San Joaquin Valley Air Pollution Control District NORTHERN REGION HEARING BOARD MEETING

Northern Region Office Magnolia Room 4800 Enterprise Way, Modesto, CA 95356

ACTION SUMMARY MINUTES

Wednesday, February 26, 2015

Meeting held via teleconferencing with the Central Region Office (Fresno) and the Northern Region Office (Modesto) participating via teleconferencing.

1. Call Meeting to Order

The Chair, Mark Kanai, called the meeting to order at 10:01 a.m.

2. Roll Call

Mark Kanai – (Chair) Attorney Present Roger Gohring – Public Present Gerald Schneider (Vice Chair) – Engineer Present Rob Hofmann – Public Present

Staff Present: Northern Region (Modesto): Nick Peirce, Permit Services Manager; Annette Ballatore-Williamson, District Counsel; Arnaud Marjollet, Director of Permit Services; Ron Giannone, Supervising Air Quality Inspector Jessi Fierro, Assistant District Counsel;

Central Region (Fresno): Patrick Houlihan, Senior Air Quality Specialist; Carol Flores, Operations and Program Support Supervisor

3. Public Hearing

The Chair swore in all those present to testify for all matters.

A. N-14-16A Appeal NohBell Corporation

2800 156th Avenue SE Suite 200

Bellevue, WA 98007

Petitioners: Andrew Fedak and Ad Verkuylen

Representative from E & J Gallo: Chris Savage

Ms. Fierro reviewed the legal standards that will be guiding the Hearing Board's decision making process. Pursuant to California Evidence Code the Board will start with the presumption that the District's action is correct. Therefore the petitioner has the burden of proof to override this presumption and show that the District's action was improper. The key inquiry is whether the evidence shows that the District did not make a fair and reasonable interpretation of the applicable legal requirements and whether there is some air regulation that the project is not expected to comply with if built as authorized by the Authority to Construct (ATC).

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Ms. Ballatore-Williamson made an opening statement. The issue at hand is whether the permit the District issued to Gallo on November 26, 2014, was properly issued. And specifically whether the District properly made a determination as to what the Best Available Control Technology (BACT) that was required for the project should be. Ms. Ballatore-Williamson stated NohBell has raised issues that the District made an improper determination as to whether the control technology that was required was both achieved in practice and whether it was cost effective. The District disagrees with NohBell's position on both points.

Mr. Savage expressed concern for the hearing process due to Gallo following proper procedures for obtaining the permit and District staff has done a thorough job in the issuance of permits. Mr. Savage expressed concern the petitioner has taken this venue to continue to market and sell their technology. Mr. Savage commented his preference for the meeting is to focus on the narrow range of their petition which is whether or not the District followed the rules in issuing the permit.

Mr. Fedak stated NohBell took this course of action after having exhausted all avenues of attempting to clarify and substantiate the representations around the invention. It is new and many of the data points substantiate a lack of understanding about the technology and also a lack of verification and rigor in verifying the representations of the two aspects: cost effectiveness and achieved in practice. Due to these aspects the ATC and the Permit to Operate (PTO) were inappropriately assigned and approved.

The Chair asked the petitioners to make their presentation.

Mr. Fedak made reference to a photo illustrating their equipment. He said only two people in the room would know what the item was because no other person in the room has seen the machine operate. Yet third party consultants, engineers, financial department staff have rendered expert testimony on its operation and it's cost effectiveness. Mr. Fedak stated as a basic tenant of common sense, as an invention it is new and requires a certain amount of rigor to substantiate the representations that have been made over the course of five seasons and leading into the sixth of testing in commercial operations and in classes of sources identical to the facility and the proposed expansion being discussed today.

Mr. Fedak stated there has been a pattern of miscommunication and lack of communication which has resulted in inaccurate cost estimations and lack of understanding of the NoMoVo equipment. Not only do the achievements in practice to date demonstrate all of the performance metrics, they also substantiate the representations of cost effectiveness. He referred to a 2013 District decision NohBell chose not to appeal and said the accumulation of these issues may be an abuse of discretion, whether there has been propriety under the legal standard and if this demonstrates arbitrary conduct.

Mr. Fedak read a paragraph from the District Staff Report regarding BACT for this project. He explained this technology was driven and created through methodology and through successful applications of air abatement technologies in car assembly plants, paint factories, coffee roasting facilities and snack food production plant. A number of different technologies and their different aspects as they apply to ethanol,

carbon and wine emission were obtained and this invention was created. He said the equipment is new and works differently.

Mr. Fedak reviewed the continuous operation for full seasons and various locations since 2009. He said in 2014 at Central Coast Wine Services (CCWS) the equipment was operated for a complete commercial season in accordance with all criteria in the District's Achieved in Practice criteria.

Mr. Kanai asked if any of the wineries that operated the equipment paid for the equipment. Mr. Fedak responded some wineries did pay for the equipment. Mr. Kanai asked if any of the wineries contracted with NohBell to install the equipment permanently. Mr. Fedak responded CCWS installed the equipment permanently and is expanding due to the success of the technology. Mr. Fedak commented the District's information referring to CCWS not operating the system in 2014 is incorrect. CCWS did operate with the NoMoVo for the complete commercial 2014 season under lease and in accordance with all regulations.

Mr. Fedak referred to the federal Lowest Achievable Emission Rate (LAER), California Health and Safety Code Section 40405, District Rule 2201 (New and Modified Stationary Source Review Rule) drawing attention to the verbiage, "achieved in practice for such class or category of source" and made the assertion that the system has worked on both class and category. He said only in this instance has the District used this verbiage to effectively create a new class and category.

Mr. Fedak presented the District's Achieved in Practice Criteria, pointing out it was published in 2013. He said he was working with a District engineer to ensure the criteria were being met by the system. He said the system has met at least 75% of the criterion multiple times in multiple locations.

Mr. Fedak stated the District asserts, because some of the installations were not under lease or owned then, they were not operated in accordance with BACT. Mr. Fedak disagreed stating most of the implementations were performed exactly according to BACT. The protocols in testing the equipment most certainly are exactly in adherence with BACT regulations.

Mr. Fedak stated the language used in the Achieved in Practice Criteria indicates Gallo is a different type of facility than those where the NoMoVo system has operated. He referred to photos illustrating the system and explained in 2013 and 2014 the unit was attached to multiple tanks and was sourced tested by the Bay Area Air Quality Management District at 99.2% efficiency. He added the unit has been installed inside, outside, on a 60,000 gallon tank and on a cluster of 24 – 60,000 gallon tanks. The machine does not know whether it's hooked up to 60 tanks fermenting 1000 gallon each or 1 tank fermenting 60,000 gallons. The units in the photos have completed a full commercial season at CCWS and have been inspected by CCWS. He reported the language used from inspection reports was, "it met or exceeded all requirements of Santa Barbara County.

Mr. Fedak reported NohBell submitted an Achieved in Practice document to the District and never received further questioning from the District to substantiate the performance of the equipment. Any criterion listed was never asked of companies

that the District called. And when wineries were called, the people who could substantiate the performance of the units were not spoken to. NohBell would be happy to provide contact information of the persons who know about the unit's performance.

Mr. Fedak reported the District does not consider the installation of a unit to be achieved in practice because it was removed and not intended as a permanent installation. The design methodology is not permanent; the units are designed to be moved around. It makes them more efficient and cost effective. Mr. Fedak stated denying the units achieved in practice status because they are portable is not fair to the test and what the technology is capable of.

Mr. Fedak stated the Monterey Air District has stricter regulations than does Santa Barbara County. Monterey is pressing forward with new regulations on how to deal with this wine emission capture technology. They are in favor of it, they support the testing of it and other wineries are looking at this technology. Mr. Fedak circulated a vile which contained ethanol and stated either the ethanol will be captured or not.

Mr. Fedak reported CCWS installed NoMoVo commercially in 2014 and ordered six more units for 2015. He stated the District was misinformed that CCWS did not use the system during commercial operation in 2014.

Mr. Fedak reported CCWS proposed an expansion to their operation and was required by SBCAPCD to provide cost data. CCWS proposed to use additional NoMoVo units. SBCAPCD would not have required the proposal if it was shown not to be cost effective. Mr. Fedak commented the NoMoVo units become more cost effective the bigger the unit at the winery. Mr. Fedak commented the District has added extra redundant expenses to NohBell's cost estimation.

Mr. Fedak read an excerpt from Gallo's professional consultant who is providing an analysis on the cost effectiveness of the NoMoVo equipment. He said the consultant has never seen, never used and does not know how it operates. Mr. Kanai asked the relevance of the excerpt from a consultant that is not present. Mr. Verkuylen explained the information in the excerpt is part of the District's document and decision making process. He said the applicant provided information that is of completely different construct, concept and principle of capture and therefore relevant to the hearing.

Mr. Fedak presented summaries of source test results. He reported there has been a 0% incident rate to the impact of wine.

Mr. Fedak stated NohBell understands the Valley is a NO_X limited district with very challenging air pollution issues. He posed a rhetorical question; with the BACT and achieved in practice protocol manner that is followed by the District, how would any engineer, scientist, or entrepreneur allocate resources towards solving a problem if verifiable, defendable repeated test documents are not treated as fact.

Ms. Fierro reported there are six exhibits that are being entered into evidence.

Witness: Steven Colome, EcoPAS, established his credentials as a witness. He said he disagrees with some of the conclusions and determinations of the District in this preceding. An open, thorough and detailed analysis would demonstrate cost effective and proven technologies capable of addressing the 85,000 lbs. of ozone precursor emissions from the proposed fermentation tanks with this ATC.

Mr. Savage said the comments made should be narrowly focused to the issues at hand and not stray too far from what the petition is about. Mr. Kanai agreed.

Mr. Colome stated the District claims indoor wineries have no current duct work which is incorrect. The District claims there will be a need for a knock out vessel in the event of foam over but with the new technology being presented there is no need for such system. Mr. Verkuylen commented the remarks are directly related to the cost effectiveness of the NoMoVo since the items the District claims to be necessary are incorrect. Mr. Peirce reported the cost of the Clean in Place system was not included in the cost effectiveness analysis.

Mr. Colome stated the District created a unique exception for this ATC in regards to the class and category of source. He commented the District had ample time between the preliminary and final ATC to gather information from the inventors of the new technology but failed to do so.

Mr. Colome commented the District has consistently overestimated costs of control through two ATC's from Gallo. He commented the District has also deviated from the EPA Cost Control manual by consistently increasing the apparent control cost and changing the framework. Mr. Colome presented a slide which illustrates a calculation of an equivalent annual cost. He stated the District misused the notion of a capital recovery factor. He said the District's assumption of equipment life being 10 years and an interest rate of 10% is incorrect. He presented graphs to illustrate his explanation of using different information will increase the cost effectiveness of the technology.

Mr. Colome stated EcoPAS remains committed to working with the District and offer expert consultation on these types of issues. He asked the District to meet with other technology developers to find solutions that achieve the best balance between possible air quality improvement, business imperatives and art of wine making.

Mr. Kanai reminded those providing testimony the comments made must be directly related to the petition appealing the District's issuance of an ATC.

Witness: Patrick Thompson, EcoPAS, commented it is time to begin phasing in some form of active controls for the wineries.

Mr. Peirce stated the District created a BACT guideline for wine fermentation tanks. This guideline lists what the District believes is achieved in practice level of control for wine fermentation tanks and also several technologies that are considered to be feasible. From the District's perspective when a wine fermentation tank triggers BACT it must, as a minimum, utilize a temperature control system to regulate the temperature of the tank's contents during fermentation. The District considers the

petitioner's NoMoVo emission control system a technological feasible control option and is therefore required by our policy to perform a cost effectiveness analysis.

Mr. Peirce reported the policy states that a control technology is considered to be cost effective if the cost of using that control is less than \$17,500 per ton of VOC emissions reduced. After performing a cost analysis on the NoMoVo technology the District found the technology was not cost effective and the results are summarized in the staff report. Mr. Peirce added the analysis did not contain the costs of a Clean in Place system or duct work. He explained how the District considered and weighed both the petitioner's comments and the applicants' responses when performing the cost effectiveness analysis.

Mr. Peirce commented the petitioner does not make any specific claims in the petition for appeal regarding the cost analysis. NohBell did not respond to a request from the District to provide updated cost data prior to the preliminary decision. Mr. Peirce reported NohBell did provide written comments during the public notice period and the District responded to each of the comments.

Mr. Peirce explained using a lower sales tax rate did not change the results of the cost effectiveness determination which NohBell addressed. The District also disagrees that the standardized interest rate and equipment life numbers can change. There has been a well-established, long standing and consistent history of using these same factors since the early 1990's. They are also contained in the District's BACT implementation policies and have never varied. They are universally applied to each project in a consistent manner.

Mr. Peirce said the petitioner objects to the inclusion of costs related to installing programmable logic controls, instrumentation, associated programing and costs faced by the owner. The District must include all costs faced by the owner related to permit compliance at the facility. Mr. Peirce said the petitioner objects to including the cost of initial source testing requirements for each NoMoVo unit. The District must be certain, without a doubt, that each unit can achieve the performance requirements. Mr. Peirce said the petitioner objects to the inclusion of a contingency cost of 20% of the capital investment. This is an accepted norm in the construction industry and has been used by the District for other similar projects involving technology that is new to a facility.

Mr. Peirce stated that due to the District possibly requiring all facilities in the industry to use this technology if it is found to be cost effective, the District must have a high level of confidence that the actual project cost will not exceed the estimate used to require that technology. This is why the District tends to error on the conservative side, because the District is potentially asking facilities to make a significant capital investment.

Mr. Peirce said whether or not any facility actually purchased emission control equipment is a critically important detail. As is how the controls were operated and what emission rate or control efficiency were actually achieved. The underlying notion that achieved in practice controls should be required regardless of cost is if one company that purchased, installed, successfully tested, demonstrated reliability to achieve its control effectiveness in a permanent commercial operation is using the

emissions control technology then it is proof that the technology is cost effective for the entire source category. A position that both EPA and LAER take. The petitioner provided five example installations yet none of the four facilities actually purchased the NoMoVo control technology. In addition, the units have been removed from each winery indicating the installations were never intended to be used for permanent commercial operation. Also, none of these installations had air permits so the District is unable to verify whether the control system was operated in the same manner that the District would require for BACT purposes.

Mr. Peirce stated there is an ongoing concern with all absorption-based control systems used for VOC emissions control. This requires a site-specific analysis of the fate of the contaminated scrubber water to ensure the captured VOC actually stay captured. The District was unable to verify the fate of the contaminated scrubber water at the locations.

Mr. Peirce referred to a conversation with the engineering manager of Santa Barbara County Air Pollution Control District. Mr. Peirce was informed if CCWS had provided cost data that showed it was not cost effective, then SBCAPCD would not have required the NoMoVo system to be used. Mr. Peirce explained the best available information obtained from SBCAPCD was that the new units that were installed at CCWS would not be used until 2015. If the system has not yet operated then it has not achieved anything.

Mr. Peirce commented the petitioner has not demonstrated substantive failure in the District's implementation of its rules and associated policies.

Witness: Arnaud Marjollet, SJVAPCD Director of Permit Services commented the petitioner stated they are inventing and developing something, if so then it cannot be achieved in practice. The District utilized conservative information from both the vendor and the facility and determined the system is not cost effective.

Mr. Kanai commented he understood NohBell has attempted to sell their system to Gallo and Gallo decided not to use it and NohBell would like the Hearing Board to decide that Gallo and all other facilities in the industry be required to install the system. He said the Hearing Board Members must be aware of the impact it would have on the industry. He expressed concerns regarding errors that staff may have made. He asked if his assumption was correct in if the Hearing Board upheld the appeal Gallo and the wine industry would be required to use the NoMoVo system. Mr. Peirce explained if Gallo was to be required to install this technology and all the source tests met the District's requirements then the technology would be considered achieved in practice and the rest of the facilities in the industry would also be required to install the new technology.

Mr. Kanai commented he understands CCWS has the technology installed and in the future will be able to provide test source results and cost data information. And what is being asked today is to base the decision on one facility during preliminary performance. He expressed appreciation for the new technology.

Mr. Fedak said he is not asking the Hearing Board to sell anything but to evaluate if the permit was issued in accordance with existing rules and regulations.

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Mr. Hofmann commented he understood there is a dispute on the information that assisted in determining the issuance of the permit; whether the District had operation and performing information. Ms. Fierro said the Hearing Board is not meant to substitute its judgement for the judgement of the District. The Hearing Board is to evaluate the information provided and determine the District made a fair and reasonable interpretation of the applicable legal requirements as of November 26, 2014.

Mr. Schneider commented the evidence provided by NohBell did not convince him that the technology was achieved in practice. The District staff report documents reasonable requirements for determining a system has been achieved in practice. The cost effectiveness analysis showed to be consistently used for all projects and should not be changed for one project.

Mr. Savage commented Gallo spent a great deal of time and money pursuing the permit. The end result was a permit the facility could live with and the District believes is defensible. The implication that Gallo does not understand the methodology of the technology is unfounded. He would argue the cost analysis understated the cost. Mr. Savage stated his company expects the District to strive to provide a level playing field for applications of permits. Mr. Savage stated there is a defined process by which new technology vendors can bring their information to the table on permit issuances and the petitioner took advantage of it. He expressed concern that the vendor was still able to request this venue unnecessarily. Mr. Savage said the issue of standing is of concern but the facility will not pursue further action.

Mr. Verkuylen commented NohBell agrees interest rates and life span for equipment should be fixed but the numbers used in these calculations have been used for the past 20 years. He said the accumulation of extra costs that were added to the cost effectiveness analysis skewed the results. Another item of concern was the criteria for achieved in practice. The technology is not required so facilities will not install the system, but if the system is not installed permanently then it has not been achieved in practice.

Mr. Fedak said the question before the Board is whether the permit was issued correctly or not and whether an appropriate amount of rigor in substantiating the provided achieved in practice document. The District missed factual issues with regards to achieved in practice that do not have anything to do with cost effectiveness.

Mr. Kanai requested a motion from the Board. He clarified denying the petition would uphold the ATC and granting the petition would revoke the ATC. Mr. Schneider made the motion to deny the petition and uphold the issuance of the ATC, the District's actions were reasonable based on evidence and consistency. Mr. Hofmann expressed concern regarding the rigidity and long term in place of District standards as well as miscommunication issues.

Public Comment: None

Having decided the petitioner did not demonstrate the District did not properly issue the permit in question, on motion of Mr. Schneider and seconded by Mr. Gohring, unanimously passed, the Petition was denied.

5. Public Comments

No public comment.

6. Hearing Board Member Comments

None.

7. New Business

8. Next Scheduled Meeting

The next scheduled meeting is March 4, 2015. The meeting will be held via teleconferencing in the Northern Region Office (Modesto) with the Central Region Office (Fresno) participating via teleconferencing.

9. Adjourn

The Chair adjourned the meeting at 12:08 p.m.