City of
LEMOORE
CALIFORNIA

10/5/2021
City Council Meeting

Handouts received after agenda posted

Marisa Avalos

From: Pam Dihel <pdihel@yahoo.com>
Sent: Saturday, September 11, 2021 12:20 PM
To: City Clerk
Subject: Pamela Dihel - People's Properties Cannabis Cultivation Project

Thank you for the opportunity to comment on this Public Hearing regarding the People's Properties Cannabis Cultivation Project. I realize this is just a requirement in the the steps to approve this project, but I feel I must at least share my concern.

I understand the potential revenue the City would gain from this project, but do we really want to be known as a Cannabis Cultivation City? I know prior comments from Councilmembers were supportive due to the additional revenue and if it's a "legal" business it should be allowed, but its not considering the odor and of look the farm land. Since the last Cannabis project was approved for FARM Lemoore LLC who also owns a local dispensary, the door has been opened for any and all companies to come in and request land for similar use. What is the limit, if any on how much land will be sold for this purpose?

I currently drive twice a day past the recently approved Cannabis Cultivation project on the corner of 19th and Jackson Ave. and the odor is overwhelming strong. Windows and vents closed the strong odor is still horrendous. That project is identified as 83 acres, with this new proposal being almost double that acreage, the odor will overtake all surrounding areas and is closer to town. Additionally, when I think of our beautiful farm land, I don't think of the large ugly privacy chain link fences with barb wire on top, with towers of security lights overlooking.

Thank you for your time, I understand my input may not make a difference, but as I find alternate routes around all this "farm" land, I will at least know that I have said my piece.

Respectively,

Pamela Dihel

City Council Meeting Date: October 5, 2021 @ 7:30pm

October 5, 2021

VIA EMAIL & HAND DELIVERY

Lemoore City Council
429 C. Street
Lemoore, California 93245

RE: People's Properties, LLC Cannabis Projects (October 5, 2021, Agenda Items 4-1 & 4-2)

Honorable City Councilmembers,

The Kelly Slater Wave Company, LLC owns and operates the Surf Ranch located at 18556 Jackson Ave, Lemoore, CA 93245, which is a first of its kind, immersive surf lifestyle experience. The Surf Ranch took almost ten years to complete and millions of dollars to design, develop, and build, and has significant plans to invest further in the Lemoore facility.

It recently came to our attention that People's Properties, LLC ("People's") has two development projects pending before the City of Lemoore ("City") – a 137-acre cannabis cultivation facility to be located east of South 19th Avenue, north of Idaho Avenue, west of Vine Street, and south of Iona Avenue (City Council Agenda Item 4-1) and a 222-acre cannabis cultivation facility to be located on the southeast corner of 19th Avenue and Idaho Avenue (City Council Agenda Item 4-2). These proposed projects are directly adjacent to the Surf Ranch.

The Surf Ranch does not necessarily oppose the proposed projects. We would, however, appreciate the opportunity to work cooperatively with the City and the applicant to address certain matters associated with the proposed projects that would affect the surrounding uses.

Yesterday, we preliminarily discussed some of these matters with City staff and understand that the City appreciates that these and other matters remain to be addressed with regard to these projects. Some of the matters discussed were also raised by the Planning Commission when the Commission recommended that the City Council not approve the annexation of the 222-acre site. Therefore, we respectfully request that the City delay taking action on the projects until the City, the applicant, and the surrounding community have had an opportunity to assess the potential impacts and design mitigation to adequately reduce those impacts. The following are some of the matters we discussed yesterday that need to be addressed before the City moves forward with the proposed projects.

October 5, 2021

Odor. The City acknowledges that cannabis cultivation and processing generates significant odors and that the Surf Ranch is downwind of the proposed projects.[1] However, there does not appear to be any requirement currently to mitigate the odors from the proposed projects. The Planning Commission staff report for the 222-acre project does not provide any information on potential odor impacts. The Mitigated Negative Declaration ("MND") for the 137-acre project finds that impacts as a result of odors will be less than significant because Section 4-8-4.C.15 of the City Municipal Code requires the installation of an odor-absorbing ventilation and exhaust system. Yet, the ventilation and exhaust system requirements do not apply to outdoor cultivation.[2] Therefore, there is no mitigation currently proposed to reduce the recognized odor impacts. Before the projects progress, we respectfully request that the City require an odor abatement plan to address odors. Mitigation could include increased setbacks[3], solid perimeter fencing, and planting of trees to offset the cannabis odors. The odor abatement plan could include the installation and operation of an odor abatement system designed to neutralize and limit cannabis odors from reaching neighboring properties.[4] We would welcome the opportunity

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[1] It is well established that cannabis plants emit a significant amount of biogenic volatile organic compounds, which may cause air quality issues. *A narrative review on environmental impacts of cannabis cultivation*, Z. Zheng, K. Fiddes & L. Yang, J Cannabis Res. 2021; 3:35, available at https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8349047/.

[2] It is our understanding that the projects propose outdoor cultivation. However, it is not clear that outdoor cultivation is consistent with the Municipal Code. Section 8-4.C.17 of the municipal code states that "[a]ll commercial cannabis operations shall occur entirely inside of a building or temporary greenhouse…" Additionally, Section 4-8-3, which is applicable to cultivation and consumption for personal use, states that "no outdoor cultivation is allowed within the City." The City should clarify if the operations will be within a temporary greenhouse and, if not, how the fully outdoor use is permitted in the City. Further it is unclear if cannabis cultivation is a permitted use in an agriculture zone. See Municipal Code §§ 9-4B-2 and 4-8-4.A.

[3] For example, other jurisdictions have recommended at least a 1,000 foot setback requirement for cannabis cultivation and packaging. See *Final EIR for the Kern County Cannabis Land Use Ordinance Project* (July 2017), at p. 4.3-41, available at https://psbweb.co.kern.ca.us/planning/pdfs/eirs/CLUO/CLUO_DEIR_Vol1_Ch1-11.pdf. The City should include similar setback requirements here.

[4] Similar odor abatement plans have been proposed by cannabis growers and adopted by local agencies. Attached hereto as **Exhibit A** is an odor abatement plan proposed by a cannabis

to work with the City and the applicant to better define these measures and identify ways to assess and modify them, as needed, going forward.

Water Supply. We understand that the extent of the proposed projects' water usage will depend on the number of crop cycles, which has yet to be determined.[5] We further understand that the City expects that the proposed projects will be served by treated wastewater and that, absent use of recycled water, the projects will not have an adequate water supply. The necessary approvals for use of recycled water for the proposed projects are pending with State regulatory agencies. As this is such a critical component of the proposed projects, the City should continue consideration of the annexation applications until the State approvals for use of the recycled water have been obtained or the City should include a condition that the proposed projects use recycled water for irrigation.

Pesticide Migration. The City documents do not appear to include analysis of potential impacts to other agricultural resources, the Surf Ranch, or other surrounding uses from the volatilization and migration of cannabis pesticides. The mistaken application or migration of cannabis pesticides to agricultural land used for organic agricultural operations may result in a significant loss of crop value and/or the inability to grow certified organic crops on such properties in the future. We also, of course, are concerned about the potential mistaken spraying on the Surf Ranch property. The City should require measures that would prevent the potential for pesticide migration.

Given the matters identified above and other potential matters, we respectfully request that the City evaluate the two projects together in one environmental review document and

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grower in March 2020 for consideration by the County of Santa Barbara, which was ultimately a condition of that project.

[5] The MND for the 137-acre project states that the project will use 2 acre-feet of water a year, but the assumptions upon which that calculation were based are not clear. The Planning Commission staff report for the 222-acre project does not provide any information on water consumption. It is widely reported that cultivation of one acre of cannabis requires over 1 acre foot of water per year. *Drought focuses attention on cannabis water use*, Sonoma Index-Tribune, September 23, 2021, available at: https://www.sonomanews.com/article/news/drought-focuses-attention-on-cannabis-water-use/ [reporting 1.4 to 4 acre-feet per year per acre for cannabis cultivation]; A *Reconsideration of Cannabis Water Use*, Ganjier, June 14, 2021, available at: https://www.ganjier.com/2021/06/14/a-reconsideration-of-cannabis-water-use/ [reporting approximately 4 acre-feet per year per acre for cannabis cultivation].

require appropriate mitigation. Given the limited analyses, there is no evidence that the proposed projects will not result in significant impacts. Further, because review of the projects has been

segmented, the City may be inadvertently understating the potential impact of the combined projects, which are directly adjacent to each other and proposed by the same applicant. Together the two projects total 359 acres of cannabis cultivation and are clearly part of the same project.

In addition, although not mentioned in the agenda materials for the City Council, the August 9, 2021 Planning Commission Staff Report for the 222 acre project states that the City Council has already approved a development agreement for the site in accordance with the City's Cannabis Ordinance. We understand from City staff that an existing site development agreement would allow People's to cultivate cannabis on up to 2,000 acres in the City. Thus, we think the City should be considering the totality of the planned operations in its environmental review, rather than evaluating it piecemeal.

* * *

For the reasons described above, the Surf Ranch respectfully requests that the City Council continue items 4-1 and 4-2 until the City has had an opportunity to further evaluate the potential impacts of the overall operations and include appropriate mitigation measures. Alternatively, we request that the City include conditions requiring (i) implementation of an odor abatement plan and other odor mitigation measures, (ii) that the project use only recycled water for cultivation, (iii) implementation of a pesticides application plan with measures to eliminate the potential for pesticide migration and (iv) annual review of the operations and modification of conditions to address any operational issues related to the above or other matters, such as security. We look forward to collaborating with the City and our new neighbors on appropriate measures and we thank the City for this opportunity to comment.

Sincerely,

Kaniela Neves
General Manager

CC: Nathan Olson, City Manager
Steve Brandt, City Planner
Mary Lerner, City Attorney
Bernard Steimann, People's Properties, LLC
Maria Hoye, Latham & Watkins LLP

Cannabis Odor Abatement Plan (Revised)

March 26, 2020

Prepared for:

Central Coast Agriculture, LLC

Site Address: 8701 Santa Rosa Rd
Buellton, CA

Prepared by:

Nate Seward, PE, CIH
Professional Mechanical Engineer (M31978)
Certified Industrial Hygienist (9582 CP)
Certified Radon Tester #108180RT
EPA & IICRC Instructor (WRT & AMRT)
Licensed Asbestos Abatement Consultant (I-1923)

March 26, 2020

Central Coast Agriculture, LLC

Site Address: 8701 Santa Rosa Rd
Buellton, CA
Re: Cannabis Odor Abatement Plan

Ladies and Gentlemen,

On behalf of the applicant, Criterion Environmental, Inc. has prepared this Cannabis Odor Abatement Plan in compliance with the Inland Zoning Ordinance requirements and the regulations set forth for Commercial Cannabis regulations. This plan included the evaluation of the proposed odor abatement system (Byers System) and its effectiveness of reducing and/or eliminating cannabis-related odors. The objective of the system is to eliminate odors from reaching receptors within residential zoned properties closest to the subject site.

Site Description –

The subject site is located at 8701 Santa Rosa Rd, Buellton, CA; APN: 083-180-007; Inland Zone = AG; Zoning = AG-II 40. The subject property will include cultivation of approximately 35 acres with the closest residential property to the north east of the property and approximately 2,239 feet from the property line and 2,500 from the nearest cultivation. To the West, the closest residential zoning is 12.5 miles away.

It is anticipated that the subject property will produce two crops per year. The first crop will get planted into the ground in April with harvesting in the last two weeks of June. The second crop will get planted into the ground in July with harvesting in the last two weeks of October. Each harvest will be flash frozen within about 20 minutes from harvest. The flowers are stored on site in sealed containers at negative 30 degrees.

Odor emissions

The odors associated at the subject site will be emitted during the flowering stages from mature plants during the growth process. The strongest cannabis odors will be expected during the last few weeks just before harvesting. These odor-emitting activities will be abated at the subject site using best available technology to eliminate odors from leaving the subject property.

Proposed Odor Abatement System

Due to the anticipated cannabis odors that will be emitted at the subject site, the applicant intends to utilize the leading odor neutralizing, vapor-phase technology currently available to limit these cannabis odors from drifting off-site towards residential zones. The abatement system is manufactured by Byers Scientific and Manufacturing and consists of the following (See Attachment 1 for technical information):

Figure 1

1. Within the housing system unit (See Figure 1), a high-flow, low pressure blower is connected to a holding tank containing an odor neutralizing agent developed specifically to neutralize odors from cannabis. The fan unit vaporizes the odor neutralizing agent and distributes it to a piping system.

2. The PVC piping system is mounted to the upper perimeter of the structure at the roof line as seen in Figure 2. The neutralizing agent injected into the air stream several feet above the piping system (as seen in Figure 3). The cannabis terpene molecules are then neutralized as they mix with the neutralizing agent. The neutralizing vapor is designed to intercept the cannabis odor regardless of the wind direction.

Figure 2

3. A computer monitoring system which allows the operator to remotely regulate the flow of the odor control system to ensure that the amount of odor neutralizing agent is adjusted to match current odor producing conditions, seasonal weather patterns, and other fluctuating conditions. The system is also capable of notifying the operator if an equipment failure has occurred so that the system can be repaired and returned to service as soon as possible.

Figure 3

Nuetralizing Deodorant

The odor neutralizing agent to be used within the Byers system is Ecosorb CNB 100 (CNB 100) and is manufactured by OMI Industries, a leader in odor neutralization materials. CNB is comprised of two polysorbate surfactants and a blend of citrus and pine oils with the remainder water (see Attachment 1 for SDS Sheet).

Specific Design Parameters of the Odor System

The proposed system will include approximately ~4,200 lineal feet of the perforated piping system along 2 sides of the property as seen in the following Site Plan where odor-emitting activities are anticipated to maximize mitigation of odor. Odors are anticipated to emanate from the processing building, however the design and layout of the piping system and two fan units will be used to vaporize the odor neutralizing product Ecosorb CNB100 and mitigate these odors. The product will be delivered at a rate of 3-6 gallons/day, depending on the characteristics of the site, to neutralize the cannabis odors as it mixes within in the air stream around the perimeter.

Site Plan

The odor control system is located in between the nearest residential property which is approximately 2500' from the cultivation area. The odor control system has been designed to be located downwind or from the west to the east which is fairly consistent within the geographic area. It is unlikely, but if the wind direction changes to blow from the east to the west, the nearest residential property is over 12 miles away. In addition, the distance of 2,500' is a significant amount of space and would likely eliminate cannabis odors from being experienced even without the proposed odor system. The system will be remotely monitored and regulated to determine if adjustments need to be made to the output system. The applicant will operate the odor control

technology at maximum capacity during odor emitting activities. At no point in time is the odor control turned off, or turned down during odor emitting activities.

The applicant is aware that environmental conditions (temperature, humidity, wind direction & speed) will likely change during the day and/or seasonally which may increase or decrease the odor intensity of the cannabis activities. The applicant understands these environmental fluctuations and is committed to monitoring the odor abatement system thru olfactory observations and making necessary adjustments to the system in order to eliminate cannabis related odors beyond the property boundaries.

Odor Technology Approval & Recognition

Vapor-phase odor neutralizing technology is a proven odor abatement technology for reducing nuisance odors including cannabis related odors. Santa Barbara County Air Pollution Control District (SB APCD) recognized that at least 14 cannabis operations were utilizing vapor-phase odor neutralizing systems throughout the Carpinteria region for odor mitigation. According to a May 2018 presentation by SB APCD (See Attachment 2), an inspection was performed by APCD personnel of a 650,000 ft^2 cannabis cultivation facility in Carpinteria which revealed that an odor control system was operating and working as advertised and noted that pungent odors from inside the greenhouse, "could not be detected directly outside the greenhouse or at the property line."

Additionally, the Long Range Planning Division of Santa Barbara County recently prepared a Final Environmental Impact Report (FEIR) to amend its Land Use and Development Code to allow certain types of cannabis activities. Within the FEIR, Appendix F indicates that vapor-phase technology, including the Byers Scientific system, is an effective odor control system in the cannabis industry including Carpinteria, CA and Pueblo, CO.

Criterion Environmental personnel, including myself, have also performed olfactory assessments at various cannabis cultivation properties in Carpinteria deploying the Byers Odor abatement technology. Results from these assessments are similar to the findings from APCD in that there is a substantial reduction in the cannabis related odor intensity within a few feet of the odor emitting source. The onsite field assessments also indicated an obvious reduction or dissipation in odor observation the further downwind from the mixing zone.

Odor Compliance

In accordance with applicable local regulations, this applicant will designate someone on staff that is responsible for monitoring the odors 24/7 and will be the primary contact person to respond to calls regarding nuisance odor complaints. The name and contact phone number for this person will be provided to the County and all complaints should follow the proper procedures, including the submission of the Odor Complaint Form on the Santa Barbara County's website https://www.surveymonkey.com/r/Can-Complaints. Within 1 hour of receiving official notice of a complaint, the applicant will immediately make any adjustments or modifications to the odor abatement system as necessary to mitigate the odor. The applicant will internally track all complaints that are received and document the process including the following information:

1. Date & Time of the complaint
2. Name and contact (phone # and email) information of the complaining party

3. Date, time and specific location as where the odor was observed by the complaining party
4. A description of the odor including an intensity ranking from 1 – 5 (1 being mild and 5 being extremely strong)
5. The atmospheric/weather conditions including wind speed and direction if known at the time of the odor complaint
6. Location of the complaining party when first observed
7. Description of any activities observed by the complainant at or near the Project Site during the odor observation (trucks entering or exiting the area, uncovered cannabis wastes near the property line, etc.)
8. Any necessary correction actions as a result from the odor complaint will be implemented to the odor abatement system and/or processes. The applicant will maintain these records for a minimum of five (5) years and will make them available to the County if requested. The applicant will allow the County full access to the facility for the purpose of inspecting the odor abatement system. If needed, the applicant will contract the services of a Professional Engineer or Certified Industrial Hygienist as a third party to document the corrective actions.

Conclusions

The proposed odor abatement system and its design technology for this property in addition to our field observations of the odor system and its successful track record for mitigating odors did not reveal any obvious concerns with the technology. The vapor-phase technology is an approved odor control system with recognition from SB APCD and based on these findings, we conclude the following:

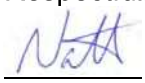
1. The neutralizing agent (CNB 100) is an actual deodorant neutralizers (not masking agents) specifically formulated for cannabis odors
2. The system can be modified or adjusted to deliver the deodorant with the objective to obtain a neutral odor and
3. The deodorant and/or neutralizing by-products is not a public health (acute or chronic) or environmental concern with supporting documentation that meets United States Environmental Protection Agency's Acute Exposure Guideline Levels or similar public health thresholds.
4. In our opinion, the proposed odor control system will not be detrimental to the comfort, convenience, general welfare, health and safety of the neighborhood and will compatible with the surrounding area.

Therefore, it is our professional opinion that this odor abatement technology is an accepted industry-specific best control technology designed to mitigate odor. As designed, we certify that the equipment and methods to be used will be effective for reducing odors at the subject site.

Limitations

It should be noted and understood that although cannabis activities have been legalized and permitted within the County, it is expected that illegal and unpermitted commercial and personal growing operations will continue within the immediate area. These operations are not complying with State or County regulations, particularly as it relates to odor abatement and therefore malodor complaints by the public may be incorrectly directed at the applicant. Cannabis odors, whether "real" or "psychological" are subjective and interpretive, depending on the receptor. Generally, the intensity of an odor will dissipate over distance and therefore in theory, the further the receptor is from the emitting-source, the less intense the odor generally is observed. If you have any questions or concerns regarding the information provided, please do not hesitate to call us at 805.644.8347 or my cell phone at 805.432.4888.

Respectfully submitted,



Nate Seward, PE, CIH
Professional Mechanical Engineer (M31978)
Certified Industrial Hygienist (9582 CP)

Attachments

Attachment 1 - Byers Vapor Phase Odor Control System- Technical Brochure & CNB100 SDS
Attachment 2 - Santa Barbara APCD- Cannabis Odor Control Presentation

Attachment 1

Byers Vapor Phase Odor Control System- Technical Brochure & CNB107 SDS

Criterion Environmental, Inc.
1879 Portola Road
Suite K
Ventura, CA 93003

www.criterionenv.com

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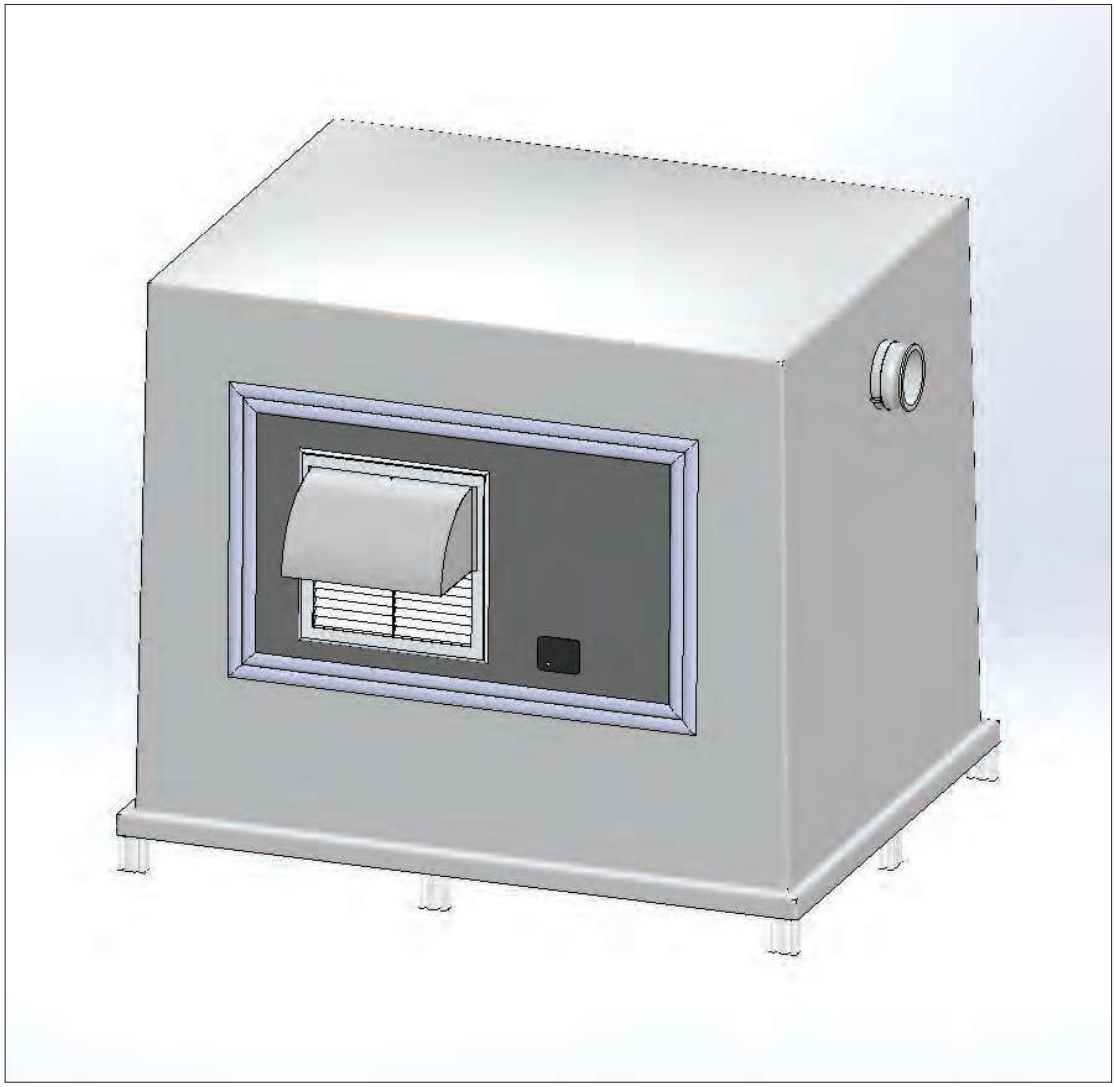
Fax: 805-644-5347
Email: info@criterionenv.com

Byers Scientific & Manufacturing
Industrial Odor Management

INSTRUCTION MANUAL



Waterless Vapor System for Odor Control
HPII Series

Read equipment manufacturer's manual before operating or servicing system. Failure to understand how to safely operate the system can result in an accident causing serious injury or death. Only qualified personnel should operate or service the system.

⚠ DANGER			
			
Hazardous Voltage can cause electrical shock or death.	High speed rotating equipment can cause severe personal injury.	Lock out/Tag out to prevent personal injury BEFORE starting ANY service or inspection.	Avoid injury. You MUST read and understand all instructions in this manual BEFORE operation.

TECHNICAL SPECIFICATIONS

SYSTEM OVERVIEW

Footprint 74.5" L x 59.0" D x 63" H

Decibels at 30 feet: 65 dB

Access Door with Intake Filter
- Filter Size: 18" x 18" x 1" Nominal
- (Actual: 17.75" x 17.75" x 0.75")

63 Gallon Storage Tank
- Internal circulation via eductors
- Level Sensor
- Temperature Sensor
- In-Tank Heater for cold climates
- Tank can be filled by toggle switch operated pump affixed to tote/drum

Evaporation Tank
- Patent-Pending Uniform Vapor Production
- Level Sensor
- Temperature Sensor
- In-Tank Heater
- Can produce up to 7 equivalent gallons of vapor/day
- Tank fills automatically via PLC

TECHNICAL SPECIFICATIONS CONT'D

ELECTRIC

UL-LISTED PANEL
- 40 / 50 Amp Service Disconnect Switch
- Touch Screen Panel Display
- Indicator Lights
- Programmable Logic Controller (PLC) for Critical System Operations
- Industrial Remote Access Router with External Antenna/Ethernet Connection
- High Limit Heat Safety Controllers

3-PHASE COMPONENTS (208- 240 / 480VAC)
- Main Blower
  - 7.5 HP Motor
  - 19.4 - 17.6 / 8.8 Full Load Amps
  - 3530 RPM
- Secondary Blower
  - 0.5 HP Motor
  - 3450 RPM
  - In-Tank Heater(s)
  - 2000 - 2660 / 3500 Watts
  - 5.6 - 6.4 / 4.3 Amps

24VDC COMPONENTS
- Diaphragm Pumps (3)
  - 3.0 gallons per hour
  - 3.5 Amps
- Precalibrated Level Sensors (2)
- Precalibrated Flow Meter with Totalizer
- Precalibrated Differential Pressure Sensor (2)
- Temperature Sensors (2)

OPERATION

SAFETY WARNING

ONLY QUALIFIED PERSONNEL THAT HAVE BEEN
PROPERLY TRAINED SHOULD OPERATE THE SYSTEM

BEFORE TURNING ON

- The yellow/red handled service disconnect located on the electric panel door must be turned to the ON position. The green indicator light for CONTROL POWER ON will be illuminated to visually show that there is power to the unit

- The HMI (Human-Machine Interface) will boot up upon turning the yellow/red handled service disconnect. To learn more about using the HMI, please refer to the guide within this manual. If it does not, contact Byers Scientific & Manufacturing for further troubleshooting

- Inspect fan inlets for obstructions

- Check that the auxiliary is filled sufficiently and that the vapor tank level is between 47 - 50%

- Once door is closed, open filter access door to make sure a filter is in place

OPERATING THE SYSTEM

- With the door closed and locked, turn the "CONTROL POWER ON/OFF" switch on the electrical panel to the ON position

- A green light under EVAPORTATION FAN RUNNING will indicate that the system is in operation. The MAIN FAN RUNNING indicator light is purposefully delayed and will turn green after three seconds. If a red FAN FAULT appears for either the evaporation or main fan, contact Byers Scientific & Manufacturing for further troubleshooting.

- The system is programmed to be self-operating and we advise that any levels set on the touchscreen should be left as is. Altering the inputs could have a negative impact upon the efficacy of the neutralizing vapor.

OPERATION CONT'D

OPERATING THE SYSTEM CONT'D

- The system will send out an SMS text message or email to personnel to alert of any systems needs e.g., filling auxiliary tank or system fault. Level 1 alarms cause the system to completely shut down to prevent potential harm to the system. Level 1 alarms are primarily due to the VFD (variable frequency drive) on the fans and can be due to a multiple factors, such as low/high supply voltage or motor overheating. After such an event, the fault code displayed on the VFD must be provided to Byers Scientific in order to determine the cause of the fault. Failing to do so and resetting the VFD without understanding the fault can harm the system as the VFD fault codes provide insight to the problem.

- To fill the auxiliary tank, make sure that the "CONTROL POWER ON/OFF" switch on the electrical panel is in the OFF position before opening the door. The toggle switch located inside the system controls the pump plumbed into the drum/tote located next to the system. Flip the toggle switch to the ON position until the level on the auxiliary level sensor reaches a maximum of 99%. Overfilling the tank can lead to a fault and the system will not run.

- When replacing drums/totes, be sure to keep the provided attachment and check the filter at the end of the plumbing before inserting into new drum/tote.

- *For optimum performance and results, Byers Scientific & Manufacturing recommends operating the unit full-time at a minimum output level of 3-4 equivalent gallons per day. The specified minimum level of output has been established based on calculations of deodorizer molar mass contrasted with a baseline typical malodor molar mass. When site-specific conditions necessitate a greater degree of output, the unit output may be increased up to 6-7 equivalent gallons of output. Please consult with Byers Scientific & Manufacturing personnel for assistance in programming your unit for scheduled production.*

MAINTENANCE

Our systems are built for minimal maintenance but will require occasional servicing. Please refer to the separate Maintenance Guide for detailed instructions on servicing the odor control unit.

TROUBLESHOOTING

FAN FAULTED	Contact Byers Scientific & Manufacturing with VFD Fault Code for further information
TRANSFER PUMP FAULTED	Pump motor issue, contact for replacement
EVAPORATION/AUXILIARY TANK FAULTED	Possible hi-limit controller issue, contact Byers Scientific & Manufacturing for further information

CONTACT INFORMATION

Byers Scientific & Manufacturing
2332 W. Industrial Park Drive
Bloomington, IN 47404
Phone: (812) 269-6218 E-mail: info@byers-scientific.com

WARRANTY

KGM Enterprises, Inc. d/b/a Byers Scientific & Manufacturing (Seller) warrants products of its own manufacture, against defects of material and workmanship under normal use and service for a period of THIRTY-SIX (36) months from the date of original installation for Purchaser. This warranty does not apply to any of Seller's products or any part thereof which has been subject to extraordinary wear and tear, accident, abuse, misuse, overloading, acts of God, negligence or alteration or repair by anyone not authorized by Seller. This warranty shall be void if the products are used in any matter other than as explicitly outlined in the product instruction manual. Purchaser's acceptance of the products from Seller indicates that Purchaser is assuming all liability for the consequences of its use or misuse by Purchaser, its employees or others. Further, the materials within Seller's odor control systems are specifically designed for use of Ecosorb® deodorizers. The use of any deodorizers other than Ecosorb® voids all warranties due to potential material incompatibilities that can cause harm to the system.

On products or product components furnished by Seller, but manufactured by others, such as fan motors, Seller extends the same warranty as Seller received from the manufacturer of the products or product components but makes no additional warranty.

THIS WARRANTY CONSTITUTES THE ENTIRE WARRANTY BETWEEN SELLER AND PURCHASER AND IS MADE IN LIEU OF ALL OTHER OBLIGATIONS AND LIABILITIES. SELLER EXPRESSLY DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, RELATING TO THE PRODUCTS INCLUDING BUT NOT LIMITED TO THE WARRANTY OF MERCHANTABILITY AND/OR FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY EXPRESSLY EXCLUDED. IN NO EVENT SHALL SELLER BE LIABLE TO PURCHASER FOR ANY LOST PROFITS, INDIRECT, COLLATERAL, INCIDENTAL, SPECIAL, CONSEQUENTIAL OR EXEMPLARY DAMAGES IN CONNECTION WITH PUCHASER'S USE OR OPERATION OF THE PRODUCTS, OR FOR ANY OTHER CAUSE WHATSOEVER RELATING TO THE PRODUCTS OR THEIR SALE OR INSTALLATION.

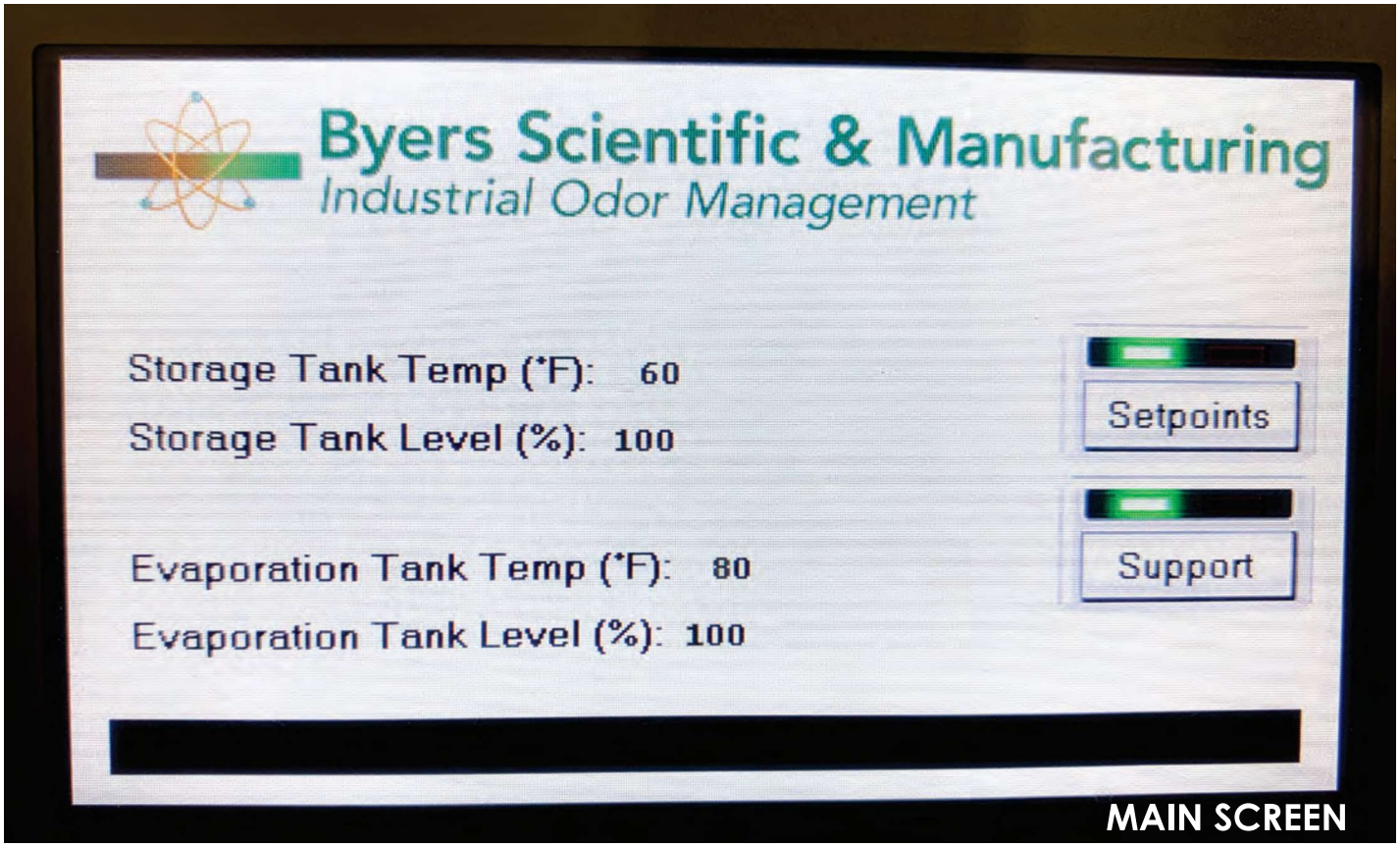
Should Purchaser believe it has a warranty claim, it must contact Seller via phone at 812-369-6218 or via email at info@byers-scientific.com to make arrangements for a review of the warranty claim. Expenses incurred by Purchasers in repairing or replacing any allegedly defective product or parts will not be allowed except where authorized in writing and signed by an officer of Seller.

HMI GUIDE

The touchscreen HMI (Human-Machine Interface) is located on the electrical control panel. The HMI will boot up automatically once the red handled electric disconnect on the panel is turned to the ON position. It takes about 30 seconds for it load the MAIN SCREEN. If the boot up process appears to be stuck/frozen, turn the yellow/red electric disconnect handle to the OFF position to reset and wait at least a minute before turning back ON. If the HMI does not boot up after resetting or any other initial boot up issues, please contact Byers Scientific for further troubleshooting.

MAIN SCREEN

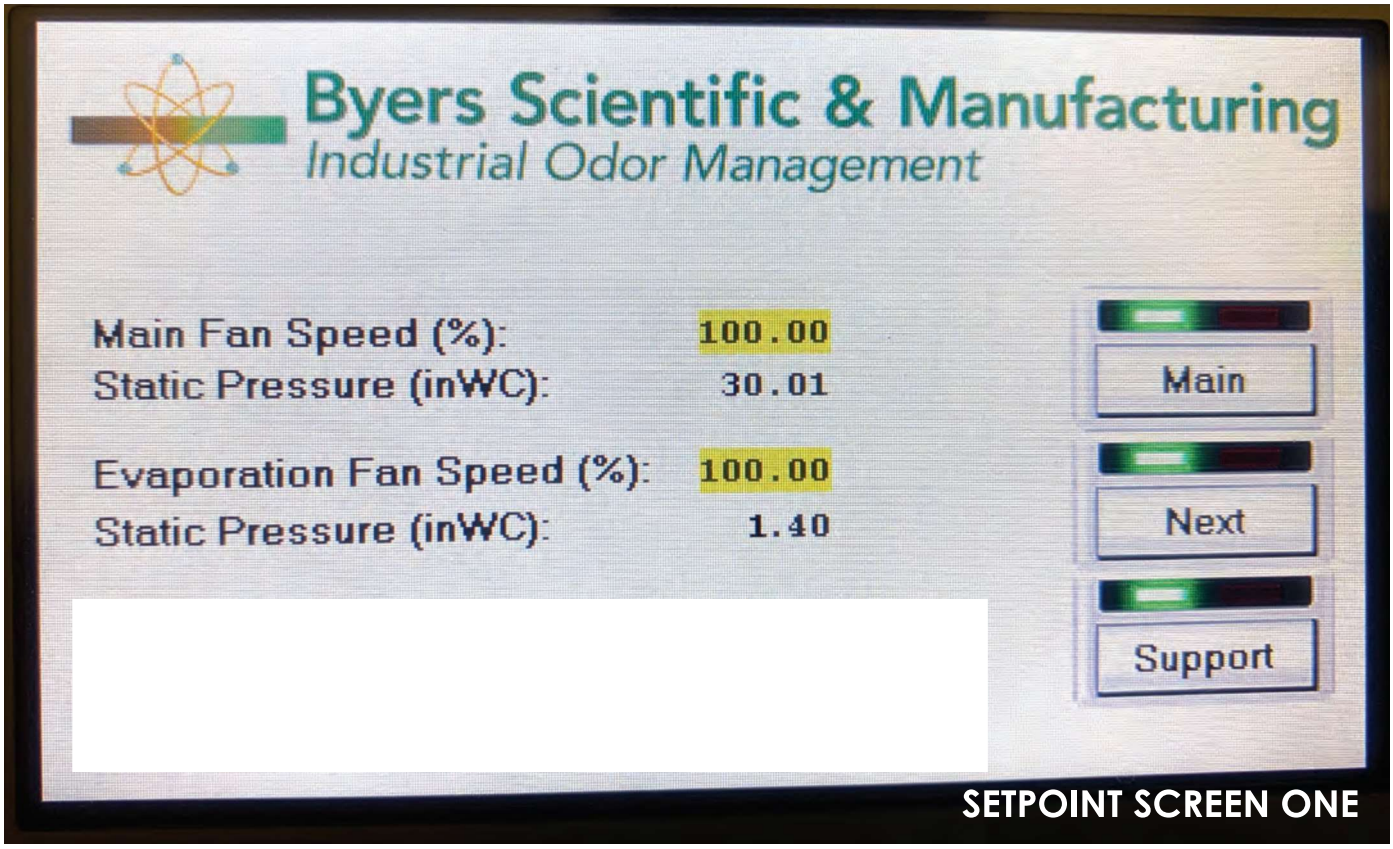
The MAIN SCREEN is READ ONLY. The values displayed for the storage tank temperature, storage tank level, evaporation tank temperature and evaporation tank level cannot be changed on this screen. See SETPOINTS for instructions on how to manually change the input values.



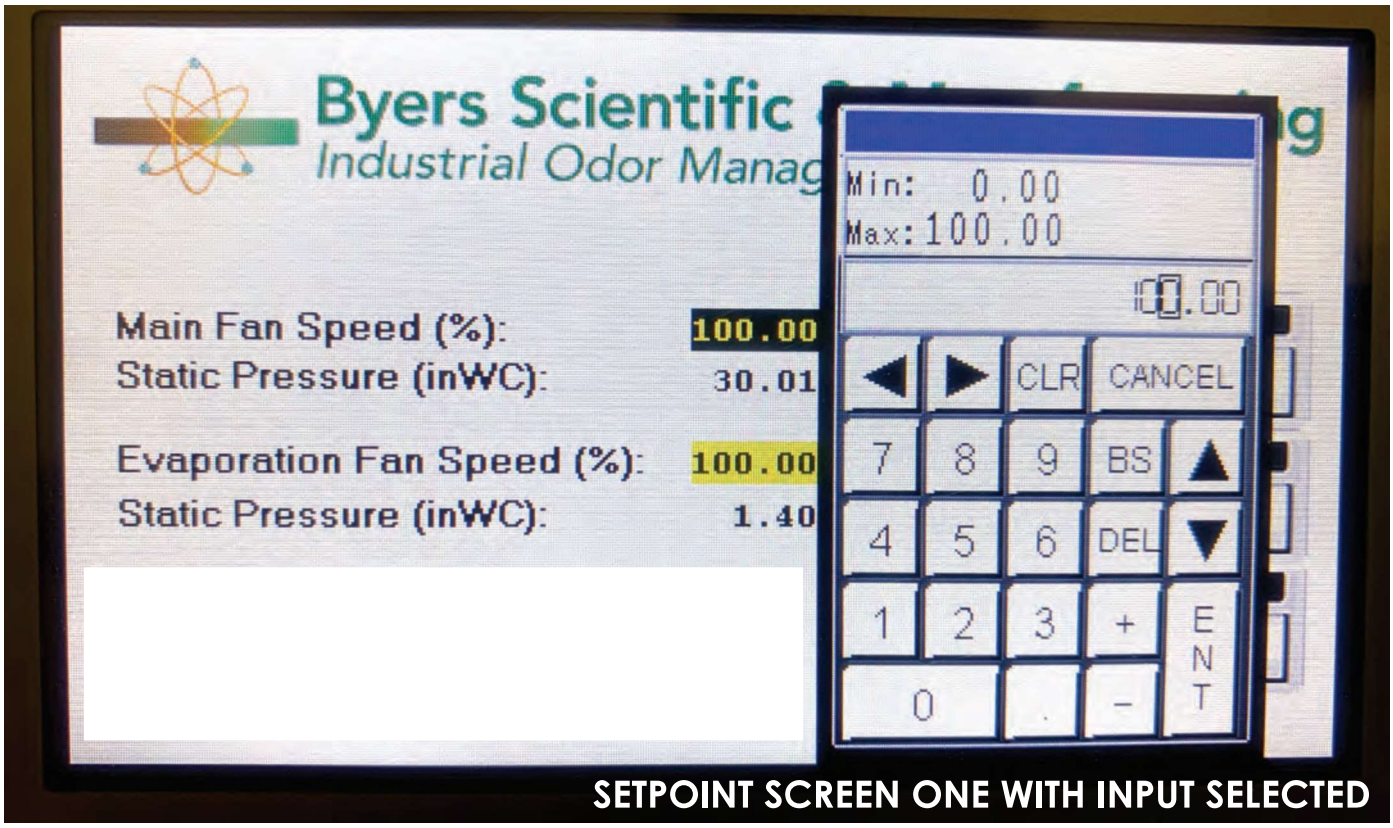
MAIN SCREEN

SETPOINTS

The SETPOINTS screens are a combination of read only and input values. The values that are highlighted with YELLOW can be changed by touching within the YELLOW area.



SETPOINT SCREEN ONE



SETPOINT SCREEN ONE WITH INPUT SELECTED

SETPOINTS CONT'D

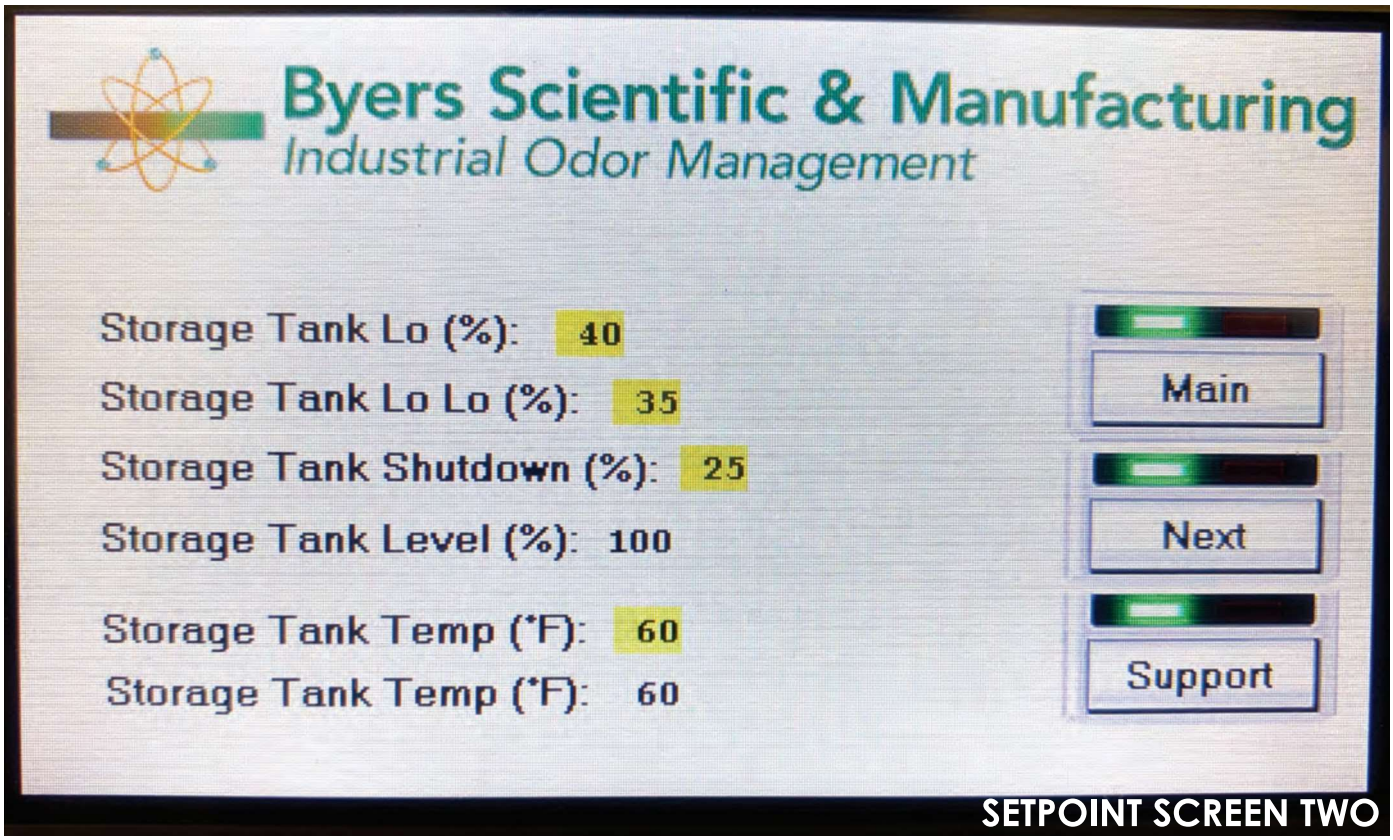
Once the pop-up screen opens with the number pad, values can be changed to the desirable setpoint. Press ENTER to input the new value and close the pop-up screen.

NOTE: Values CANNOT be changed if scheduling has been enabled via Byers Scientific SCADA. Contact Byers Scientific to disable or change output schedule.

To go to the different SETPOINT screens, press the NEXT button.

SETPOINT SCREEN ONE OF THREE

Main Fan Speed:	100% is based upon 60 Hz; manufacturer recommends not changing this value. This value can be set by Byers Scientific for scheduling via the SCADA.
Main Fan Static Pressure:	Read-only value based upon Main Fan Speed
Evaporation Fan Speed:	100% is based upon 60 Hz; this value can be lowered if output of deodorizer needs to be decreased. This value can be set by Byers Scientific for scheduling via the SCADA.
Evaporation Fan Static Pressure:	Read-only value based upon Evaporation Fan Speed



SETPOINT SCREEN TWO

SETPOINTS CONT'D

SETPOINT SCREEN TWO OF THREE

Storage Tank Setpoints are based upon the level of deodorizer required to remain in the tank for the circulation and transfer pump to function properly. For cold climate locations it is also used to keep the deodorizer from freezing and provide an adequate level of deodorizer over the heating element. Byers Scientific recommends that the setpoints for Storage Tank be kept at the initial set value.

For systems with a Storage Tank Heater, the Lo, Lo Lo, and Lo Lo Lo setpoint values can be safely altered to NO HEATER setpoints once past last date for frost in the spring. If this is done, the setpoint values must be reset back to original HEATER values once the first frost date approaches in the fall.

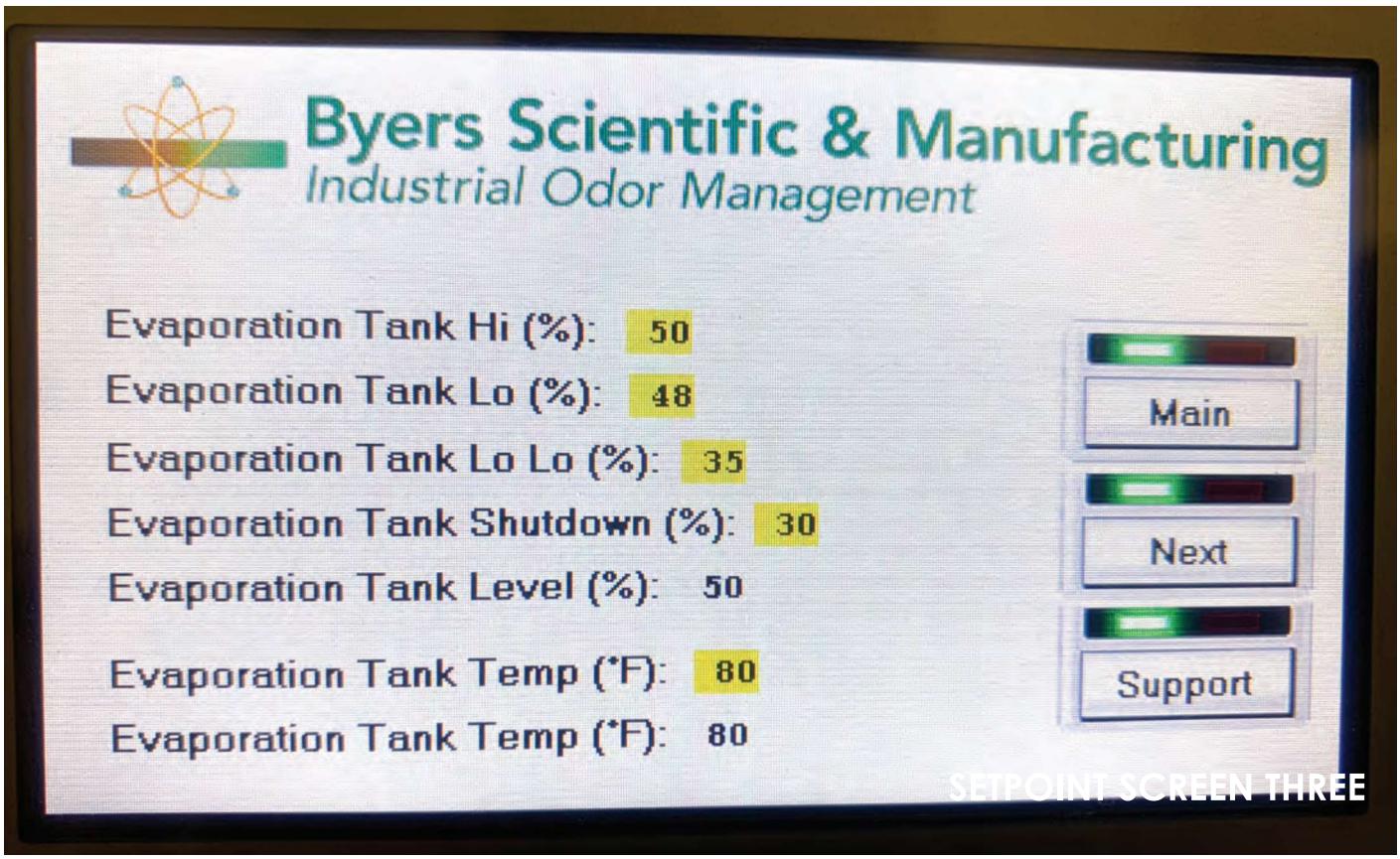
Storage Tank Lo:	NO HEATER: Minimum setpoint value 20% HEATER: Minimum setpoint value 40% A text/email alert will go out when this setpoint is reached to refill the tank within three (3) days
Storage Tank Lo Lo:	NO HEATER: Minimum setpoint value 15% HEATER: Minimum setpoint value 35% A text/email alert will go out when this setpoint is reached to refill the tank immediately or the system will shut down
Storage Tank Lo Lo Lo:	NO HEATER: Minimum setpoint value 5% HEATER: Minimum setpoint value 25% A text/email alert will go out when this setpoint is reached that the system is shut down to prevent harm to components
Storage Tank Level:	Read-only value of current storage tank level
Storage Tank Temperature:	NO HEATER: N/A HEATER: Minimum setpoint value 35°F. Recommended to be set at 60°F during freezing/near freezing temperatures and 35°F during above freezing temperatures.
Storage Tank Temperature:	Read-only value of current storage tank temperature

SETPOINTS CONT'D

SETPOINT SCREEN THREE OF THREE

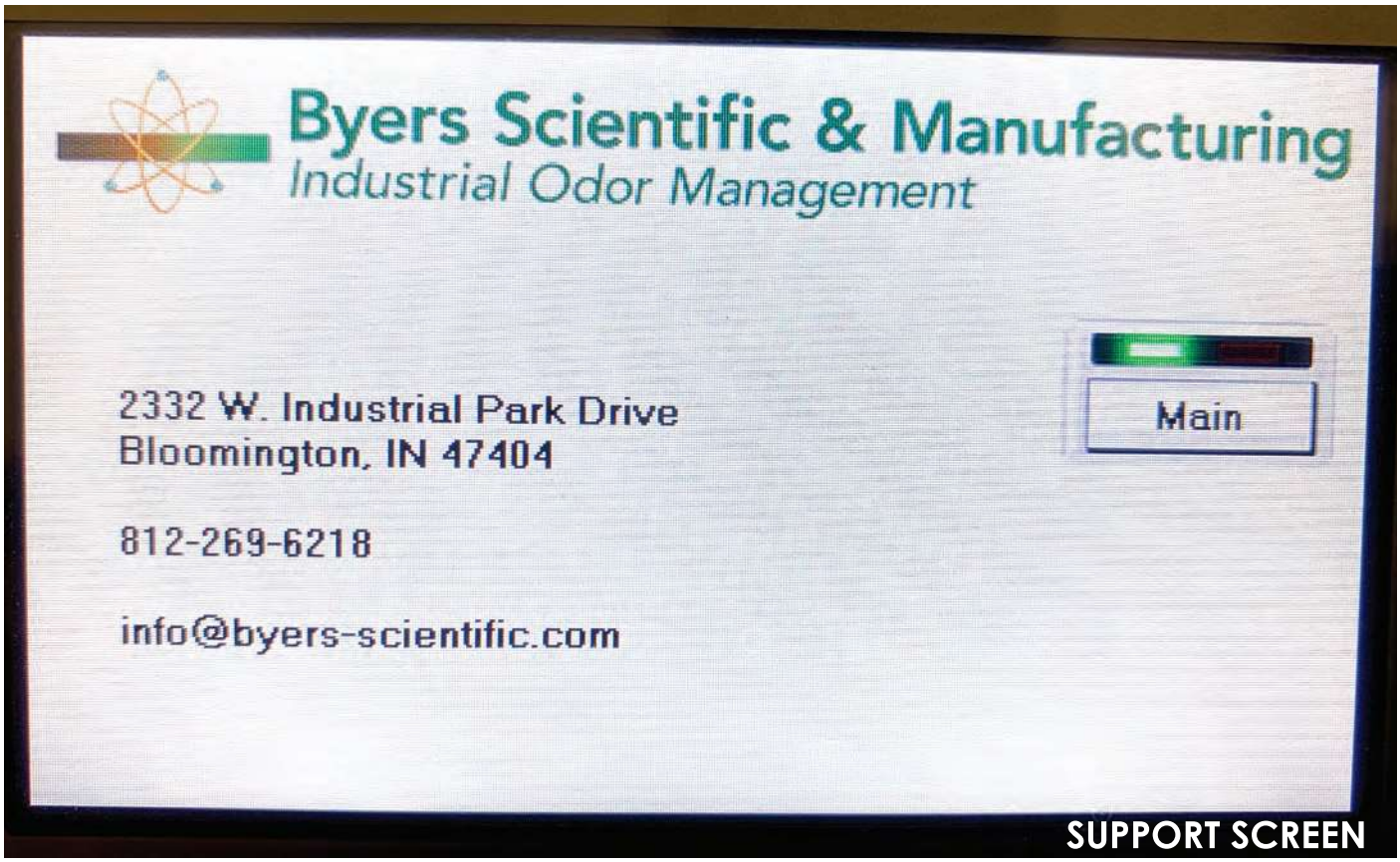
Evaporation Tank Setpoints are based upon an adequate level of deodorizer over the heating element and headspace within the evaporation tank for vaporizing the deodorizer. Byers Scientific recommends that the setpoints for Evaporation Tank be kept at the initial set value.

Evaporation Tank Lo:	Setpoint value 50%
Evaporation Tank Lo Lo:	Setpoint value 48%
Evaporation Tank Lo Lo Lo:	Setpoint value 40% A text/email alert will go out when this setpoint is reached that the system is shut down to prevent harm to components
Evaporation Tank Level:	Read-only value of current storage tank level
Evaporation Tank Temperature:	Maximum setpoint value 95°F, minimum 80°F. This value can be set by Byers Scientific for scheduling via the SCADA.
Evaporation Tank Temperature:	Read-only value of current storage tank temperature



SUPPORT

Provides contact information for Byers Scientific & Manufacturing for further support.



SUPPORT SCREEN

ECOSORB CNB 107P

Safety Data Sheet
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
Date of issue: 04/04/2019 Version: 1.0

SECTION 1: Identification

1.1. Identification

Product form : Mixture

Product name : ECOSORB CNB 107P

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Odor Neutralizer

Recommended use : Odor Neutralizer

Restrictions on use : None known

1.3. Supplier

Manufacturer
OMI Industries
1300 Barbour Way
Rising Sun, IN 47040 - U.S.A
T 1-847-304-9111

1.4. Emergency telephone number

Emergency number : 1-800-662-6367, Monday - Friday 8 am to 5 pm CST

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Not classified

2.2. GHS Label elements, including precautionary statements

GHS US labeling

No labeling applicable

2.3. Other hazards which do not result in classification

Other hazards not contributing to the classification : None under normal conditions. Keep out of reach of children.

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

This mixture does not contain any substances to be mentioned according to the criteria of section 3.2 of HazCom 2012

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : Call a poison center/doctor/physician if you feel unwell.

First-aid measures after inhalation : Move to fresh air if necessary.

First-aid measures after skin contact : Wash skin with plenty of water.

First-aid measures after eye contact : Rinse eyes with water as a precaution.

First-aid measures after ingestion : Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Potential Adverse human health effects and symptoms : No other effects known.

Expected Symptoms/Effects, Acute and Delayed : No known effects from this product.

Symptoms/effects : None under normal use.

Symptoms/effects after inhalation : No effects known.

Symptoms/effects after skin contact : No effects known.

Symptoms/effects after eye contact : No effects known.

Symptoms/effects after ingestion : No effects known.

Symptoms/effects upon intravenous administration : No other effects known.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Dry powder. Foam. Carbon dioxide.

Unsuitable extinguishing media : No unsuitable extinguishing media known.

5.2. Specific hazards arising from the chemical

Fire hazard : Not flammable.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Cool tanks/drums with water spray/remove them into safety.

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Stop leak if safe to do so.

6.1.1. For non-emergency personnel

Protective equipment	: Gloves and safety glasses recommended.
Emergency procedures	: Ventilate spillage area.

6.1.2. For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment. Prevent liquid from entering sewers, watercourses, underground or low areas.

6.3. Methods and material for containment and cleaning up

For containment	: Collect spillage.
Methods for cleaning up	: Take up liquid spill into absorbent material.
Other information	: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13. For further information refer to section 8: "Exposure controls/personal protection".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	: Ensure good ventilation of the work station. Wear personal protective equipment.
Hygiene measures	: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures	: Does not require any specific or particular technical measures.
Storage conditions	: Store in a well-ventilated place. Keep cool.
Incompatible products	: Oxidizing agent. Strong acids.
Incompatible materials	: Keep away from strong acids and strong oxidizers.
Storage temperature	: 4 - 29 °C 40°F and 85°F Allowing product to freeze may cause layering.
Heat-ignition	: KEEP SUBSTANCE AWAY FROM: heat sources. ignition sources.
Information on mixed storage	: KEEP SUBSTANCE AWAY FROM: (strong) acids. oxidizing agents.
Storage area	: Keep container in a well-ventilated place. Store in a cool area. Keep out of direct sunlight. Store in a well-ventilated place.
Special rules on packaging	: Keep only in original container.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls	: Ensure good ventilation of the work station.

Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Gloves and safety glasses recommended.

Hand protection:

Protective gloves. Recommended

Eye protection:

Safety glasses. Recommended

Skin and body protection:

None under normal use

Respiratory protection:

Respiratory protection not required in normal conditions

Thermal hazard protection:

Not applicable.

Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Appearance	:	White liquid.
Color	:	White
Odor	:	Characteristic odour
Odor threshold	:	No data available
pH	:	6 - 8.5
Melting point	:	Not applicable
Freezing point	:	No data available
Boiling point	:	≈ 99 °C
Flash point	:	No data available
Relative evaporation rate (butyl acetate=1)	:	No data available
Flammability (solid, gas)	:	Not applicable.
Vapor pressure	:	No data available
Relative vapor density at 20 °C	:	No data available
Relative density	:	≈ 0.99
Solubility	:	Soluble in water.
Partition coefficient n-octanol/water	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity, kinematic	:	≈ 1.1 cSt
Viscosity, dynamic	:	No data available
Explosion limits	:	No data available
Explosive properties	:	No data available
Oxidizing properties	:	No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

Oxidizing agent. Strong acids.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
Skin corrosion/irritation	: Not classified pH: 6 - 8.5
Serious eye damage/irritation	: Not classified pH: 6 - 8.5
Respiratory or skin sensitization	: Not classified.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity – single exposure	: Not classified
Specific target organ toxicity – repeated exposure	: Not classified
Aspiration hazard	: Not classified
Viscosity, kinematic	: ≈ 1.1 cSt
Likely routes of exposure	: Inhalation. Dermal.
Potential Adverse human health effects and symptoms	: No other effects known.
Expected Symptoms/Effects, Acute and Delayed	: No known effects from this product.
Symptoms/effects	: None under normal use.

Symptoms/effects after inhalation	: No effects known.
Symptoms/effects after skin contact	: No effects known.
Symptoms/effects after eye contact	: No effects known.
Symptoms/effects after ingestion	: No effects known.
Symptoms/effects upon intravenous administration	: No other effects known.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

12.2. Persistence and degradability

ECOSORB CNB 107P	
Persistence and degradability	Biodegradability in water: no data available.

12.3. Bioaccumulative potential

ECOSORB CNB 107P	
Bioaccumulative potential	Not established.

12.4. Mobility in soil

ECOSORB CNB 107P	
Ecology - soil	The product is predicted to have high mobility in soil. Soluble in water.

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Regional legislation (waste)	: Disposal must be done according to official regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Avoid release to the environment.
Ecology - waste materials	: Avoid release to the environment.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not regulated

Transportation of Dangerous Goods

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

15.2. International regulations

CANADA

ECOSORB CNB 107P
Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

ECOSORB CNB 107P

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

National regulations

ECOSORB CNB 107P
Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Korean ECL (Existing Chemicals List)
Listed on INSQ (Mexican National Inventory of Chemical Substances)

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Training advice : Normal use of this product shall imply use in accordance with the instructions on the packaging.

Other information : None.

Abbreviations and acronyms:

	ATE	Acute Toxicity Estimate
	BCF	Bioconcentration factor
	IATA	International Air Transport Association
	IMDG	International Maritime Dangerous Goods
	LC50	Median lethal concentration
	IARC	International Agency for Research on Cancer
	OECD	Organisation for Economic Co-operation and Development
	LD50	Median lethal dose
	SDS	Safety Data Sheet
	STP	Sewage treatment plant

Hazard Rating

Health : 0 Minimal Hazard - No significant risk to health

Flammability : 0 Minimal Hazard - Materials that will not burn

Physical : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

Personal protection : B

B - Safety glasses, Gloves

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.