



**DEPARTMENT OF THE ARMY**  
ROCKY MOUNTAIN DISTRICT VETERINARY COMMAND  
ATTN: MCVS-GPC  
1661 O'CONNELL BOULEVARD, BUILDING 1012  
FORT CARSON, CO 80913-5108

REPLY TO  
ATTENTION OF

November 3, 2008

Rocky Mountain District Veterinary Command

VC# 08-0078  
Rakhra Mushroom Farm, Corp.  
PO Box 2002  
Alamosa, CO 81101-0200

Dear Mr. Robert Ruybal, QA Manager, EXT 12:

On October 21, 2008, I conducted a routine sanitation audit of your establishment in accordance with MIL-STD 3006C. Your establishment received an acceptable rating and is recommended for continued listing in the Directory of Sanitarily Approved Food Establishments for Armed Forces Procurement. A copy of the Sanitation Audit Report is enclosed.

You may contact us at the address indicated at the top of this letter or I can be reached by telephone at 719-524-4053, FAX: 719-526-1215, or Email: CathyMoon@ln.amedd.army.mil.

Sincerely,

Cathy Moon  
Chief Warrant Officer Three, US Army  
Auditor In Charge

Enclosure(s)  
as  
CF:  
Commander, U.S. Army Veterinary Command

**AWAITING REVIEW - DVC  
SANITATION AUDIT REPORT**

<b>1. VC#/NAME/ADDRESS/PHONE/ESTAB #/EMAIL:</b> VC# 08-0078 Rakhra Mushroom Farm, Corp. 10719 Road 5 S Alamosa, Colorado 81101-7002 719-589-5882 Fax 719-589-5886 E-mail gregonline@yahoo.com		<b>2. UNIT/IRC/ADDRESS/PHONE/AUDITOR/EMAIL:</b> Rocky Mountain District Veterinary Command ATTN: MCVS-GPC 1661 O'Connell Boulevard, Building 1012 Fort Carson, CO 80913-5108 Phone: (719) 526-1216 FAX: (719) 526-1215 AUDITOR: CW3 Cathy Moon EMAIL: CathyMoon@ln.amedd.army.mil Phone: 719-524-4053 Fax: 719-526-1215	
<b>3. NAME &amp; TITLE OF THE ESTABLISHMENT'S POC:</b> Mr. Robert Ruybal, QA Manager, EXT 12		<b>4. ESTABLISHMENT'S OWNER:</b> Mr. Baljit Nanda	
<b>5. DATE OF AUDIT:</b> 21 Oct 2008		<b>6. TYPE OF AUDIT:</b> Routine	
<b>7. PRODUCT(S) FOR DIRECTORY LISTING:</b> mushrooms (fresh whole & sliced)		<b>8. OTHER PRODUCT(S) PRODUCED OR STORED:</b> Various small quantities of other mushrooms produced at other facilities	
<b>9. SAMPLING IS REQUIRED IN CONJUNCTION WITH THIS AUDIT.</b> No			
<b>10. AUDIT RATING:</b> Acceptable		<b>11. DELIVERY STATUS:</b>	
<b>12. APPENDICES USED AND ENCLOSURES:</b> Appendix A, R & Y			
<b>13. OTHER INSPECTION AGENCIES/AUDIT ORGANIZATIONS:</b> Colorado Department of Public Health / pass / 17 Oct 07 Siliker / 20 May 08 / 93%			
<b>14. REMARKS:</b> Water Potability Certificate? Sangre De Cristo Laboratory, 10/30/07 / ABS for Total Coliform and Fecal Coliform - Contracts: Through 3rd party Distribution ( Sysco, US Food Service) - Reviewed Pest Control Records, (10/09/08) HACCP program, SSOPs, picking records. - Establishment is currently on a reduced frequency / annual. Will revert back to quarterly due to major finding. - Left a current Appendix R, A and Y with management.			
<b>15. BRAND NAMES AND POINT OF ORIGIN CODE(S)*:</b> POC: For Markon the first 3 digits of the production code on the case box is 038. Name and state is also used. For other brands name, state and sometimes the letter A or B at the beginning of the line code. It varies. Brand Names: Rakhra Mushrooms, Markon, Sysco, Zanios Foods, Giambrocco Food Service, Oregon Trail, Cross Valley Farms, Dominos Pizza EU PLANT CODE*: None * If code is not applicable or not available, enter None.			
<b>16. COMPANY ALIAS:</b> None			
<b>17. REQUEST FOR REDUCTION: NA</b>			

**FINDINGS**

<b>ESTABLISHMENT:</b> VC#: 08-0078 - Rakhra Mushroom Farm, Corp. 08-0078	<b>AUDIT DATE:</b> 21 Oct 2008
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SCORE: M

SUBPART PARA: B9

REQUIREMENT: The water supply is sufficient and from a sanitary source. Water potability is checked not less than annually by samples selected from within the plant. (21 CFR 110.37(a)) (Not applicable for warehouses that do not process food).

DESCRIPTION: Well water not tested IAW EPA Standards. Establishment has a history of not meeting EPA Standards for Arsenic. Last tested for Arsenic 3 Jan 07. Result was .019. Standard is .010. Establishment does not periodically test the well water for total / fecal coliforms either in house or by independent laboratory. Establishment does test water annually for total / fecal coliforms by an independent laboratory.

SCORE: O

SUBPART PARA: A9

REQUIREMENT: Employees are not eating food, chewing gum, drinking beverages or using tobacco where food or single-service articles are exposed or where equipment and utensils are washed or could become contaminated. (21 CFR 110.10(b)).

DESCRIPTION: The smell of cigarette smoke was present in the laboratory leading to believe a cigarette had just been smoked. The laboratory is not a designated smoking area.

SCORE: O

SUBPART PARA: B2

REQUIREMENT: Buildings and structure are suitable in size, construction, and design to facilitate maintenance and sanitary operations to include food contact surfaces and food packaging materials. Potential for contamination is reduced by effective separation of operations in which contamination is likely to occur. (21 CFR 110.20(b)).

DESCRIPTION: Dry storage dock door does not close tightly to floor allowing light to penetrate.

SCORE: O

SUBPART PARA: B3

REQUIREMENT: Buildings (to include floors, walls, and ceilings), fixtures (to include those that allow dripping and condensation), utensils, and other physical facilities of the plant are maintained in a sanitary condition and in good repair. (21 CFR 110.20(b) & 110.35(a)).

DESCRIPTION: Concrete walls in the growing rooms have peeling paint. Walls are steamed cleaned after the 3rd picking.

SCORE: O

SUBPART PARA: C1

REQUIREMENT: All pieces of equipment and utensils are adequately designed so as to be cleanable and are properly maintained and cleaned as often as necessary. (21 CFR 110.40(a)).

DESCRIPTION: Water hose lying on the floor in the spawn casing area.

SCORE: O

SUBPART PARA: E2

REQUIREMENT: Manufacturing operations are conducted under conditions and controls necessary to minimize the potential growth of microorganisms or contamination of foods. (21 CFR 110.80(b)).

DESCRIPTION: Employee straddling the mushroom tray bed during the picking process had one foot touching the actual bed. Corrected on the spot.

AUDITOR'S TYPED NAME & SIGNATURE	DISTRICT COMMANDER'S TYPED NAME & SIGNATURE
DIGITALLY SIGNED BY: CW3 Cathy Moon ON 11/03/2008 11:32:47 AM	

REGION COMMANDER'S TYPED NAME & SIGNATURE

\* DEFECT: C-Critical, M-Major, O-Observation

METHODOLOGY

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**ESTABLISHMENT:** VC#: 08-0078 - Rakhra Mushroom Farm, Corp. 08-0078

**PERSONNEL/ADMINISTRATION:**

Rakhra Mushrooms is owned by Mr. Baljit Nanda.  
 - Plant manager - Mr. Lynn Mortensen  
 - Assistant manager/QA - Mr. Robert Ruybal.

**GENERAL:**

Rakhra Mushrooms grows, slices and packages mushrooms.  
 - The building is adequately maintained for mushroom production.  
 - The plant has a capacity of approximately 300,000 lbs. of mushrooms per week. The plant's average production is approximately 40,000 to 45,000 lbs of mushrooms picked daily.  
 - The plant operates 24 hours per day, seven days per week. Normal hours of harvest and production: 0800-1700 hours daily.  
 - Records indicate this company supplies product to distributors in Denver, CO. The Denver distributors in-turn sells mushrooms to military installations in Colorado Springs arear. They also sell as far south as El Paso, Texas and Albuquerque, NM.  
 - There are approximately 270 full-time personnel employed at this plant. They work three shifts a day.  
**SHELF LIFE:** The recommended shelf life for mushrooms is 14 days based upon industry standards maintained at between 40 and 45 degrees F.

**CODING:** The name: Rakhra Mushrooms is on the packaging along with the city and state but can be just the name, and state.

- For Markon labels on the case: the first three digits 038 is at the beginning of the line code. For example: 038 111 06 . 038 is the plant code. 111 is the Julian Date and 06 is the grow room.  
 - For other labels it can be the name, city, state or a line code. For example: A0150B1001. A= plant code, 015 is the Julian Date, the next digit 0 = year, B is the crew who picked product, 1001 is the packaging line. The letter B can also be used as a plant code instead of A.  
 Use by date open coded on case or package.

**TRACEABILITY:**

- Forward: list of all suppliers ( distributors) they supply too.  
 - Back: Maintains records of lot#, crop#, room#, crew - person picked, spawn #, in case of a recall.  
 - Mock recalls are conducted every 6 months.  
 - Recall Team: Lynn Mortensen ( General Manager), Jason Gartrell ( Recall Coordinator), Karmjit Sahi ( Production Harvesting),

**CONTRACTS:** Third party distribution ( Sysco, US Food Service)

**BRAND NAMES:** Rakhra, Sysco, Zanios Foods, Markon, Giambrocco Food Service, Oregon Trail, Cross Valley Farms, and Dominos Pizza

**FACILITIES:**

The plant is located in a rural area north of the city Alamosa off Highway 17.  
 - The building is a concrete material, single story structure occupying approximately 144,000 square feet (includes the compost make area) under one roof and was constructed in 1981.  
 - The building is adequately designed and maintained for production and packaging of mushrooms. Ventilation system is adequate to maintain a sanitary environment.

**Equipment:**

1 slicer  
 1 prepack machine plus a spare  
 1 metal detector  
 2 packaging lines ( prepak and bulk)  
 10 tunnels for pasteurization

**FOOD PROTECTION AND SANITATION:**

**RAW MATERIALS:** Compost is manufactured on-site.

- Straw, cotton seed hulls, processed poultry waste is received from various approved suppliers as determined by Rakhra.  
 - Mushroom spores (Agaricus bisporas) are purchased from Sylvan America.  
 - Foam Trays - Central Bag and Burlap  
 - Plastic Film & Cups - Ex[edex  
 - A one-time letter from suppliers is maintained on-site to certify compliance to product specifications. All incoming products are recorded on a receipt log. Products are inspected for condition and quantity. Shipments are received regularly throughout the week. Compost material is stored outside the production facility. Spores are stored in a designated storage area within the building.

**WATER:** Water originates from one on-site well.

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- Backflow prevention device was inspected and certified.

#### LABORATORY TESTING:

- Sangre De Cristo Labs performs the annual water potability testing
- In-house lab tests for ammonia and nitrogen concentrations.
- Monthly in house testing is also conducted for Coliforms (limits-absent), listeria (limits- neg) and total plate counts (limits are <100 cfu/sq. in). NOT BEING CONDUCTED.
- Colorado Department of Health Laboratory Division tests for Arsenic of the water but current certificate is not available.
- No finished product testing is performed at this time.

**EMPLOYEE SANITATION AND HYGIENE:** No preemployment health exams are required. Food handler cards are not required. The company maintains a formal documented training program.

- The program consists of induction training, HACCP, Plant security, sanitation, hygiene and annual refresher training. Company manuals and posted signs are available in English and Spanish to facilitate understanding.
- Training records are maintained and were made available for the auditor to review. Work cloths are provided to some employees, depending on duties. Jewelry, hair and disease policies are addressed in company directives.

**PLANT SANITATION:** This company maintains a written sanitation plan. Updates are performed on an as needed basis. Company employees clean the plant and equipment IAW the cleaning plan as needed. The plan identifies daily and weekly areas to be cleaned. Food contact surfaces are cleaned and sanitized daily. Employees maintain their own harvest knives. The knives are sanitized at the start of the shift and sanitizer buckets are maintained throughout the processing areas to permit knives to be sanitized as needed. Sodium Hypochloride is used as a sanitizer (150 ppm), was tested during this audit and found to be adequate. Zepamine is the detergent. Formaldehyde is used on floors outside the production area to control and prevent microorganisms from being tracked between rooms and production areas (sprayed only at night). A pre-operational hygiene checklist is completed daily. Chemicals are secured in a designated storage area. Only the certified chemical applicator has access to the storage room. Chemical concentrations are monitored by formulation and test strips. MSDS are current and available for review.

**PEST CONTROL AND WASTE DISPOSAL:** Integrated Pest Management Program: Pest control program is a combination of in-house and contracted surveys and applications. The contractor is Orkin Pest Control. In-house pesticide applications are completed and monitored by State-licensed applicators. Orkin is responsible for pesticide chemicals outside the production areas. Orkin visits monthly and verification is maintained. Monthly in house surveys are completed and documented. No significant infestations have been recorded or observed during these surveys. Fly-strips, insecticutors, bait stations, catch-alls and chemical sprays are used at strategic locations throughout the premises. A bait site map is maintained and is current.

- Liquid waste is discharge from the building into a private septic system. The system is a four pond lagoon system and is inspected and approved by the local health department and appears to meet requirements in regard to design and function. Solid waste is burned. Used compost is sterilized and sold to an external company-not reused in the plant.

#### PROCESS:

**Production:** The total time from commencing compost production to harvesting mushrooms is approximately 7-8 weeks. The process begins with the preparation of the compost. Compost material is blended in a large area outside the production facility. After blending, the compost is maintained in bunkers where decomposition begins. Rows of compost (ricks) are mechanically turned, watered and nutrients added on a regular schedule to maintain proper oxygen and moisture levels and ensure even development of compost material. The compost is then placed inside a pasteurization room (tunnels) where temperatures are allowed to rise to 140 and above degrees Fahrenheit. This temperature is held for approximately six to eight hours to achieve pasteurization of the compost. Objective of the pasteurization process is to destroy insects, bacteria, nematodes and pest fungi. In addition, pasteurization commences the process of removing ammonia from the compost, which is harmful to proper mushroom development. The temperature is gradually reduced over several days to prepare the beds for spawning. Once the pasturization process has been completed, the material is mechanically loaded into large wooden trays. The prepared beds are next mechanically inoculated with mushroom spawns. The trays are then moved to one of the spawning rooms, maintained at high humidity to prevent drying as the mycellum develop. After the spawn run has occurred (approximately 2 weeks), casing is mechanically added to the beds. From this point the mushrooms eventually develop and are harvested. As needed, Benelate or Mertect (fungicides) and /or Turbocide (insecticide) are applied to the growing rooms. The rooms are tagged when these chemicals are applied and entry to the room is restricted for a specified period of time (CCP1- see below) in accordance with chemical manufactures and varies as the chemicals dissipate or are absorbed into the compost. The mushrooms develop above the casing and when harvested, care is exercised to ensure the edible portion of the mushrooms does not contact unclean surfaces. Employees wear disposable gloves during harvest and maintain their own knives. Harvested mushrooms are placed in plastic trays and held in a pre-cooler at approximately 40 degrees Fahrenheit. From the cooler, mushrooms are either transferred to the slicing room or packaging room. Mushrooms are packaged in ventilated packages to

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prevent an anaerobic environment. Sliced and whole packaged mushrooms are passed through a metal detection unit (CCP2 - see HACCP below). Finished product is loaded into shipping cases and placed in the refrigerated product cooler maintained between 34 and 40 degrees Fahrenheit until shipped to the distribution center.

HACCP: Rakhra maintains a HACCP plan dated October 2007 and has just been reviewed by management. Two CCPs have been identified.

- CCP1-Pre-harvest interval (no harvest within a specific time period of fungicide or pesticide application) and CCP2-metal detectors. The process flow is accurately documented and CCPs are recorded; however verification of CCP1 is visual IAW chemical manufacture's requirements. The critical limits of CCP1 are 12 hours for Mertect, 48 hours for Benlate and 0 hours (entry permitted upon clearing) for Turbocide.

- Corrective action for CCP1- Delay harvest until proper harvest interval is achieved. If product has already been harvested --company will trace and dispose of product. If already shipped...institute a recall

CCP2 - 3.5mm stainless steel, 3.0 mm non-ferrous metal and 2.0mm ferrous metal. Metal detector is normally verified three times daily with testing sticks.

- Corrective Action - If device doesn't work during testing...all product is sent back through the detector from the last recorded check.

**STORAGE:**

The finished product is stored in two coolers that are maintained between 34 and 45 degrees Fahrenheit. Raw compost material and spent compost are stored in designated areas, separate from finished product areas.

**DISTRIBUTION:**

The product is delivered in company owned refrigerated trucks, operated by company drivers. Product is shipped from this plant to distribution centers. Product is delivered to the military customer through the distribution company.

**FOOD DEFENSE:**

Discussed.

**PRODUCT FLOW**

ESTABLISHMENT: VC#: 08-0078 - Rakhra Mushroom Farm, Corp. 08-0078

AUDIT DATE: 21 Oct 2008

DESCRIPTION: (please use the attachment section below for graphical representation)  
See Below

**ATTACHMENTS**

TYPE	FILE NAME	SIZE (KB)	LAST REV
Business Card	business card.pdf	124603	11/3/2008
Flow Chart	RakhraFlow.pdf	105400	11/3/2008
HACCP	Rakhra - HACCP.pdf	59726	11/3/2008
Lab Results - Vendor	arsenic.pdf	141511	11/3/2008
Lab Results - Vendor	chem.pdf	272645	11/3/2008
Other	spawn origins.pdf	682224	11/3/2008
Plant Diagram	Floor_Rakhra78.doc	832512	11/3/2008
Plant Diagram	plant map.pdf	141939	11/3/2008
Water Potability	Rakhra Water Potability.pdf	32004	11/3/2008

LAST MODIFIED BY CW3 Cathy Moon - 11/03/2008 11:34:14 AM

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## CORRECTIVE ACTION REQUEST

**1. ESTABLISHMENT & VC#:**  
 VC# 08-0078  
 Rakhra Mushroom Farm, Corp.  
 PO Box 2002  
 Alamosa, CO 81101-0200

**2. ESTABLISHMENT POC:**  
 Mr. Robert Ruybal, QA Manager, EXT 12

### PART 1

#### DEFICIENCY FOUND

**3. RESPOND TO THE FOLLOWING DEFICIENCY BY:**

Score: M

Subpart Para: B9

**REQUIREMENTS:**

The water supply is sufficient and from a sanitary source. Water potability is checked not less than annually by samples selected from within the plant. (21 CFR 110.37(a)) (Not applicable for warehouses that do not process food).

**DEFICIENCY:**

Well water not tested IAW EPA Standards. Establishment has a history of not meeting EPA Standards for Arsenic. Last tested for Arsenic 3 Jan 07. Result was .019. Standard is .010. Establishment does not periodically test the well water for total / fecal coliforms either in house or by independent laboratory. Establishment does test water annually for total / fecal coliforms by an independent laboratory.

**AUDITOR'S NAME, SIGNATURE AND DATE**  
 CW3 Cathy Moon *3/10/08*

**MANAGEMENT'S NAME, SIGNATURE AND DATE**

### PART 2

#### ROOT CAUSE OF DEFICIENCY

#### ACTION TAKEN TO CORRECT AND PREVENT RECURRENCE OF DEFICIENCY

**4. PERSON RESPONSIBLE FOR IMPLEMENTING CORRECTIVE ACTION:**

**5. SIGNATURE:**

### PART 3

#### AUDITOR'S EVALUATION OF CORRECTIVE ACTION(S)

**6. DISPOSITION OF CORRECTIVE ACTION:**

**7. FOLLOW-UP AUDIT REQUIRED:**  Yes  No

**8. REMARKS:**

**AUDITOR'S NAME, SIGNATURE AND DATE**