition that takes constant care and proper planning to produce quality. It takes time and money to market your wine. Long term planning and constant attention in the first few years are necessary. Don’t wait until your first wine is in bottle before starting to market. Your brand image and what your wine will stand for must be thought about at the beginning. Marketing takes time to have an effect, just like planting and caring for a vineyard.

Focus your efforts. Too many small wineries try to make too many different wines and sell them to too many markets. Every market needs to be contacted and visited regularly. Your time becomes your most valuable asset. Developing productive relationships with distributors and agents is paramount. You will never survive with ‘adios’ marketing, where you wave good bye to your wine as it leaves your winery never to see it again. Only you at the winery can ensure that your wine will sell. Depending on the size and importance of the market, one or more visits need to be made each year, along with weekly emails and other communication. It takes talking to the trade and consumers and visiting the market over and over again. Obviously direct sales and domestic markets cost less to service than overseas agents. Direct sales are easier with a good location in a well-visited wine region. Otherwise you need a good reputation as a high quality wine.\textsuperscript{113}

High quality must be the number one attribute of your wine. The judgement for high quality might come from wine writers, the trade and consumers. Small wineries might need third party recognition from wine critics as well as accolades from the wine shows and competitions to get a foot in. With the amount of new wineries popping up all the time, competition is increasing. Even with a big award and a sell out of a vintage, ongoing marketing is necessary to maintain your presence in the marketplace. The market is fickle and quickly forgets! Don’t think the wine will sell itself.

Along with quality, price is crucial. The first mistake to avoid is over-capitalisation in equipment with no money left for marketing. Obviously the French oak barrels and vineyards are important, but it is unlikely these are enough to make the winery successful. The wine needs attractive packaging and a long-term marketing plan. The Deloitte survey shows that the top 25% of small wineries have an average gross
margin (difference between production costs and selling price from winery) of 60%. This needs to cover overheads and marketing. The Deloitte figures show that a large winery can produce a bottle of wine at half the price of a small winery. A small winery’s overheads are higher and more expensive grapes, processing and packaging raise the costs. Small wineries must be able to convince the market to pay enough to cover these costs. The price point/volume relationship matters. A small winery must decide how many cases it wants to sell in each market and then price their wine so it hits the right price point in that market to move that volume. A good exercise for any wine producer is to be able to explain directly to a potential buyer why they should be willing to pay the asking price.¹¹⁴

You need to have a clear and honest story behind the wine and be able to tell your market how you differ from other wineries. A story can be anything from a historical perspective, a family affair, conservation minded or humorous, but it has to be true, simple, to the point, and easy to explain to consumers and the trade. You must have a story you truly believe in and be willing to tell it over and over again to succeed. It may seem boring and repetitive to you, but buyers in the market have to feel some link to the wine to move it. We might be passionate about our wine, but we want our buyers to be, too!

The label and packaging also helps sell the first bottle of wine, along with all your promotions and communications with the buyer. The consumer is more likely to choose your wine if she recognizes the name from wine reviews, dinners, visits and other communications. The package must suit the wine and the wine must deliver value at the price point to possibly be chosen again. The packaging must be easily recognizable. If it looks the same as loads of others the chance of being found and picked again is not as great. A wine label is not a beauty contest but rather a memory and recognition contest by often hurried consumers. And remember, the label might sell that first bottle but the winemaker is selling the second.¹¹⁵

Your cellar door is your best store. In today’s difficult retail climate, the more cellar door wine sales you can generate the better to optimise profits. Firstly, visitors have to find your cellar door. You need to signpost clearly to guide people to your door. Make sure your winery is listed in brochures, websites and visitors guides. Get other wineries and hotels and restaurants to recommend you. As a garagiste, if someone has searched you out, they are generally interested in wine. In a friendly, comfortable relaxed setting you are almost guaranteed sales, as well as word of mouth brand building if guests leave with a fond memory. Follow up marketing can be done by having visitors sign a guestbook.¹¹⁶

Most wine marketing for the little guys has been focused on relationship building, whether this is through cellar door, direct marketing, dinners, tastings or winemaker visits to the trade. Recently there is a new social networking revolution in marketing with a generation of new drinkers who are familiar with technology and use it as their means to communicate with other people. These “Millenials” are the first generation
to grow up thinking they are a global generation and have the means to be one. They communicate through Facebook, YouTube, Twitter and blogs. In the USA alone, these “Millennials” represent over 77 million potential wine consumers. They are much more likely to purchase bottled wine than cask wine, and enjoy buying wine by the glass or sharing a bottle in a café. They are the future of wine consumption. We need to engage this younger generation in our marketing, so get blogging and twittering.\textsuperscript{117}

And if you think going “green” will give you that marketing edge, think again. Recent research in Australia showed fewer than 10\% of consumers will pay even a small premium for good environmental practice in winemaking. A few years ago environmentally friendly might have been considered unique. Within a few years good environmental practice will be necessary just to get listed in many retailers.\textsuperscript{118}

In conclusion it is important to look at your product, price, place and promotion and ask yourself some questions. You need to have a realistic, objective view of the quality of your wine. How does it compare to your perceived competition? Does it reflect your wine making philosophy? Are you getting the most from the raw materials you have to work with? How does the price you are asking for your wine reflect the position you are looking for, and the quality of your wine? Under pricing wine is as bad as over pricing. As a baseline, there is a certain return you need from the wine relative to your investment. Does the end product justify that return? If priced too high, the wine will not sell, and you will have excess inventory to deal with. Is it priced too low? If you are selling out your offering quickly, think about raising your price.\textsuperscript{119}

What are you doing to get the product in front of the consumer? Do you have distributors? Are you making market visits to promote your wine? Do you have a good website? Are you managing your mailing list? Do you have a club? These are all elements of distribution.\textsuperscript{120}

What can a small winery do to promote their product? There are the obvious tactics, enter wine competitions, winemakers’ dinners, and shelf talkers. What about the not so obvious like direct promotions, such as special offerings to your club members, creating unique bundled offers in your tasting room, or using your newsletter to educate the consumer? The bottom line is that making great wine is rarely enough. You must be a marketer as well.\textsuperscript{121}
7 Conclusion

I communicated with dozens of micro producers for this paper. Some have remained garagistes and some are honorary garagistes like me. Whether a trained winemaker, wheat farmer, architect, guest house owner, publisher, engineer, sailmaker, freelance writer, or a teacher; the thing these garagistes have in common is passion for their wine and a commitment to quality.

Many garagistes can benefit from consultants in winemaking, viticulture and marketing, as well as receiving help from mobile bottling companies, distributors and professional label designers. But at the end of the day you become a jack of all trades. A garagiste is not only a winemaker but a bookkeeper, marketer, delivery person, accountant, and farmer. Today while my wine is maturing in barrel, I have applied for export certificates on line, delivered samples to the Department of Agriculture, paid bills, sent price lists to a potential agent, and saved my Dad’s Jack Russell who was locked in the cellar since yesterday!

This is the workload I have now with 54 barrels of wine. It was very different in 2001 when I made 8 barrels of Shiraz. In 2003 I was very excited to be admiring my 3946 bottles of finished wine, all hand bottled and hand labelled with bus stickers attached. Then the reality hit of what I was going to do with all the bottles. It was too much to drink myself and I don’t have that many friends! So I loaded my car with wine and headed off to Cape Town to visit some recommended restaurants and wine shops, and at the end of the day I came back with an empty car! Everyone loved the fact that the winemaker full of passion and knowledge was making the effort, and the story of starting Black Pearl with no wine degree or wine background was intriguing to potential clients. Amazingly, all those people who bought my first vintage out of the boot of my car remain loyal customers to this day.

But times they are a changing. Most wine buyers won’t see you these days without an appointment because they are bombarded with wine reps nonstop. My words of wisdom are start small and let all your friends and favourite restaurants know what you’re doing. Get your brand name out there while your wine is still in barrel. Establish your markets and then slowly expand every year, or remain small and keep it as an exciting and ever changing hobby. As my father repeats often, “it’s all about the f word..........fun.”

Fun and rewarding. To show up at a close friends 60th birthday party with a case of your own garage wine rather than the next person’s heavily advertised wine bought from the supermarket means so much to your friend. To get an email from a complete stranger in Canada or Austria telling you your wine is the best wine they
have ever tasted means so much to you. (To have your wine listed at Disneyland is even more amazing!)

Becoming a Garagiste is an amazing experience, whether making 4 barrels or 40. It is an education every day, and to quote my father once more, “if you can read you can do”. So don’t fear the garage, buy that winemaking book, search the web, attend a garagiste course, and start making that individual, non homogenised wine you’ve been dreaming about!

To quote Clive Torr, one of the founding members of the Garagiste Movement, “the true essence of garage wine is when a crazy dream and a huge passion for wine becomes a reality, follows you home and lands up becoming a special part of your everyday life.”

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41. http://www.bwi.co.za/background/
http://www.wieta.org.za/
http://www.wosa.co.za/sa/wosa_about.php
http://www.wosa.co.za/sa/wosa_about.php
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Haasbroek, J., My Wyn, Personal Communication, 2010
Richardson, S., Mellasat Wines, Personal Communication, 2010
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Appendix A

Mary-Lou Nash CWM Dissertation Questionnaire

1) Completed by: Most common answers Wine brand Over two dozen responses

2) What is your full time job? Huge range from architect to farmer

3) When did you start making wine? Most within past 5-10 years
   Why? Passion and interest from childhood or interest from wine courses

4) How much did you make when you started? Many a couple hundred cases
   How much do you make now? Many up to 1000 cases
   What is your goal production?
   Most maximum would be a couple thousand cases

5) Did you train in winemaking? Most self taught
   If no, where did you get your info?
   Internet ☐ What sites? Refer to Useful Websites Appendix B
   Books ☐ Which books? Refer to Further Reading Appendix C
   Friends ☐ Who? Many garagistes made friends with trained
   winemakers for advice

   Have you done vintages overseas? No If so, where?
   Visited wine regions on holiday

6) Where do you make your wine?
   Is the building insulated and/or is cooling available? Yes

7) Do you have your own vineyard or do you buy in your grapes? Most all buy in
   If buy in, from whom, where and why? Huge variety of areas

8) What varieties do you make and why the choice?
   Lots of Shiraz and red, Chenin Blanc, Viognier
9) Briefly, how do you make your wine?

Hands on, naturally as possible, focus on quality rather than quantity

Who helps make your wine? Family and friends

What equipment do you use?

Own small crusher, press, pump, barrels. Some use hired equipment from bigger cellars

What additions do you add to your wine?

☐ SO2  Everyone used at crush and after malolactic fermentation

☐ Tartaric  Most tried to avoid

☐ Yeast  Many used wild yeast rather than commercial

☐ Yeast Nutrients  Generally ammonia as a nitrogen source

10) Where do you store your wine?  Mainly a combination of new and used barrels

11) How often do you analyze your wine?

At crush, after malolactic and before bottling

12) How do you bottle?  Mobile Bottling

13) How do you label?  Mobile Labeling

14) Where did the idea/name of your brand come from?  A lot from family names

15) When did you start marketing?  Still weak point for most

   How do you market?  Word of mouth

   Do you enter wine competitions?

   Most don’t because consider it a lottery and expensive

   Do you participate in wine shows?

   A few do shows that have special prices for garagistes, such as the JoBurg Wine Show. Most don’t due to high costs involved

   Where do you sell your wines?  80% local, 20% export

16) Is your wine certified?  Yes  Do you belong to IPW?  Bought in grapes usually do  Do you belong to BWI?  No
17) What efforts do you make to be environmentally friendly?

Recycle, manage waste water

18) Who do you recommend for suppliers of the following, winery equipment, barrels, labels, labeling, bottles, bottling, and local and export shipments?

Refer to Suppliers List Appendix D

19) Do you make a profit from your endeavors? A few yes and lots of not yet!

20) Have there been any articles, etc. written about you? Many garagistes have received third party recognition in publications. Following is a short list of some of the top ones, note all Shiraz!

- Rudi Schultz Syrah Stellenbosch 2006 93 points Wine Spectator
- The Foundry Syrah Coastal Region 2005 91 points Wine Spectator
- Scali Syrah Voor-Paardeberg 2006 91 Points Wine Spectator
- Dunstone Shiraz Wellington 2008 5 Stars John Platter Guide
- Black Pearl Shiraz Paarl 2006 4.5 Stars John Platter Guide
- Katbakkies Syrah 2002 4.5 Stars John Platter Guide

21) Please recount any interesting, funny or disastrous experiences.

Read some examples below

“Disastrous is watching a pallet full of wine bottles slide, slowly but unavoidably, off the tines of a forklift to the ground in a spectacular display of glass and red liquid. Fortunately, the breakage always looks worse than it is but even the unbroken bottles have red wine stains on them.” Steve Richardson from Mellasat

“When I started making my first wine, I had one of the small sub divider tanks. They have sieves on the bottom that one must insert to drain off the free run juice. I forgot to insert them and could not drain off my free run. I phoned Marais De Villiers, which designed the tank, for some practical advice to go about. He told me that I must take a shower, climb into the tank and insert the sieves. I did this with only my “onderbroek” on. I did the job and phoned Marais back. He said: “Now you can tell all the customers they can taste the body in the wine.” Lourens van der Westhuisen from Arendsig Hand Crafted Wines

“My most disastrous experience was when I forgot to close a valve on a tank while racking our 2004 Syrah from one tank to another. The tank I rack into is on a different level down in the barrel cellar (below ground level) to the one I’m racking from. I only discovered my mistake when I realized that the level of the wine in the tank I was racking into, wasn’t changing and I was getting the most wonderful berry and spice aromas coming up the cellar stairs. I lost about 500 litres of my best tank of wine. It took 2 days for the CO2 fumes to clear before we could start mopping up...
operations. It’s the sort of mistake you only make once in a lifetime!” Andy Mitchell from Andy Mitchell Wines

“The 2007 harvest was our maiden vintage. It was also the wine that became KwaZulu-Natal’s first ever certified estate wine. The afternoon before harvest, a hail storm from hell was moving up the Dargle Valley with Abingdon in its sights-devastating everything in its path. One hundred meters from the vineyard the storm turned left then right circumnavigating our vines and carried on with its original path and wiped out everything from Lions River to Howick. Not one hail stone fell on Abingdon. 2008 saw a storm of equal ferocity shred our vineyard the day after the last grape was brought to the cellar. Every day something new is learnt, mistakes are made and lessons documented.” Ian Smorthwaite from Abingdon

“We sent wine to my husband’s brother in Florida who owned a restaurant. The wine took five months to clear and by then his brother had closed the restaurant. From this came an opportunity to find distribution in the States. Always an opportunity out of challenges.” Penny Hughes from Nativo Wines

“A friend, who came to help with harvest, picked up the press head and slipped. In the fall, his front tooth was cracked in half. We dedicated the 1st box of bottled wine to him and offered to pay for the dentist!” Elmari Swart from Cheviot Winery

“We inadvertently bottled a Syrah under CO2 in 2002 (the red bottling run was just after the white run and we forgot to switch over to Nitrogen), so the wine had a bit of a fizz. So a week later we pulled all the corks, threw the wine into an open topped tank and bubbled Nitrogen through the wine for ¾ of an hour to drive off the CO2 and thereafter rebottled. The wine went into deep slumber and closed up completely, 6 months later it started opening again and went on to rate 4 ½ stars in Platter’s.” Andries van der Walt from Katbakkies

“Disaster is a second ferment of sweet Verdelho in the bottle after creating a fine wine and not allowing ferment to finish, despite fermenting for twelve months at 10 degrees Celsius.” Andy Roediger from Boschheim Wines

“We lost our entire crop in 2003 to birds and nearly lost 2007 crop to baboons. Now we surround our vineyard with electric fence and cover vines as grapes ripen with bird netting.” Peter Bayly from Peter Bayly Wines

“Meet everyday wonderful people, from all over the world, very interesting, can travel around the world only visiting friends I have made through my winemaking and tasting.” Jacoline Haasbroek from My Wyn
Appendix B

Useful Websites

www.bcawa.ca
Amateur winemaking information

www.brsquared.org/wine/
Improved winemaking

www.bwi.co.za
Biodiversity and Wine Initiative Information

www.capecateway.gov.za
Government information and services/liquor license

www.cargoinfo.co.za
Directory of freight service providers plus sailing schedules, tariffs, and exchange rates

www.cipro.gov.za
Company registration and trademarks

www.dawineonline.co.za
All documentation and communication required by Department of Agriculture for exporting wine, registration forms and detailed user manuals.

www.dti.gov.za
Exporting—learning to export, assessing export readiness, setting up export orders, processing orders, export incentives, assistance with funding for marketing trips, guidance for pricing.

Broad-Based Black Economic Empowerment—regulations, strategy, codes of good practice, scorecards.

www.ipw.co.za
Integrated Production of Wine Information

www.sars.gov.za
customs and excise, warehouse requirements and forms

www.sawis.co.za
wine industry information, statistics and news, certification and Wine of Origin information, South African and International wine law, SAWIS forms and manuals.

www.wine.co.za
biggest reference environment for South African wine and related businesses

www.wineanorak.com
everything relating to wine

www.winefiles.org
wine, winemaking and grape growing

www.winemakermag.com
making your own great wine at home

www.wosa.co.za
details of competitions and shows, contacts for foreign distributors and agents, foreign media and publications, foreign wine sales statistics, export statistics.

making your own great wine at home

www.winefly.com
technical oenology information
Appendix C

Suggested Further Reading


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Appendix D

Suppliers

The following suppliers are recommended personally by myself as well as by many garagistes that I interviewed. For a more comprehensive list please consult the South African Wine Industry Directory, 2010/2011, published by Wineland Publications, T 021 863 4524, in@wineland.co.za.

Analysis of Wine

Vinlab
PO Box 532, Stellenbosch 7599
T 021 882 8866
F 021 882 8868
info@vinlab.com

Wine Quality Consultants
PO Box 6231, Uniedal 7612
T 021 883 9017
F 021 882 9487
Lofty Cell 082 825 2489

Hanna Instruments
PO Box 1646, Bruma 2026
T 011 615 6076
F 011 615 8582
hanna@hanna.co.za

Attorneys (Liquor Licenses, Trademarks)

Steyn Coetzee
PO Box 2538, Paarl 7620
T 021 872 1968
F 021 872 2678
www.steyncoetzee.co.za
info@steyncoetzee.co.za

Cluver Markotter
PO Box 12, Stellenbosch 7599
T 021 808 5642
F 021 886 5420
dlc@cm.law.za
Everyone will have their personal preference depending on what style of wine they are making and from experimentation. Artizana are exactly that, artisan barrels, and Marius is very knowledgeable and helpful. Mark Howell at Toneleria Nacional is a fellow garagiste making Anthill Wines, and I have had good results with his barrels. All these companies also supply wood alternatives.

Artisana Barrels
Vinea South Africa CC
PO Box 1558, Suider Paarl 7624
T/F 021 872 2894
Marius Cell: 082 616 0610
marius@vineasa.co.za

Nadalie Barrels
FS Smit and Co (Pty) Ltd
10 Lyon Street, Suider Paarl 7646
T 021 863 1032
F 021 863 2931
helene@fssmitco.co.za

Taransaud, Kadar and Canton Cooperages
Gerry Sergeant Sales
PO Box 2405, Somerset West 7129
T 021 855 5680
F 021 855 5618
sergeant@icon.co.za

Toneleria Nacional
PO Box 5708, Helderberg 7135
T 021 851 5435
F 021 851 5914
mhowell@toneleria.com

Used Barrels
Thales
PO Box 12378, Die Boord 7613
T 021 887 1235
F 021 887 1248
adriaan@thaleswcs.co.za
**Bottles**

New Consol Ltd
Northern Division
PO Box 562, Germiston 1400
T 011 603 2080
F 011 656 0680
Southern Division
T 021 888 4000
F 021 887 1049
www.consol.co.za

Recycled
Greens Bottle Recyclers
PO Box 1027, Brackenfell 7568
T/F 021 981 2675
mgreen@greensbr.co.za

Bottle Traders
PO Box 378, Worcester 6849
T 023 342 2596
Hein Cell: 083 627 2283

**Boxes**

Tekco Pac CC
PO Box 1248, Worcester
T 023 626 2009
F 023 626 5609
info@tekco.co.za

Cape Quick Packaging
T 021 505 8580
F 021 534 8922
www.capequick.co.za

**Generic**

Kaap-Agri
PO Box 22, Malmesbury 7300
T 022 482 8000
F 022 482 8088
www.kaapagri.co.za
info@kaapagri.co.za
Cleaning Equipment, Barrel Washing
ITS Karcher
PO Box 815, Sanlamhof 7532
T 021 949 7665
F 021 949 5813
gary@its-africa.co.za

Kranzle South Africa
PO Box 37202, Chempet 7442
T 086 181 8181
F 021 551 5367
rod@kranzle.co.za

Corks, Closures, Capsules
Cork Supply South Africa (Pty) Ltd
PO Box 523, Stellenbosch 7599
T 021 886 4830
F 021 886 4834
info@corksupply.co.za

Columbit (Pty) Ltd
PO Box 2737, Cape Town 8000
T 021 593 3161
F 021 593 3179
bridget@addept.co.za

MCG Industries
PO Box 25, Paarden Eiland 7441
T 021 508 7100
F 021 508 7198
andreb@mcgind.co.za

Labels
Rotolabel
PO Box 532, Eppindust 7475
T 021 532 5540
F 021 532 2080
Marthie@Rotolabel.co.za

SA Litho
PO Box, 6060, Parow East 7501
T 021 929 6400
F 086 607 7145
peters@salitho.co.za
Mobile Bottling and Labelling

Mobbot Mobile Bottling
PO Box 150, Koelenhof 7605
T 021 865 2329
F 021 865 2436
Franz Cell 082 659 1004
Elzette.mobbot@mailbox.co.za

Estate Mobile Bottling
PO Box 600, Wellington 7654
T 021 873 6085
F 021 873 4886
Laurent Cell 082 786 4886
embo6@telkomsa.net

Mobile Filtrations and Treatments i.e. VA removal, stabilization, alcohol adjustments

Serdyn Filtrasie BK
Kwikstertlaan 9, Stellenbosch 7600
T 021 887 9145

Michael Paetzold Wine Services
PO Box 1161, Stellenbosch 7599
T 021 508 7100
F 021 886 9235
mpaetzoldws@mweb.co.za

Plastic Tanks

Ivy Blue Rotational Moulders
23 Montague Drive, Montague Gardens
T 021 551 9191
F 021 551 9190
www.ivyblue.co.za
info@ivyblue.co.za

Kaymac Rotomoulders
KZN
T 033 387 1507
F 033 387 2911
Western Cape
T 021 946 2383
F 021 946 2395
Gauteng
T 011 922 3300
F 011 392 1118
www.kayroto.co.za
sales@kayroto.co.za
Nel Tanks  
PO Box 515, Sanlamhof 7532  
T 021 905 1395  
F 021 905 3325  
info@neltanks.co.za  

Refrigeration and Cooling  
Coldfact Projects  
PO Box 7313, Northern Paarl 7623  
T 021 862 4705  
F 021 862 4803  
hennie@coldfact.co.za  

Daikin Air Conditioning SA (Pty) Ltd  
PO Box 1147, Milnerton 7435  
T 0860 DAIKIN  
F 021 552 6844  
headoffice@daikin.co.za  

Isoboard  
T 021 983 1140  
www.isoboard.co.za  
southsales@isoboard.com  

Weideman Engineering  
T 021 939 4142  
F 021 939 4142  
www.weidemaneng.co.za  
weidemaneng@telkomsa.net  

Shipping  
Local and Small Exports  
Cape Grape and Wine Logistics  
Polkadoraai Road, Stellenbosch 7600  
T 021 881 3477  
F 021 881 3476  

The Vineyard Connection  
PO Box 1484, Stellenbosch 7599  
T 021 884 4360  
F 021 884 4361  
info@vineyardconnection.co.za
Freight Forwarders/Export

JF Hillebrand South Africa (Pty) Ltd
PO Box 684, Stellenbosch 7599
T 021 809 2000
F 021 809 2006
capetown@jfhillebrand.com

Inter-Sped Cape Town
PO Box 8337, Roggebaai 8012
T 021 551 7126
F 021 551 7704
nick@intersped-ct.za

Stainless Steel Tanks
Imvusa Stainless
PO Box 156, Blackheath 7581
T 021 905 5324
F 021 905 1771
don@imvusa-s.co.za

Defranceschi SA
Private Bag X34, Suite 155, Somerset West 7130
T 021 905 7142
F 086 517 2562
cvandermerwe@absamail.co.za

Vine Nurseries
Lelienfontein Vinegrowers
PO Box 17, Wellington 7654
T 021 864 1705
F 021 873 2517
info@vinegrowers.co.za

Voor-Groenberg Nurseries
PO Box 345, Wellington 7654
T 021 864 1018
F 021 864 3689
vgroenberg@ezinet.co.za
Winery equipment
The following three companies not only sell all winery equipment from crushers, presses, pumps, and tanks, they also sell everything from yeasts, nutrients, chemicals, buckets, barrels and balling meters. They can be a one stop shop. Most recommended was Nick Furness at Wine Machinery.

Bacchus Equipment
PO Box 690, Suider Paarl 7624
T 021 863 0632
F 086 509 0442
gerrit@bacchussa.co.za

CDS Vintec (Pty) Ltd
PO Box 2690, Paarl 7646
T 021 863 5050
F 021 863 5051
darryl@cdsvintec.com

Wine Machinery
PO Box 2183, Dennesig 7601
T 021 887 4731
F 021 886 5340
nick@winemachinerygroup.com

Yeasts, Yeast Nutrients and Additives
Anchor Yeast (Pty) Ltd
PO Box 14, Eppindust 7475
T 021 534 1351
F 021 534 3881
wineyeast@anchor.co.za

Laffort South Africa
PO Box 1093, Stellenbosch 7599
T 021 882 8106
laffort.rsa@laffort.com

Mountain River Group
146 Main Street, Paarl 7646
T 021 872 3256
F 021 872 3255
latarie@mweb.co.za
Lallemand South Africa
PO Box 3542, Matieland 7602
T 021 913 7555
F 021 913 5550
ploubser@lallemand.com

Warren Chemicals
PO Box 36846, Chempet 7442
T 021 556 1920
F 021 556 1905
info@warrenchemct.co.za

Enartis Winechem SA
PO Box 272, Blackheath 7581
T 021 905 0303
F 021 905 0304
sales@enartis.co.za
# Appendix E

## Cost Price of a Bottle of Wine—An Example

The price of a finished bottle of wine can vary enormously depending on what variety you make, the quantity, your additives, your equipment and your packaging selections. Corks alone range from ZAR 2-20. Ordering supplies in small amounts is always more expensive, and printed materials such as capsules, screw caps, boxes and labels all have initial art work and die making costs, as well as minimum orders. Following is a rough example of what it might cost you to convert one ton of Shiraz grapes into six hundred litres of wine, or eight hundred bottles.

<table>
<thead>
<tr>
<th>Item</th>
<th>Price (Rands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>One Ton of Shiraz Grapes from Agter Paarl @ 4000R/ton</td>
<td>5.00</td>
</tr>
<tr>
<td>Yeast, nutrients, tartaric acid, sulphur dioxide @ 200 R/ton</td>
<td>0.25</td>
</tr>
<tr>
<td>2 new barrels, 1 French and 1 American, 11000 Rand /3 years</td>
<td>4.60</td>
</tr>
<tr>
<td>Bottles (1 pallet minimum order), recycled @ 2 R/bottle</td>
<td>3.00</td>
</tr>
<tr>
<td>Printed Screw cap* (minimum order applies)</td>
<td>1.00</td>
</tr>
<tr>
<td>Labels* one colour front and back for order of 1000</td>
<td>1.00</td>
</tr>
<tr>
<td>Boxes* and Inserts 12 x 750ml @ 6 R/box</td>
<td>0.50</td>
</tr>
<tr>
<td>Duty 2.14 Rand per litre</td>
<td>1.61</td>
</tr>
<tr>
<td>Wine and Spirit Board and Wine Analysis Fees</td>
<td>1.50</td>
</tr>
<tr>
<td>Mobile Bottling and Labelling</td>
<td>.75</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>19.21</strong></td>
</tr>
<tr>
<td>Plastic Fermentation bins x 2 @ 1800 R /10 years</td>
<td>.22</td>
</tr>
<tr>
<td>Manual Basket Press 30000 Rand/10 years</td>
<td>3.75</td>
</tr>
<tr>
<td>Simple Crusher De-Stemmer 9200 Rand/10 years</td>
<td>1.15</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>24.33</strong></td>
</tr>
</tbody>
</table>

This price doesn’t include initial cellar set up costs, electricity, labour or VAT costs.*My initial art and die fee for boxes was 5000 Rand, labels 3500 Rand, and screw caps 2000 Rand.*
Garagiste Winemaking Course-University of Stellenbosch

The Garagiste winemaking course of the Department Of Viticulture and Oenology at the University of Stellenbosch is a weekend course for people interested in producing quality small-scale wines. Those wishing to attend will have the chance to observe the use of small-scale winemaking equipment, as well as taste a number of wines that were produced on a small scale. The course focuses on all production aspects of small-scale winemaking and can be quite technical. The course is presented by Wessel Du Toit, senior lecturer in Oenology at the university. Those interested can contact him for a registration form, wdutoit@sun.ac.za.

Garagiste Winemaking Course-Country Life Magazine

A winemaker, a viticulturist, a liquor license expert and experienced garagistes will share their knowledge with you on this laid back Cape weekend workshop. To book for workshops contact Mandy on 031 910 5773, mandya@dbn.caxton.co.za.

Topaz Wine Education

Clive Torr, who pioneered the Garagiste Movement in South Africa, uses his vast experience in the Industry to help you get to know the basics of viticulture and winemaking as well as how to appreciate wine. These are evening classes at The Topaz Garagiste Wine Cellar at Delvera, near Elsenberg Agricultural College in Stellenbosch.

If you want to get your hands dirty during harvest, Clive also does Custom Crush at the Topaz Garagiste Wine Cellar. For 15,000 Rand you can make a 225 litre barrel of wine. This is an all inclusive price from berry to bottle, including help from the man himself. For more information, contact Michelle on 021 462 3572, michelle@topazwe.com.

The Garagiste Movement

To become a member of the Garagiste Movement, contact Tanja, tanja@topazwines.co.za.
Appendix G

1. SAWIS 3 Form/ Application for Registration

2. SARS DA 185 Form/ Application for Registration

3. CIPRO TM1 Form/ Application for Trademark Registration
# AANSOEK OM REGISTRASIE / APPLICATION FOR REGISTRATION

## Naam en posadres:
Name and postal address:

## Fisiese adres:
Physical address:

## Kontak persoon/Contact person:

## BTW Registrasie no
VAT Registration nr

Nie geregistreer vir doeleindes van BTW
Not registered for VAT purposes

### Regpersoon / Legal Status (Out aan met X / Indicate with X)

<table>
<thead>
<tr>
<th>Maatskappy / Company</th>
<th>Trust / Trust</th>
<th>BK / CC</th>
<th>Vennootskap / Partnership</th>
<th>Own name</th>
</tr>
</thead>
</table>

** Registrasie nommer / Registration number

## DUI TIE REGISTRASIE MET X AAN / INDICATE TYPE OF REGISTRATION WITH X

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Wynprodusent / Wine producer</td>
</tr>
<tr>
<td>A1</td>
<td>Met 'n pleas / With a farm</td>
</tr>
<tr>
<td>A2</td>
<td>Met 'n kelder / With a cellar</td>
</tr>
<tr>
<td>A3</td>
<td>Sonder 'n pleas / Without a farm</td>
</tr>
<tr>
<td>A4</td>
<td>Sonder 'n kelder / Without a cellar</td>
</tr>
<tr>
<td>B</td>
<td>Wynhandelaar / Wine Trader</td>
</tr>
<tr>
<td>C</td>
<td>Uitvoerder / Exporter</td>
</tr>
<tr>
<td>D</td>
<td>Nuwe toetreder / New entrant</td>
</tr>
<tr>
<td>E</td>
<td>Verandering van naam / Change of name</td>
</tr>
<tr>
<td>F</td>
<td>Bottelmeerder Dienste / Bottler Services</td>
</tr>
</tbody>
</table>

---

### Datum / Date

### Handtekening / Signature

### NEEM KENNIS / PLEASE NOTE

Wynkelders moet ook by Doene & Aksym register word.
Wine Cellars have to be registered with Customs & Excise.

'n Licensie ingevoeg die Drankwet word benodig vir die verkoop van drank.
A licence in terms of the Liquor Act is required for the sale of liquor.

Naam van Inspekteur:  
Name of Inspector:
# APPLICATION FORM: REGISTRATION / LICENSING OF CUSTOMS AND EXCISE CLIENTS

## 1. NOTES FOR THE COMPLETION OF FORM

1. Please indicate with an "X" in the applicable box.
2. If the space provided on form DA185 and applicable annexure(s) is insufficient, the information must be furnished on a separate page, which must be attached to the form DA185 and the annexures.
3. Where the asterisk (*) appears, delete which ever is not applicable.
4. Please reflect the relevant customs and excise client number, customs and excise warehouse number or rebate user number when applying for the amendment of existing information or for a total cancellation per client type.
5. Please take note that a separate application form must be completed for each client type.
6. Please complete annexure DA185.C where security must be furnished.

## 2. EXISTING REGISTRANT/LICENSEE PARTICULARS

If currently registered/licensed with SARS, please state allocated customs client number.

## 3. PURPOSE OF APPLICATION

- [ ] New Registration/Licensee or renewal:
- [ ] Amendment of existing information:
- [ ] Cancellation:

## 4. CLIENT TYPES

### 4.A REGISTRATION

(Section 59A and the rules thereto)

| 4A1 | Importer - Annexure DA 185.4A1 |
| 4A2 | Exporter - Annexure DA 185.4A2 |
|     | Exporter for SADC, TDCA and SACUFEITA - Annexure DA 185.4A2 (Rule 59A.01, rule 49A, B and C) |
|     | Exporter for AGOA - Section A of Annexure DA 185.4A2 & Form DA 45A.1.02 (Rules 48A.1.02) |
|     | Approved Exporter for TDCA, SACUFEITA - Section B of Annexure DA 185.4A2 & Form DA 45A.02 (Rules 49A.18 (19,20) and 49C.18(19)(20)) |
|     | Exporter for QSP (Various countries) - Section C of Annexure DA 185.4A2 & Form DA 45A.01 (Rules 46A.2.18) |

### 4.B LICENSING

(Section 60 and 61 and the rules thereto)

| 4B1 | Special Manufacturing Warehouse - Annexure DA 185.4B1 (Section 21 and the rules thereto) |
| 4B2 | Manufacturing Warehouse - Annexure DA 185.4B2 (Sections 19A and 27 and the rules thereto) |
| 4B3 | Storage Warehouse - Annexure DA 185.4B3 |
| 4B4 | Special Storage Warehouse - Annexure DA 185.4B4 (Sections 19A and 21 and the rules thereto) |
| 4B5 | Clearing Agent - Annexure DA 185.4B5 (Section 64B and the rules thereto) |
| 4B6 | Removal of goods in Bond - Annexure DA 185.4B6 (Section 64D and the rules thereto) |
| 4B7 | Distributor of Fuel - Annexure DA 185.4B7 (Section 64F and the rules thereto) |
| 4B8 | Special Ad Valorem Manufacturing Warehouse - Annexure DA 185.4B8 (Section 36A and the rules thereto) |
| 4B9 | Storage Warehouse (Customs Controlled Area Enterprise) - Annexure DA 185.4B9 (Sections 19A, 21, 21A and Rule 21A.10) |
| 4B10 | Manufacturing Warehouse (Customs Controlled Area Enterprise) - Annexure DA 185.4B10 (Sections 19A, 21A, 27 and Rule 21A.10) |

### Cont. Overleaf
## 5. BUSINESS / PERSON PARTICULARS

<table>
<thead>
<tr>
<th>Registered name of business or name of applicant:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Business address: Street name and number:</td>
<td></td>
</tr>
<tr>
<td>Building name and floor number:</td>
<td></td>
</tr>
<tr>
<td>Suburb:</td>
<td></td>
</tr>
<tr>
<td>City/Town:</td>
<td></td>
</tr>
<tr>
<td>Postal address:</td>
<td></td>
</tr>
<tr>
<td>Suburb:</td>
<td></td>
</tr>
<tr>
<td>City/Town:</td>
<td></td>
</tr>
<tr>
<td>Business Telephone (Including code):</td>
<td></td>
</tr>
<tr>
<td>Code:</td>
<td></td>
</tr>
<tr>
<td>Tel:</td>
<td></td>
</tr>
<tr>
<td>Fax number (Including code):</td>
<td></td>
</tr>
<tr>
<td>Code:</td>
<td></td>
</tr>
<tr>
<td>Fax:</td>
<td></td>
</tr>
<tr>
<td>Business e-mail address:</td>
<td></td>
</tr>
</tbody>
</table>

## 6. BANK ACCOUNT DETAILS

- Mark if you do not have a local savings or cheque account: [ ] Account No: [ ]

<table>
<thead>
<tr>
<th>Branch Name:</th>
<th>Branch No:</th>
<th>Bank Name:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Account Holder Name: [ ]

## 7. SARS REVENUE IDENTIFICATION NUMBERS

| i. VAT Registration Number: | 4 |
| ii. Income Tax Reference Number: |  |
| iii. PAYE Reference Number: | 7 |
| iv. SDL Reference Number: | L |
| v. UIF Reference Number: | U |

## 8. NATURE OF BUSINESS

- Company [ ]
- Close Corporation [ ]
- Trust [ ]
- Sole Proprietor / Individual [ ]
- Partnership [ ]
- Co-op [ ]
- Public Authority [ ]
- Other [ ]
- Other (Please specify): [ ]

<table>
<thead>
<tr>
<th>Company Registration number:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Close Corporation Registration Number:</td>
<td></td>
</tr>
<tr>
<td>Trust Registration Number:</td>
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</tr>
</tbody>
</table>

## 9. PARTICULARS OF SOLE PROPRIETOR / INDIVIDUAL AND / OR PARTNERS

### i. Initials: [ ]

<table>
<thead>
<tr>
<th>Surname:</th>
<th>First Name/s:</th>
</tr>
</thead>
<tbody>
<tr>
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<table>
<thead>
<tr>
<th>ID No:</th>
<th>Passport No:</th>
<th>Passport Country (e.g. South Africa = ZAF)</th>
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<tbody>
<tr>
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<td></td>
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</table>

### ii. Initials: [ ]

<table>
<thead>
<tr>
<th>Surname:</th>
<th>First Name/s:</th>
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<tbody>
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<th>Passport No:</th>
<th>Passport Country (e.g. South Africa = ZAF)</th>
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### iii. Initials: [ ]

<table>
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<th>First Name/s:</th>
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<tr>
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<th>Passport No:</th>
<th>Passport Country (e.g. South Africa = ZAF)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
10. PUBLIC OFFICER / REPRESENTATIVE

Surname: 

First Name: 

Telephone (including code): Code (___) Tel (_____), Fax number (including code): Code (___) Fax (_______)

E-mail address: 

Cellular Phone Number: 

Public Officer: [ ] Curator/Trustee: [ ] Partner: [ ] Accounting officer / Treasurer / Financial Officer: [ ] Other, please specify: 

11. INFORMATION REGARDING CONTRAVENTIONS AND OTHER MATTERS

Please indicate whether during the preceding five years, any person contemplated in the rules for section 59A or 60:-

(a) Has contravened or failed to comply with the provisions of the Act. Yes: [ ] No: [ ]

(b) Has failed to comply with any condition, obligation or other requirement imposed by the Commissioner. Yes: [ ] No: [ ]

(c) Has been convicted of any offence under the Act. Yes: [ ] No: [ ]

(d) Has been convicted of any offence involving dishonesty. Yes: [ ] No: [ ]

(e) Has made any false or misleading statement in any material respect or omitted to state any material fact which was required to be stated in any application for registration or for any other purpose under the Act. Yes: [ ] No: [ ]

(f) Has ever been insolvent or in liquidation. Yes: [ ] No: [ ]

Note:
- If the answer is "yes" to any of the above questions in Block 10, full details must be furnished on a separate page and attached to the application.
- Any applicant may, where it is contended in respect of paragraphs (a) and (b) that the contravention or failure was inadvertent, without fraudulent intent or gross negligence, a submission to this effect should be furnished on a separate page and attached to the application.

12. DOCUMENTS IN SUPPORT OF APPLICATION

The following information / documents must be submitted with this application form,

- One of the following documents to prove bank details:
  - A cancelled cheque;
  - A legible certified copy or original bank statement which confirms the account holder's name, account number and branch code;
  - An original letter from the bank on an letterhead, or
  - An original auto bank statement.

- Certified copies of the following documents:
  - Municipal account not older than 3 months to confirm the address details,
  - VAT, IT, PAYE, SDL, UIF letters from SARS to confirm revenue registration details,
  - CIPRO registration letter when company or CC was registered,
  - Identity document or passport,
  - Telkom and/or cellular phone account not older than 3 months to confirm contact details.

- Any other information as the Commissioner for SARS may require.

Declaration:

I hereby:
(a) declare that the particulars in the application and all enclosures are true and correct; and
(b) undertake to:
(i) inform the South African Revenue Service immediately of any changes in the particulars furnished in the application;
(ii) comply with the customs and excise laws and procedures.

(Initials and Surname) __________________________ (Status / Capacity, e.g. Director)

(Signature) __________________________ (Date & Place)
**APPROVAL FOR THE REGISTRATION OF A TRADE MARK**
Sections 9, 14, 16, 425 43 and 63 - Regulations 11, 56 and 57

<table>
<thead>
<tr>
<th>For office use only</th>
</tr>
</thead>
<tbody>
<tr>
<td>21 Application Number</td>
</tr>
<tr>
<td>22 Filing Date</td>
</tr>
</tbody>
</table>

**OFFICIAL DATE STAMP**
One copy will be returned to the applicant’s address as proof of lodgement and is only valid if endorsed with the official date stamp.

| Applicant’s or agent’s GPA number |

**NA Nature (O=Ordinary, CE=Certification, CO=Collective, CU=Honest Concurrent User)**

<table>
<thead>
<tr>
<th>Owner/company</th>
<th>Address for service (postal address)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forename(s)</td>
<td></td>
</tr>
<tr>
<td>Street address</td>
<td></td>
</tr>
</tbody>
</table>

**57 Specification of goods/services**

| 51 International Classification |

**58 Endorsement(s)**

<table>
<thead>
<tr>
<th>Convention priority claimed</th>
</tr>
</thead>
<tbody>
<tr>
<td>31 Number</td>
</tr>
<tr>
<td>32 Date</td>
</tr>
<tr>
<td>33 Country</td>
</tr>
</tbody>
</table>

**54 Representation of trade mark**

(2)

| 55 Association No. (if applicable) |

(1)

If trade mark is a word, letter, numeral or combination, insert in inner block (1)

If trade mark is represented in a special or particular form, place a good copy in outer block (2) (Maximum size: 8.5 cm x 10 cm)

The applicant claims to be the proprietor of the accompanying trade mark which is proposed to be/is being used in respect of the above-mentioned goods or services.

**Signature of applicant or authorised agent**

Date