

AGG/CAWG Industry Webinar **2021**



*Part 1 –
Key Challenges and Grower Perspective*

**Jeff Bitter
Allied Grape Growers
July 16, 2021**

AGG/CAWG Industry Webinar 2021



Smoke events are no longer the exception:

- **2015 - Lake County (Middletown)**
- **2016 - Carmel Valley**
- **2017 - Napa Valley**
- **2018 - Mendocino/Lake Counties**
- **2019 - Alexander Valley**
- **2020 – CALIFORNIA**
 - **And others not listed.....**

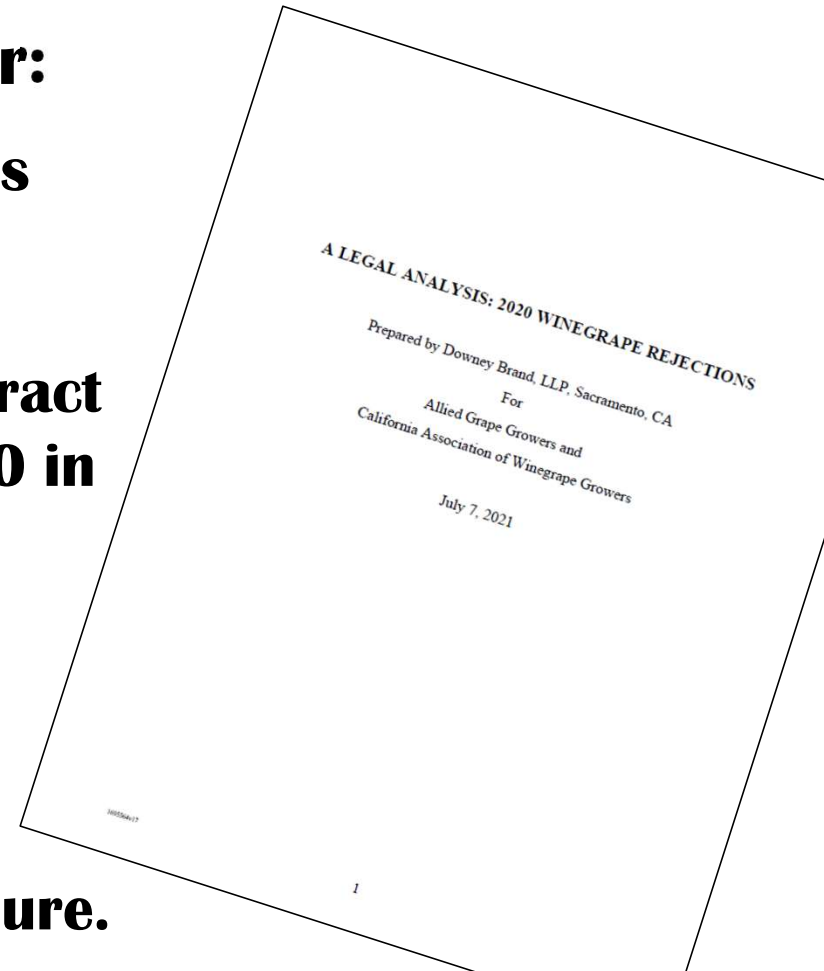
The difference with 2020 was the duration/magnitude of fire events.





The background and the paper:

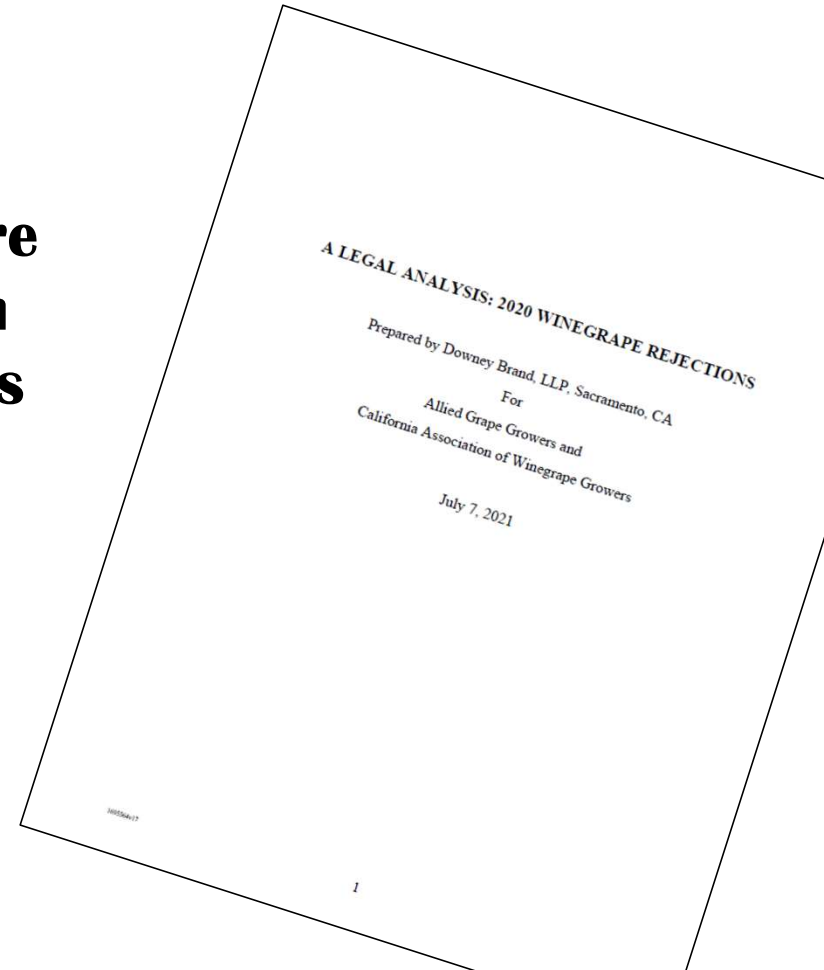
- **Real, substantial economic losses experienced by growers.**
- **AGG represents a fraction of the crush, but experienced 80+ contract rejections and over \$12,000,000 in unrealized sales losses in 2020.**
- **AGG administers well over 500 GPA's annually.**
 - **Have first-hand insight into numerous variations of GPA's and reactions to smoke exposure.**





So, what's the issue?

Essentially, the issue is that there is no real industry standard with regard to how smoke exposure is managed contractually.

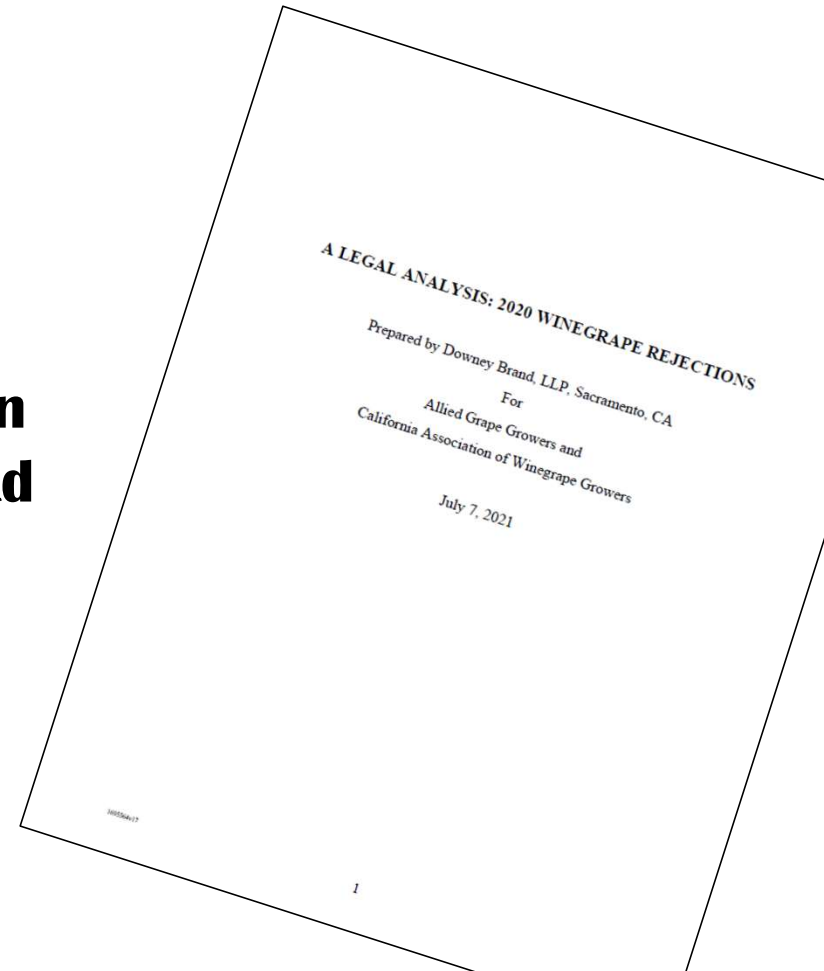




Additionally.....

As pointed out in our report, the majority of grape purchase agreements which were written prior to the last year or two, and in place during the 2020 harvest, had no specific mention of smoke.....

“...many wineries interpreted their contracts to include unwritten criteria for the presence of varying amounts of Guaiacol and other wildfire smoke markers that justified their rejection of winegrapes.”

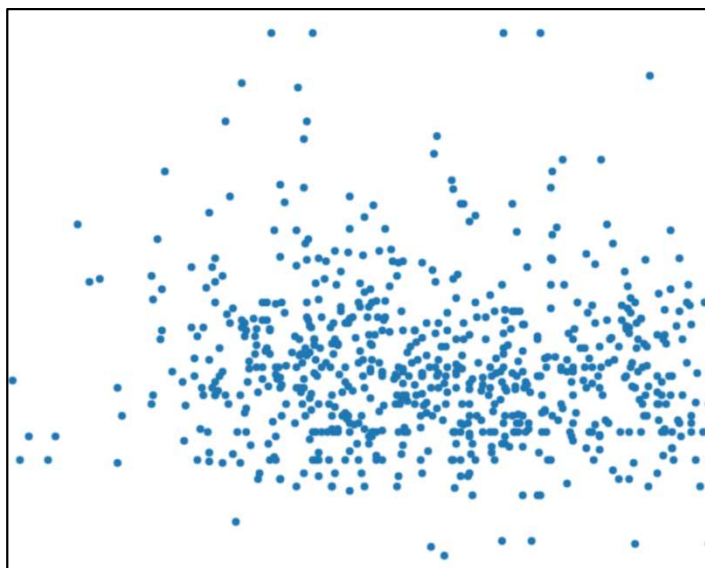


AGG/CAWG Industry Webinar 2021

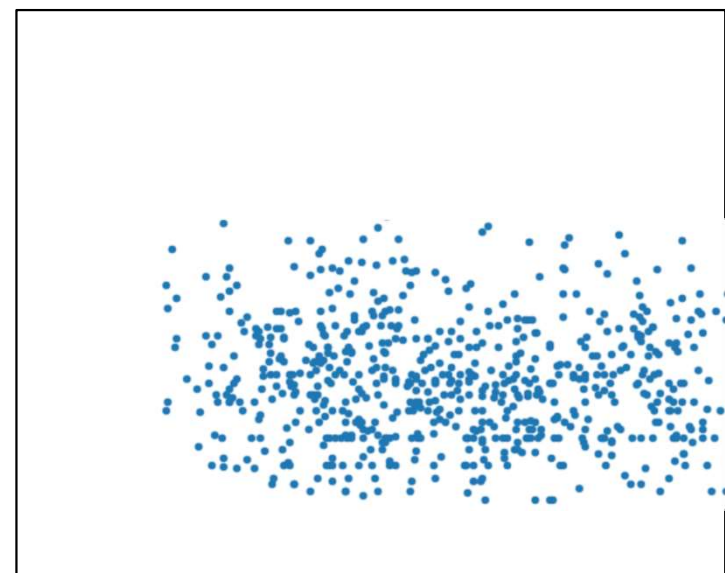


Using scatter diagrams as a visual representation of the various reactions to smoke exposure, our goal as an industry should be to reduce extremes.

Current



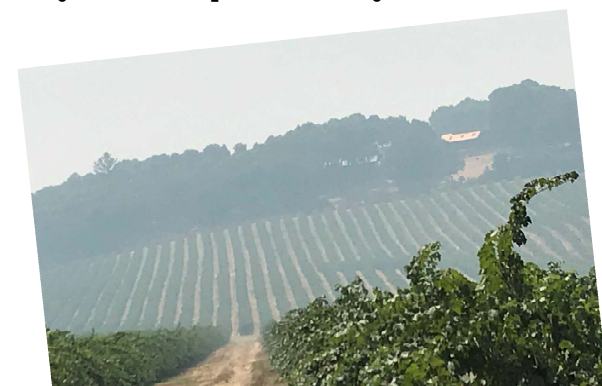
Aspirational





As an industry, why are we all over the board?

- Limited conclusive data available for confident decision making:**
 - The “list” of predictive compounds may not be comprehensive.
 - Smoke influence varies (fuel source, “age” of smoke, proximity to fire, duration, etc.)
 - Varietal impact differs.
 - Tolerance thresholds are unknown – how much smoke is too much?
 - Lack of baseline data regarding naturally occurring compound concentration.
- Significant differences in evaluating, understanding and interpreting smoke risk:**
 - There’s various levels of knowledge regarding smoke exposure.
 - Analysis options vary (grapes vs. wine, free vs. total, test methodology, etc.).
 - Is it the grower’s responsibility to prove suitability or the buyer’s responsibility to prove nonconformity?
 - “Reasonableness” is technically undefined.
 - Tolerance varies for many reasons
- External forces influence our decisions:**
 - The reality of “the market”
 - Lab capacities, turnaround time
 - Smoke event vs. harvest timing



AGG/CAWG Industry Webinar 2021



Jeff Bitter
Allied Grape Growers
July 16, 2021



*Part 2 –
Observations and Insights:
What works, what doesn't
and where do we go from here?*

**Jeff Bitter
Allied Grape Growers
July 16, 2021**



Define “smoke taint”.....

- **Is it the mere detectable presence of smoke compounds or is it describing the commercial viability of grapes/wine? (i.e., smoke “exposed” vs. smoke “impacted” vs. smoke “tainted”)**
- **The word “taint” is often used “loosely” in contracts, and since there is no standard industry definition for smoke taint, it quickly becomes a matter of interpretation.**
- **Example of problematic verbiage:**

“To Seller’s knowledge, the wine is not damaged, defective, or spoiled in any respect, and the wine is free of any wine faults, smoke taint, or other contaminants.”
- **Solution/Direction: Clearly define what taint is and how measured, or simply refrain from using the word “taint” and utilize and incorporate written objective parameters for quality evaluation.**



Many active grape purchase agreements are devoid of a clause that provides remedy in the event of smoke exposure.

- **Contracts devoid of smoke exposure clauses leave the determination of suitability much more open for interpretation.**
- **Often end up relying on other “quality” statements in the contract to imperfectly address smoke exposure.**
- **The evaluation of smoke impact is important enough with regard to quality standards that there ought to be specific verbiage addressing it in contracts.**
- **Solution/Direction: Make sure you have an agreeable smoke exposure clause in the contract you are offering or signing, or discuss placing a mutually agreed amendment in place on existing contracts, prior to a smoke event.**

Smoke Exposure Clause 2021



However, it is possible to go “too far” regarding smoke.....

Grape Purchase Agreement

BUYER:
GROWER: Allied Grape Growers
VINEYARD ADDRESS:
MAILING ADDRESS: 7030 North Fruit Ave, Suite 115 Fresno, CA 93711
BLOCK(S): Chardonnay
CONTACT: Jeff Bitter (559) 276-7021 email; jeff@alliedgrapegrowers.org
VARIETY: Chardonnay (Russian River)
TARGET SUGAR: 24.0
CONTRACT TERM: The term of this agreement shall be three (3) years, specifically the harvest in years 2021, 2022 and 2023.
TONNAGE: 70 tons
PRICING:
PAYMENT TERMS: 33% Payment due December 20th following harvest; 33% Payment due January 20th the year following harvest; 34% (Final Payment) due March 20th the year following harvest.

DELIVERY: The grapes will be delivered to _____ (TBC) _____ buyer shall approve the picking prior to harvesting. The grapes will be weighed on a certified scale. Delivery shall be on the day of picking unless approval is given otherwise by Buyer. Seller assumes all risk of loss until grapes are delivered and accepted at buyer's winery.

Buyer will inspect the vineyard for maturity and will work with grower to determine the best time for harvesting. Maximum rot is 1.0%. Maximum M.O.G. is 1.5%. Outside of these standards, the grapes are subject to rejection. Seller shall be responsible for all direct and consequential damages caused by any litter of foreign material present in the grapes delivered. The cost of repairing said damage may be deducted and withheld from any payment due to the seller for grapes delivered. Seller shall be given documentary evidence of the nature and extent of said damage and the cost of all repairs.

PESTICIDE REPORTS: A pesticide use report listing all pesticides used in the vineyard must be submitted to Buyer, before delivery. Buyer must have written records of all pesticide use as a prerequisite to delivery and crushing of grapes.

FORCE MAJEURE PROVISIONS: In the event that the business of either party shall be interfered with for any reason beyond such party's reasonable control, which interference materially prevents performance of this Agreement by such party, including, without being limited to, strikes, fire, flood, earthquakes, acts of God, breakdown, or laws, regulations, requirements, rulings or orders of any governmental agency or authority (a "Force Majeure Event"), either party may at his option cancel this Agreement with respect to any part of the grapes remaining undelivered for the season affected thereby. Notice of such election shall be promptly given to the other party and such notice shall relieve Buyer from all liability to pay for grapes remaining undelivered in such season, and shall release Grower from all liability to deliver the same.

SMOKE EVENT: In the event that the grapes to be sold pursuant to this Agreement are exposed to smoke during the growing season (a "Smoke Event"), Buyer shall have the option to terminate this Agreement in accordance with this section for the crop year affected.

1. Pre-Harvest Smoke Event – Wine Analysis. If a Smoke Event occurs more than two (2) weeks prior to the anticipated harvest date (at any point during the growing season), Buyer shall collect berry samples from a minimum of twenty (20) vines per block and conduct a small-scale primary fermentation for each block. Such primary fermentation shall mimic Buyer's normal processing procedures as closely as possible. For example, white grapes will be pressed off the skins, inoculated with commercial yeast, and fermented to sugar dryness. Upon completion of such primary fermentation, Buyer shall submit the sample to the nearest accredited laboratory that can process the sample in a timely fashion to be analyzed for guaiacol. If the laboratory analysis reports a concentration of guaiacol in excess of two (2) PFB, then Buyer may at its option cancel this Agreement in accordance with Section 3 below. Buyer shall provide copies of such analysis to Grower.

2. Harvest Smoke Event – Berry Analysis. If the Smoke Event occurs less than two (2) weeks prior to the anticipated harvest date, Buyer shall collect berry samples from a minimum of twenty (20) vines per block (and in no case less than 200 individual berries per block) and shall submit such berries to the nearest accredited laboratory location that can process the sample in a timely fashion to be analyzed for guaiacol. If the laboratory analysis reports a concentration of guaiacol in excess of one-half (0.5) parts per billion (PPB), then Buyer may at its option cancel this Agreement in accordance with Section 3 below. Buyer shall provide copies of such analysis to Grower.

3. Buyer's Option to Terminate. In the event that the laboratory analysis reports a concentration of guaiacol in excess of the thresholds set forth above for wine or for berries, then Buyer may at its option cancel this Agreement with respect to the harvest year in which the Smoke Event occurs only. Notice of such election shall be promptly given to Grower and such notice shall relieve Buyer from all liability to pay for the grapes subject to this Agreement.

4. Delayed Test Results

a. In the event that Buyer will not be able to obtain test results on Grower's fruit prior to when the fruit is to be harvested, and, because it has been shown that smoke taint may not emerge until months after fermentation, if Buyer finds following fermentation that Grower's fruit (as determined by the ISO-certified laboratory test taken before harvest, but the results of which were not received until after harvest) or the wine made from Grower's fruit (as determined by an ISO-certified laboratory) has detectable levels of smoke taint that cannot be corrected sufficiently for use in Buyer's blends, as determined in the sole discretion of Buyer's winemaker, then Buyer will attempt to sell or dispose of the wine. If Buyer receives any compensation for the wine made from Grower's fruit, then Buyer will keep up to \$500/ton from these proceeds to cover Buyer's processing costs. Buyer will pay Grower any net sales proceeds above this amount up to the contracted price per ton. Any sales proceeds remaining after paying processing and the contracted price per ton will be split equally between Grower and Buyer. In the event Buyer is not able to sell the wine within 1 year after harvest, then Grower shall either pick up the wine, at no cost to Grower, or have it destroyed, at Grower's cost, all within 30 days of notice from Buyer.

b. After December 1st of the harvest year, if Buyer still does not detect any smoke taint by analysis by an independent ISO-certified laboratory and organoleptic evaluation in wine made from your fruit, Buyer will pay 1/3 on December 20th of the harvest year, and 1/3 on March 1st the year following harvest. However, if Buyer detects any smoke taint by analysis and organoleptic evaluation in wine made from Grower's fruit and must take corrective action to ameliorate smoke taint in the wine made from Grower's fruit, Buyer will deduct half of those costs from final payment.

c. The final payment of 1/3 payment will be deferred to August 1st, the year following harvest. However, if Buyer detects any smoke taint by analysis by an independent ISO-Certified laboratory in wine made from Grower's fruit and must take corrective action to ameliorate smoke taint in the wine made from Grower's fruit, Buyer will deduct half of those costs from this payment.

Acknowledgment: Grower and Buyer acknowledge that the sensory perception of smoke taint depends on many factors in addition to the concentration of guaiacol present in the berries or resulting wine as determined by the laboratory testing outlined in this section and agree to cooperate in good faith in the event of a Smoke Event. Grower and Buyer further acknowledge and agree that the methodologies for smoke taint analysis set forth herein are reasonable and appropriate for purposes of determining Buyer's right to terminate this Agreement in accordance with this section and that this paragraph should be amended by the parties as the methodologies for smoke taint analysis become more precise. Accordingly, Grower waives all claims and releases Buyer for any and all damages which may arise as a result of such termination. Nothing herein precludes Buyer from rejecting any or all loads it deems unsuitable in its sole discretion based on failure to meet the Minimum Quality Standards for the production of high-quality wine.

CROP INSURANCE: Buyer recommends that Grower carry crop insurance covering the grapes to be sold pursuant to this Agreement in the event of a Force Majeure Event or a Smoke Event in an amount recommended by Grower's broker based on Grower's operation. Grower acknowledges and agrees that if it does not obtain crop insurance, it does so at its own risk.

Approved and Accepted: _____ Approved and Accepted: _____

Grower _____ Date _____ Buyer _____ Date _____

Observations and Insights

2021



One-size-fits-all smoke exposure clauses.....

- **Virtually all buyers that are incorporating smoke exposure clauses into their contracts are making those clauses part of the contract template rather than part of the vineyard-specific quality parameters.**
- **We know from work done in California and Australia that different varieties have different baseline concentrations of the commonly assessed smoke markers. Much more work (research) is planned in this area.**
- **Standard processing procedures (like removing the skins before fermenting white grapes), as well as various elective processing options, may adequately mitigate smoke impact in certain wines.**
- **Solution/Direction: Discuss/negotiate the specific tolerance for smoke impact based on:**
 - **Type, variety, and price point of finished wine**
 - **Example \$10/bottle Sauv Blanc vs. \$100/bottle Cab Sauv**



Reliance on sensory evaluation alone, for suitability, is dangerous

- **Best practice is to rely on laboratory analysis (which is objective in nature) for contractual purposes, and confirm as applicable with subjective sensory evaluation.**
- **Research shows there exists varying sensitivity to the impacts of smoke in wine. (i.e., not everyone exhibits the same levels of sensitivity or perceptibility when it comes to smoke.)**
- **Solution/Direction: Appropriate use of sensory evaluation is as a supplement to objective measures, particularly when wine that is otherwise confirmed to be affected by smoke needs to be “classified” by the buyer for payment purposes or otherwise.**

Observations and Insights

2021



Test methodology, targets and results for grape/wine analysis can vary in nature....

- **Are we measuring the right compounds?**
 - **There's considerable speculation regarding the predictive qualities of the various compounds. For example, it's been shown Syringol may not correlate with other measured compounds in the same manner the other compounds correlate with each other. There's also some speculation we may not yet be fully recognizing all (or even the best) compounds associated with smoke impact.**
- **Are we utilizing the right methods to test grapes vs. wine?**
 - **When fermentation is emulated in a laboratory setting, is it a reliable method to evaluate grapes? Finished wine results may not match pre-harvest analysis.**
- **Different buyers rely on different measurements (free vs. total).**
- **Solution/Direction: Be aware of, and agree upon, the methodology and protocol used in evaluating grapes or wine for smoke impact. Currently, the most widely adopted method involves the measurement of guaiacol and 4-methyl guaiacol by certified commercial laboratories.**

What Works/What Doesn't? 2021



Works:

- **Post harvest evaluations, when necessary (with options)**
- **Scaled pricing based on objective measures**
- **Mitigating risk with crop insurance**

Doesn't Work:

- **“Rejection with Detection” as a one-size-fits-all application**
- **Subjective evaluation/decisions unsupported by objective measures**
- **Treating smoke exposure as a “black & white” issue.**
- **Contracts without smoke clauses**

In Summary

2021



- **The risk/reward trade-off becomes the determining factor with regard to negotiating an agreeable contract.**
- **Open the lines of communication regarding smoke. Smoke discussions do not have to originate from the buyer.**
- **Consider the cost of crop insurance during contract negotiations. Crop insurance is an effective way for growers and wineries to work together to address smoke concerns, but it comes with cost.**
- **Ultimately, as an industry, we need to move toward uniform reaction to smoke exposure and reduce or eliminate the outlying behaviors that damage either party unnecessarily.**
- **Here's to the 2021 harvest being smoke-free!!**