



FOCUS ON FOOD SAFETY IN SCHOOLS

Red Clay School Nutrition Services, Wilmington, Delaware
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RED CLAY CONSOLIDATED SCHOOL DISTRICT



- Red Clay School Nutrition Services provides meals to:
 - 25 Public Education Schools
 - Rural Sites: 20 schools
 - Urban Sites: 5 schools
 - Nutrition Services also provided to 2 additional sites:
 - Thomas Edison Charter School
 - Gateway Lab School
 - For 2017-2018 School Year, 18 of the 25 schools were operating as CEP schools
 - Red Clay Schools Enrollment: 17,481
 - Enrollment with 2 Non-Red Clay Schools: 18,468

RED CLAY SCHOOL NUTRITION PROGRAM

- All sites serve breakfast and lunch
 - Some sites also offer dinner and after school snack
- District-wide Average Daily Participation for 2017-2018 SY:
 - ~6,211 reimbursable breakfasts/day
 - ~11,047 reimbursable lunches/day
 - Total After School Meals and Dinners served: 92,787



RED CLAY NUTRITION SERVICES STAFF

- Administrative Nutrition Office Staff
 - Manager
 - Operations & Nutrition Specialist
 - Nutrition Specialist
 - Financial Specialist
 - 2 Secretaries and 1 Clerk
- Onsite Supervision
 - 3 Field Operations Managers
 - Production Manager
 - 13 Site Level Managers
- 3 Meal Handlers
- 195 Cafeteria Staff
- Substitute workers to fill in as needed



RED CLAY SCHOOL MEALS



HOW DOES RED CLAY ADDRESS FOOD SAFETY IN THE SCHOOL CAFETERIAS

- HACCP MANUAL
- BASIC SANITATION AND CLEANLINESS PROCEDURES
- EMPLOYEE TRAINING PROGRAMS
- RECIPE/PROCESS INSTRUCTIONS
- EQUIPMENT
- MONITORING

Let's take a closer look.....

DEVELOPMENT OF OUR HACCP MANUAL

- **HACCP Committee** – including manager, specialist, managers, cooks, lead workers, and general workers to ensure standard operating procedures were practical in the field
 - Committee met regularly for the first 4 years to evaluate the manual and ensure compliance; made modifications to SOP's as needed
- Annual review of the HACCP manual to ensure continuous updates as department policies and procedures change



HACCP – 7 PRINCIPALS

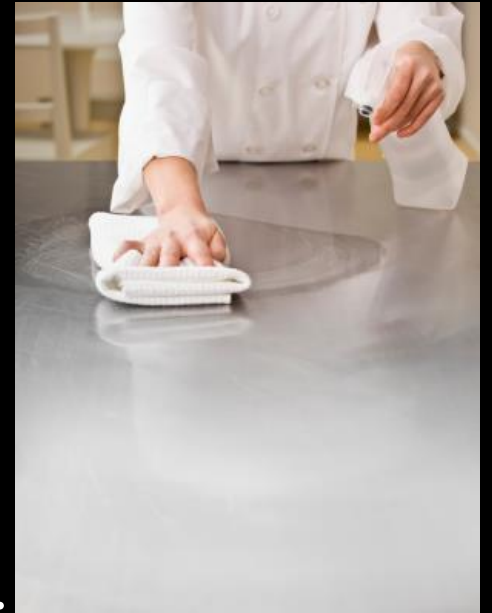
Our HACCP Manual addresses each of the 7 HACCP principals

1. Hazard Analysis
2. Critical Control Point Identification
3. Establishment of Critical Limits
4. Monitoring Procedures
5. Corrective Actions
6. Record Keeping
7. Verification Procedures



BASIC SANITATION AND CLEANLINESS PROCEDURES

- Service Contract with Food Safety & Sanitation Company
 - Cleaning and sanitation chemicals are provided
 - Extensive audit completed monthly to:
 - Review compliance with proper use of chemicals
 - Review staff compliance with HACCP Procedures
 - Ensure we are compliant with Board of Health procedures
- Cleaning and Sanitation Procedures are outlined in our HACCP Manual and materials provided by company.
- Cafeteria Managers ensure compliance in operation daily.



EMPLOYEE TRAINING PROGRAMS

- New Hire training for all employees upon hire and for existing employees as needed
- Monthly training provided to all staff on various Food Safety Topics
- ServSafe Certification required for all managers, leads and cooks
- All employees not ServSafe certified are required to take and pass a Basic Food Safety Course
- Scenario based training with managers, leads and cooks



MONTHLY CALENDAR TRAINING

PROVIDED BY CONTRACTED COMPANY

Monthly Topics for the 2018-2019 School Year:

- ✓ Chemical Mixing & SDS
- ✓ Wiping Cloth Bucket
- ✓ Cross contamination
- ✓ Time and Temperature
- ✓ Hand Washing
- ✓ Food Contact Surfaces
- ✓ Thermometers & Calibration
- ✓ Sanitizer vs. Germicide
- ✓ HACCP Principals
- ✓ Norovirus Prevention
- ✓ Cleaning for Food Allergens

Each training is 15 minutes
and counts as a 1/4 credit
for Professional Standards

RECIPE/PROCESS INSTRUCTIONS

Production Manager Tests Recipes prior to working with the Nutrition Specialists to write the recipe instructions

- Cooling methods are tested
- All Recipes include Critical Control Points and Corrective Actions
- Instructions for cleaning surfaces; handwashing, temperature requirements.



EACH RECIPE IS COMPLETE WITH THE FOLLOWING 5 STEPS

1. Prepping
2. Cooking
3. Serving/Holding
4. Cooling
5. Reheating

PREPPING:

Food prep areas, equipment, and utensils, to be used in recipe will be washed and sanitized prior to beginning the preparation and cooking.

Assemble all ingredients, utensils, etc. to be used in recipe within easy reach of prep area so that food safety can be managed more effectively as well as better control of contamination and cross contamination.

Remove frozen product from freezer using oldest pack date first.

CCP: Record in Smart Temps all beginning temperatures of refrigerated foods before sure frozen foods are frozen.

1. Clean all cans before opening.
2. Pour beans into a colander and drain for 2 minutes. Rinse beans under tap water for 2 minutes.
3. Grind beans to a smooth paste in the buffalo chipper, robot-coupe or VCM (vertical mixer).
4. Wash Peppers under running water and set aside in colander until ready to dice.
5. Chop Peppers on clean cutting board or surface into small pieces; set aside until needed.
6. Dice Onion on clean cutting board or surface; set aside until needed.

COOKING:

Wash hands thoroughly before handling food, after handling contaminated food or objects, where there is an opportunity for contamination. This applies as well to before and after gloving when handling raw product. Replace gloves after handling any other object.

1. Remove the 40 lb of raw beef from bag and put in appropriate pan and place in steamer.
2. Drain excess liquid from steam table pan and then transfer to buffalo chopper or VCM to the Kettle Mixture Below.

CCP: Heat Beef to 185 degrees F for at least 15 seconds.

1. Transfer all other ingredients into the kettle; stir occasionally. Do NOT add the additional ingredients) these are for service as optional condiments.

CCP: Heat kettle mixture to 185 degrees F for at least 15 seconds.

1. When the beef has reached temperature add it to the kettle mixture.
2. Bring the nacho beef mixture to a boil, then lower the temperature to a simmer for at least 20 minutes. Continue to cook until the proper consistency is reached. It should not be runny.

CCP: Heat final kettle beef mixture to 185 degrees F for at least 15 seconds.

SERVING/HOLDING:

CCP: Product should be served immediately. Ensure that hot food is held at a temperature above 135° F. Temp one of each hot item on each line before service and at mid-service with Smart Shield (Record under Smart Temp Serving, Choose Line #).

CORRECTIVE ACTION HOT FOOD All cooked food items being held for service that drop below 135 degrees must be removed from service until such time as they are reheated to 135 degrees. If not reheated then food must be discarded at the end of service.

1. ASSEMBLY: Place 3/4 Cup nacho mix onto NACHO TRAY #314353 with 1 OZ Cheese sauce on same tray. Offer Bag of Tostitos (1.4 oz bag for grades 6-12) as the grain offering alongside the nachos. *Students are not required to take grain, but grain may not be offered with other entrees.*
2. Pre-Portion 1/4 cup salsa into souffle cups with lid and have at register along with 1 oz sour cream packet as optional condiments. *May choose to offer salsa and lettuce condiment station but all leftovers must be discarded.*
3. Place shredded lettuce with tongs on the line for students to take as an optional condiment (discard at end of service).

If food is held less than four (4) hours and the integrity of the food items has been maintained throughout the time of service (it has not dropped into the temperature danger zone without a corrective action) and was temped before each service line and appears to be of good quality, then the food items may be cooled or frozen for another serving day (no more than 25% of total entree served as leftovers).

COOLING:

1. Place Nacho into new shallow 2" pan, Place in ice bath for 20-30 minutes then remove.
2. Label with the date the food was cooked and the date it was cooled/frozen (today's date), the number of servings the pan contains and the name of the food item.

CCP: Temp one item of each type of food from all serving lines at the end of day with Smart Shield prior putting in refrigerator/freezer.

1. Place in freezer if saving for next menu cycle when the item is offered again OR place in refrigerator for next day service.
2. If blast chiller is available, always use this for leftovers being saved for next cycle menu for maximum quality upon reheating.

CCP: Items must be cooled to 70 degrees F within 2 hours and cooled to below 40 degrees F in an additional 4 hours whether being frozen or cooled.

REHEATING

1. Always assess quality before serving! If you wouldn't eat it, don't serve it.
2. Reheat in oven/combi at 375° for 30 minutes.
3. Check on food items every 20 minutes for temperature and acceptable appearance while reheating.
4. Reheating leftovers should be done immediately before service to limit excessive reheating of the product.
5. Discard leftovers after this final service.

CCP: Internal temperature of 165 or higher for at least 15 seconds. Temp at least one item from 3 pans per batch of food with Smart Shield. Temp the center of the NACHO.

RECIPES...TRACKING DURING TRANSPORT

BASE KITCHEN ITEMS

- **Transporting (Base Kitchen)**
 - **CCP:** Temp 3 containers per batch or food item with handheld to be transported to satellites. Record one of these 3 temperatures onto the Transport Sheet going to each satellite along with the time.
- **Receiving (Satellite Kitchen)**
 - **CCP:** Temp at least one pan/container per base item with handheld received hot or cold. Frozen items check for signs of thawing. Record temperature and time on transport sheet.
 - **CCP:** Temp at least one pan of each base item before transferring to cooling
CCP for Same Day Service: Temp at least one pan of each base item before putting in hot holding
- **Reheating (Satellite Kitchen)**
 - **CCP:** Internal temperature of 165 degrees F or higher for at least 15 seconds. Temp at least 3 pans per batch of food with handheld.



EQUIPPED FOR FOOD SAFETY....

What equipment do we have to track the safety of the food we serve in Red Clay?

BLAST CHILLERS

Our department has purchased several pieces of equipment to assist with assuring food safety

- **Blast Chiller** – Cools foods rapidly to get the food out of the temperature danger zone quickly
- **No Blast Chiller? No problem!**
 - Ice Paddles/baths
 - Transferring cooling leftovers to smaller containers/vent
 - Test cooling methods before adding to recipe instructions.



ONLINE TEMPERATURE MANAGEMENT SYSTEM

- Cloud based storage, around-the-clock temperature logging designed to monitor coolers, freezers, the flow-of-Food and act as a HACCP compliance tool.
- Cloud Based Equipment Temperature Monitoring
- Hand Held Cloud Based Temperature Monitoring Device

HANDHELD TEMPERATURE MONITORING DEVICE

- Take temperatures of food during preparation, serving and cooling
- 24/7 Monitoring of temperatures from any computer
- Simplified Recording of Temperatures- Automatically communicates temperatures to the Cloud.
- **Easy as 1, 2, 3....**
 - Select Menu item to be temped
 - Temp item (temperature automatically) recorded
 - If item is out of temperature, you are notified to take corrective action.

TAKE TEMPERATURES OFTEN

- Ensures foods are received, prepped, cooked, held and cooled properly
- Tracks the flow of food
- Ensures corrective actions are taken when food is in Danger Zone
- Field Operations Managers complete temperature audits
 - Select one day/week
 - Number of temperatures taken for receiving, prepping, cooking, cooling, serving.
 - Variety of items temped
 - Additional staff training if necessary



TRACKING THE FLOW OF FOOD

- Temperatures should tell a story about if the food was handled properly
- Story can be used in the event of a suspected Food Borne Illness
- Use the story to determine if additional training is needed for staff

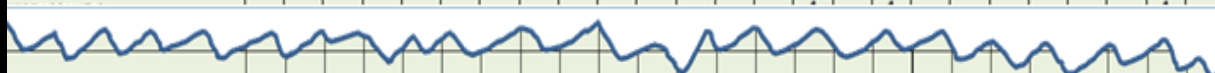
EQUIPMENT TEMPERATURE MONITORING SYSTEM

- 24/7 monitoring of refrigeration and freezer temperatures
- Alerts sent when the temperature of a unit rises
- Temperature patterns can be reviewed
 - Proactive
 - Reactive
- Units not electronically monitored
 - Temperatures recorded twice daily



REGULAR AUDITS

CONDUCTED BY THIRD PARTY AUDITOR

	Your School Comparison																			
0. Sanitation - Entrance																				
1. Dumpster Area				1						1	1									1
2. Dock or Receiving Area					1										1					
3. Door Properly Closed	1														1	1				2
4. Sanitation - Kitchen Set UP																				
5. Hand Washing Stations																				
6. Supplies (Soap/PT/Chart)								1												
7. Hot Water																				
8. Food Storage - Dry																	1			1
9. Food Storage - Freezer			1					1							1					
10. Food Storage - Refrigerator																				
11. Cooking Equipment																				
12. Non-Cooking Equipment																				
13. Food Preparation Areas																				
14. Thermometer Use			2	1				1						1	1				1	2
15. Proper Food Handling																				
16. Serving Lines				1																1
17. Stainless Steel Appearance																1				
18. Serving / Customer Areas																				1
19. Sanitizer Usage / Proper Strength			1					1						1				1		1
20. Sanitizer Spray Bottle					1			1						1				1	1	
21. Sanitizer Bucket/Therm Cup		1	1								1	1	1					1		
																				
Milk Cooler Log																				
Production Log																				
Cooking Log			1	2	1			1				1	1	1	1			2		1
Reheating Log					1			1												
Corrective Actions					1					1		1								
Cold Holding	1	1	1	1	1	3		3	3	2	1	2	1		1	1	2		1	1
Hot Holding/Serving Log	2	1	1		1	2		2	2	1	2	1	1		1	1	1		1	2
Cooling Log				1	1	1	1	1	1	2	1							1	1	1
Training Modules						1					1	1			2			1	1	
Sanitizer Log																	1	1		
Dish Machine Log																				
Thermometer Calibration Log																	1			
Total NC Issues	3	3	5	10	7	9	4	8	7	6	7	13	2	3	9	6	9	3	6	11

- Monthly site audits of all schools
- Annual report show number of non-compliant issues
- Used to assess where training needs are and what schools need to be monitored more closely

TAKE HOME MOMENT

- Create a diverse HACCP team
- Utilize new technology and equipment to strengthen HACCP compliance and implement new procedures within your HACCP plan
- Monitor HACCP compliance through regular audits
- Regularly train staff and stress importance of compliance
 - Develop a troubleshooting exercise for employees to assess in groups using a real life scenario
- Review HACCP plan annually, or as needed, for necessary revisions to reinforce the plan





QUESTIONS.....??