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COLORADO RIVER WAR RELOCATION PROJECT  
Division of Sanitation  
Poston, Arizona  
September 4, 1943

REPORT TO: A. Pressman, M. D., Director  
Health and Sanitation

FROM: T. R. Nishimoto, Division of Sanitation

SUBJECT: Report on General Sanitation Within  
Camps I, II and III

FOODS:

Transportation problems and wartime conditions were responsible for some of the food being below the qualities which might have been expected. Some vegetables were definitely off standard. Poston-fed pork was affected by mechanical difficulties encountered after slaughtering. Insect infestations were found rather extensive in grain products.

A meeting was held in Unit I with the Unit II and III Division of Sanitation attending. Mr. Snelson also attended this meeting, and he discussed the difficulties encountered by the Subsistence Department and what he has done to combat them. The high lights of the meeting were as follows:

1. Uncertainty made it necessary in the early days of the Project to order a four to six months supply of food at one time. This resulted in a great deal of spoilage. The present set up calls for an order for thirty days and a fifteen days emergency order. Some of the milk and cereals which are supplied to the mess halls are those which have been on the Project for as long as a year.
2. Vegetables from Tule Lake shipped to us by train were in perfect condition at the point of shipping. However, difficulties enroute made it necessary to take from eight to eleven days for delivery instead of the customary three. This resulted in a great deal of spoilage, sometimes necessitating wholesale condemnation.

Conditions have been rectified by requiring the icing of products for a eleven day period to insure the getting here of the vegetables in perfect condition.

3. Chefs and inspectors will have to temper their judgement of food in line with the existing outside conditions. All salvageable foods from condemned food should be used.
4. It was recognized by both the Division of Sanitation and Mr. Snelson that a great deal of the spoilage existed because of improper handling and transportation between the three Units. Efforts are being made by Mr. Snelson to eliminate rough handling of food stuffs. Special care will be given Poston slaughtered hogs, since it has been observed by the Inspectors that these carcasses were not placed into refrigerators immediately if they were delivered after 10:30 a.m. The reason being that the kitchen crew were too busy with the noon day meal and could not do the required butchering until about 2:00 p.m.
5. Work on the butcher shop will be asked to be speeded up so that better control of Poston slaughtered meat can be made possible.

We have observed that as the month came to a close there was a general upswing in the qualities of food. This was especially noticeable in the vegetables and fruits delivered to the kitchens.

We feel that some of the condemned canned goods, especially milk, are affected only in a physical way, therefore, some samples were sent to a laboratory for analysis. If the laboratory findings support our belief, then it will be possible to reissue these for use in cooking.

#### WATER:

Bacteriological reports from the Ninth Service Command and the Arizona State Laboratory on the potability of the water in Poston are not satisfactory. Gas due to coli aerogenes group were found in many cases, and we feel it was not attributable to improper handling at the time of sampling.

Camp II and III has been requested to flush out all existing fire hydrants, and the Fire Department is helping in this matter.

All lines are being checked for back-siphonage and contaminations.

Camp I has had no residual chlorine reading for almost two months. This is due to the inadequacy of the chlorine machine.

Buildings are now being built for the two new chlorine

machines in Unit I, and it is hoped that these will be put into operation as soon as possible.

A competent man has been put in charge of the chlorinators and it is expected that this stricter watch will insure proper chlorination and fewer breakdowns.

#### MESS HALLS AND KITCHENS:

All mess halls and kitchens were found in a sanitary condition. Unit comparisons rated Unit III as the most clean, Unit II next and Unit I as third.

Recognizing the possibilities of mess halls as a source of transmission of communicable diseases, a strong program was instituted a few months back for the procurement of dish washing racks, so that water of about 160°F could be employed in rinsing the dishes and utensils.

Metal trays were impossible to get and a recommended tray of wood and wire was disapproved by the Construction Department because of the unavailability of wood. Therefore, No. 9 wire was made available to the kitchens. Two hundred feet per kitchen was issued. The Block Managers were contacted and asked to assist the kitchens in making this necessary item.

Kitchens which have already complied with this request reports that the utensils and dishes are freer from grease and other foreign matters and requires less or no wiping at all. It is now advisable to issue dish washing instructions to all mess halls and expect cooperation.

Varnishing of table tops and scullery boards have been started in Unit II and work on Unit I and III are expected to start in about two weeks.

All kitchen workers in Unit III have been given a physical examination. Unit II and I have decided to follow the recommendation of California which does not insist upon physical examination of kitchen workers. We feel that the X-ray program will help us in keeping persons with lung afflictions out of the mess halls.

A grease collection program should be set up. Some kitchens are throwing this item away. It creates a sanitary problem when disposed around the immediate surroundings, and there is the thought that bad publicity may arise, if it is discovered that we are not cooperating with the Nations efforts in saving this necessary item.

#### LATRINES:

No improvements have been noted or have been done as yet on the masonite walls of the shower rooms.

Wash basins and urinals are unsanitary in some latrines because of leakages. The Maintenance Department is making replacements for the wash basins and it is hoped that they are installed wherever necessary in the near future.

Efforts to keep this facility clean was recognized. Some rated as high as 97% in the upkeep of cleanliness.

Toilet seats are badly in need of varnishing. Cracks are beginning to show on some seats. If varnishing is started at once, we believe it will result in saving 25% of the seats.

#### BEAN SPROUT, NOODLE AND BEAN CAKE FACTORIES:

The bean sprout and cake factories were in a satisfactory condition. Unit I's bean cake factory was renovated to take care of the increased demands and the deficiencies which existed there.

A highly unsatisfactory condition existed in the noodle factory in that the worker's feet were used in mixing some of the articles. A canvas was employed in stepping on the products but it was felt that there was danger of contamination. Therefore, kneading tables and poles were procured and is now in use.

Disinfectant is issued periodically to these factories for use in cleaning their utensils and floors.

#### WAREHOUSES AND REEFERS:

Warehouses in Unit II and III are bothered by rodents which will be controlled as soon as traps for them are made available. Some use have been made for Cyno gas. However, we feel that traps are more practical since the infestation is not extensive.

Except for the accumulation of dust and some crickets, the warehouses are in a sanitary condition.

The reefers are kept fairly clean and the temperature is being maintained at a safe level.

#### COMMUNITY ENTERPRISES:

1. Beauty Shops and Barber Shops. A recommendation was sent to the Supervisor of the canteens to keep the beauty shops and the barber shops in a more sanitary condition.
2. Stores. The manufacturing of fruit juice drinks were eyed with some suspicion, but investigation proved that it would pass inspection. There is, however, need for a duck board upon which to lay the ice.

Recommendations will be made to the canteens.

A request was made to the Unit III store that some persons be replaced because of health reasons.

All other conditions in the Community Enterprises were found to be satisfactory.

#### BLOCK SANITATION:

Sanitary conditions within blocks in Camp I are below standard. It has been necessary to issue a memorandum to all owners of inside sinks and faucets to provide such facilities with slop jars or buckets and to minimize the use of water. We have also suggested that latrines are provided for personal hygiene and that the residents use these facilities. Block sanitation within Camps II and III is satisfactory. They have asked the residents to dig drainage pits for their coolers and in most cases they have complied. Therefore, water accumulation has been lessened.

There are still some blocks in Camp I raising fowls and rabbits within the blocks. Memorandums have been sent to the offending blocks. However, there is a necessity of the Council passing an ordinance prohibiting the maintenance of these nuisances before any action can be taken.

We feel that it is the breakdown of ordinary sanitation which is to be feared most. Therefore, a merit rating system is being inaugurated and with proper publicity given to this, we feel that some of the blocks may be cleaned up in Unit I.

#### SEWERAGE SYSTEM:

Many mistakes were made at the sewerage plants and it was attributed to the lack of competent personnel and proper supervision.

Contacts were made with the Maintenance Department and we have recommended the issuing of instructions periodically to the personnel. A Caucasian is being sought who could supervise this phase of the work.

As Unit I's system was the first built, there are a few deficiencies that must be corrected such as an addition of a sludge box and the addition of some check valves.

Due to the two pumps which is throwing three-fourths of all the effluent out into the south-west side of Camp, the sewerage lagoon existing on the south side of Camp I is now under control. This is recognized as a temporary

measure and there is still need for the building of effluent ponds.

#### GARBAGE AND TRASH COLLECTION:

With the influx of feeder hogs into Camp much of the garbage is again being used to feed them. The unedible portion of the garbage is being properly buried and covered.

Trash collection is satisfactory. Tin cans are accumulating on the west side of Quad 9 and efforts are being made to have these collected and disposed of.

#### PEST CONTROL:

1. Mosquitoes. Mosquitoes are now under control and ciling is done twice a week to safeguard against an increase.
2. Crickets. There is a great deal of crickets in all three Units. Control measures may be resorted to by using a poison bait. However, due to its poisonous nature, we did not recommend the spreading of this mixture within the blocks. A poison mixture is available at the Sanitation office and this is being used in instances where there is no danger of children being about.
3. Roaches. Many kitchens are affected by roaches and these are being held down by the use of roach powder, poisoned mixture, and spray. The fumigants which were ordered two months ago have not as yet arrived.
4. Flies. Flies are on the increase. Since the fly is recognized in some circles as the vectors of the infantile paralysis virus, the spreading of which is approaching an epidemic stage in some surrounding territories, efforts are being made for the destruction and the non-accumulation of matters which may breed and attract flies. Grass clippings which accumulates within the blocks are being removed, and the mess halls are being asked to be vigilant. A campaign against flies in the mess halls will be carried out the latter part of the month.
5. Snails. Fresh water snails are abundant in the drainage canals surrounding the blocks. These create a sanitary problem since some species are recognized as being the intermediate hosts to the blood flukes. Drainage is being practised wherever feasible, and an addition of a small amount of copper sulphate, (3 lbs. per million gallon of water), will also control these.
6. Saw-toothed Grain Beetle. Unless the grain products

COLORADO RIVER WAR RELOCATION PROJECT  
Division of Sanitation  
Poston, Arizona  
November 4, 1943

REPORT TO: A. Pressman, M. D., Director  
Health and Sanitation

FROM: T. R. Nishimoto, Supervisor, Division of Sanitation

SUBJECT: Report on General Sanitation Within Camp I, II and  
III for the Month of October

KITCHENS AND MESS HALLS:

All mess halls and kitchens were found to be clean and sanitary. There is insome kitchens a shortage of workers which accounted for the average going down approximately 3% for the whole Project.

Dish rinsing racks which were recommended by the Sanitation Department are slow in being used because approximately fifteen minutes more work is involved. However, efforts are being made, and it is believed that their use will be the standard procedure within a few weeks.

A chemical trade marked "Diversol" is employed now in dish washing. This chemical has been approved by the California Public Health Department as being a good disinfecting agent for dishes.

FOODS:

Meats. All meats including Poston slaughtered hogs were found to be in perfect condition. Because of the lack of space in the reefers, it was necessary at times to lay the meats on the floor of the reefers. In most cases this was allowable because the floors were laid on racks with saw-dust and kept clean.

Vegetables and Fruits. All vegetables and fruits coming to this Project was satisfactory and of good quality.

Canned Goods. Except for some baby food which were distended, all canned foods were in good condition. A report from the Food and Drug Administration upon cans of food products sent to them was received. This report supported the thought that all milk, heretofore condemned because of its unpalatability and precipitated nature, was fit for use. All such milk is now being reissued to chefs with the understanding that it is to be used for cooking purposes.

Cereals and Grain Products. In warehouse No. 9 in Camp II 570 sacks of rolled oats and 1330 cartons of macaroni were inspected upon request of Camp II. The rolled oats were found infested with beetles and the macaroni was found to have an insect similar to the silver fish in them. The insects have been sent to Washington for identification together with the request that control measures be advised. It is our belief that the condition of the macaroni was caused by the fact that they were allowed to get moist during transit. It is evident that there is a need for fumigation chambers within the three camps so that infestation can be kept down to a minimum.

WATER:

The bacteriological reports for all water were "potable and safe for human consumption." The break down in the pumping system in Unit II has been repaired and the gas chlorinators in Unit I are operating satisfactorily. An examination for residual chlorine shows that a 0.2 p.p.m. is being maintained at all times.

WAREHOUSES AND REEFERS:

All warehouses and reefers are in satisfactory sanitary condition.

INDUSTRY:

The Tofu, Moyashi, and Noodle Factories are operating satisfactorily, and periodic inspections are made and disinfectants are issued to them for the maintenance of sanitation.

COMMUNITY ENTERPRISES:

All the stores and their personnel were found to be in good condition. A memorandum was issued to the supervisors that ice used in the manufacture of beverages should be placed on racks. This recommendation will be followed by the Community Enterprises whenever lumber is made available to them.

Conditions at the Block 12 Beauty Shop is as yet unsatisfactory. There is a lack of hot water, sinks and other necessary items.

There seems to be a noticeable laxness among the barbers in observing sanitary rules. Therefore, it will be necessary to inspect them in a much closer interval than heretofore.

SLAUGHTER HOUSE:

The slaughter house has been screened and cooler weather

conditions have helped in keeping the temperature of the chilling room down. Because the septic tank was built too close to the well, it was thought wise to move it about 200 ft. further down thereby minimizing any danger of contamination of the well. Work on this has been started.

#### LATRINES:

Wash troughs for the latrines are being replaced slowly. However, nothing has been done about the urinals and conditions are approaching a critical stage. It was necessary to deny the use of the urinal because of the excessive leakages in Block 36. Unless work is expedited towards repairing these, we can expect a condemnation of at least 20 wash basins and urinals. Camp II has acquired cement through the Block Manager Supervisor's Office and plan to put an inch of cement coating throughout the entire length of the trough. There exists in our mind the thought that if this material is not made impervious, we may expect an odor nuisance.

#### SEWAGE DISPOSAL PLANT:

All sewage disposal plants are in a sanitary condition. Effluent water from Camp I is as yet not taken care of satisfactorily.

#### BLOCK SANITATION:

There is a need for much improvement in block sanitation. Conditions where clipped grass were allowed to remain within the blocks until flies bred in them has been reported. Due to the cooler weather some blocks are burning garbage with their rubbish and this condition causes an odor as well as a fly nuisance bed.

Since all coolers are now shut off, there is an absence of pools that were of such trouble to us this summer. Plans are now being formulated where gravel will be made available to the residents so that they may dig pits approximately 3 x 3 and use the gravel to line the pits, thereby, minimizing conditions such as we experienced last summer.

#### GARBAGE:

The garbage disposal pit has been moved to Camp III, and the Camp III garbage crew is now under the Sanitation Department. Since Camp I and II are now having any problems in regards to garbage collection, the crew is still left in charge of the Transportation and Agriculture Department.

#### SCHOOL SANITATION:

Since janitorial supplies for the school has as yet

not arrived, a few deficiencies were noted in the schools. There is a lack of waste paper disposal cans and it has been recommended that these cans be placed, one in the girl's latrine, one in the boy's latrine, and one along the corridors spaced approximately one building apart. There is need also for more supervision of the children's lavatory. It has been recommended that these janitors clean the latrines at least twice a day and make an inspection between cleanings. School floors have been found to be dusty in some buildings.

Rec-hall schools are not provided with an adequate drinking system. A recommendation that faucets be turned upward and a drainage pit be dug and lined with gravel has not been followed. Therefore, pools of water are forming underneath some of these buildings.

#### INSECTS:

Flies. The common house-fly has increased tremendously within the last few weeks. A campaign for the control of these flies has been started and is going along smoothly. However, many kitchens are complaining that the fly spray is not potent enough and the fly guns are not satisfactory. All kitchens have been cautioned to cover prepared foods and to appoint one member of the kitchen as fly controller so that flies can be kept at a minimum. The electric fly sprayers used by the Sanitation Department are unsatisfactory and has been breaking down on the average of once a week. Since these sprayers can not be repaired here, it has meant that the pest controllers were unable to work until such repairs could be made. Three new electric fly spray guns have been ordered. These guns are similar to the paint spray guns and it is believed that these will be more trouble-free than the steam vapor type.

Mosquitoes. The mosquito situation is greatly improved, and no greater influx of them are expected until February. This condition may be avoided in Unit I if the sewage lagooning system is put in.

Cockroaches. The cockroaches have infested all the mess halls and are creating a serious problem in about twelve kitchens within the Project. Spraying and frequent cleanings are used as control measures, but it has not been too successful. It is hoped that fumigation of the worse kitchens can be done.

Ants and Crickets. Crickets have virtually disappeared and the sanitary control program has been instrumental in ridding the Project of most of the ants.

Bedbugs. Unit I, Block 34, has reported a bedbug infesta-

tion in one of their barracks. The room in question has been sprayed innumerable times. However, infestation persists. Therefore, we have recommended that a fumigant be procured so that this situation can be controlled. No other infestation has been reported but it is reasonable to expect that occasional reports will come in because of the influx of seasonal workers.

GENERAL REMARKS:

We are reiterating at this time the need for immediate action in Unit I in regards to the disposition of the effluent water in Camp I.

Taking the grave conditions of water pools formed by evaporative coolers within the blocks this summer in consideration, it is recommended that we follow Mr. Rupkey's recommendation in regards to drainage pits lined with gravel. This work should be started immediately so that we will be ready, and the pits in use, by the summer months of next year.

Although some blocks have garbage washing stands connected with their sewage system, there are many who are still washing their garbage cans alongside the kitchen and the resultant water has been a notorious attraction to flies. It is recommended that a garbage washing stand be built within every block and this be connected with the sewage system to take care of the situation. We have observed at another relocation center that they were employing steam in cleaning the garbage cans and it was necessary to bring the cans to a central location. Due to the rough handling, it was noticed that these cans were well battered and in poor condition due to leakages, etc. It is our belief that if the proposed garbage washing station is put up, we may expect the same trouble. Therefore, it might be more economical to put a small washing stand within each block. If the cans are kept in a sanitary condition as they are now, no serious problems will arise except from the resultant wash water.

T. R. Nishimoto, Supervisor  
Division of Sanitation

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*Miss Stover*  
*Shank*

COLORADO RIVER WAR RELOCATION PROJECT  
Division of Sanitation  
Poston, Arizona  
December 15, 1943

*Miss Evelyn Stover*  
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REPORT TO: A. Pressman, M. D., Director, Health and Sanitation  
FROM: T. R. Nishimoto, Supervisor, Division of Sanitation  
SUBJECT: Report on General Sanitation Within Camps I, II and III  
from November 1, 1943 to December 15, 1943

WATER:

Two reports out of the twenty-four water samples sent to the Arizona State Laboratory and the Ninth Service Command Laboratory were declared unpotable due to the presence of coli-aerogenes gas. These samples might have been contaminated at the time of sampling.

In comparison with the reports of other months, it is our belief, substantiated by laboratory reports, that there has been a great deal of improvement in the water since the installation of the gas chlorinators.

Many complaints have come into our office regarding the odor of chlorine in the water, and also that the treated water has affected the skins of various residents and has killed fishes in block ponds in Unit I and II.

We were aware that the residual chlorine content of water was rather high at times in Unit I and II, and this was due to the mechanical difficulties encountered at the pump plants which were corrected from time to time. The system of distribution in Unit I also contributed toward a high content in blocks closest to the pumps.

A survey was made of some of the residents who said that the water affected their skin. Our conclusion is that the water was not at fault.

The affected person was in almost every case elderly. Since the inception of colder weather, their skin secretes less perspiration and oils and age also has slowed down these processes. The older person is staying in the showers much longer in an effort to get warm than the younger resident, and consequently are using more soap which irritates their skin into resentment by paroxysms of a stinging itch. Our advice to the persons affected was to take fewer showers of shorter durations and if they were still affected, to see their doctor.

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We also advised people who complained of the water killing their fishes that this condition was expected since fishes are susceptible to a low residual chlorine content in water. To minimize it, it was suggested that they control the flow of water into their ponds which were in almost every case running day and night.

#### FOODS:

Meats. All meats were of excellent quality. A few complaints were received that there was a lack of cleanliness on some carcasses. This was corrected by the Subsistence Department constructing and laying new racks on the reefer floors and a more careful handling of meats.

Vegetables and Fruits. All vegetables and fruits with the exception of approximately eight crates of yams and squash were of excellent quality.

Canned Goods. All canned goods are being kept and handled in a sanitary manner.

Milk and Dairy Products. All milk and milk products are bought from a reliable firm and are considered excellent.

Eggs. Eggs delivered to kitchens are of a sub-standard grade. Approximately one dozen from each crate is considered unfit for human consumption. This condition exists because it is required that Governmental agencies use up excess cold storage eggs in Government warehouses whenever practical.

Cereal and Grain Products. Silverfish, which affected macaronies and other paste products in the Unit II warehouse, are now non-existent. These products may be issued to the residents if care is taken to pre-heat it at a temperature of approximately 145°F before using. This should be done in the near future.

Other cereal products are still infected with the saw-toothed grain beetle and the flour beetle, but the infestation is not extensive to the recently delivered products.

#### MESS HALLS AND KITCHENS:

Inspection of mess halls showed all kitchens and mess halls in a fairly sanitary condition. It was suggested by Mr. Lowe that all grain and cereal products be stored in one section of the store room to facilitate cleaning out more regularly so that insect infestation can be controlled.

Roach infestations are bad in some kitchens and since it has been advised that fumigation is not practical, more uses will be made of sprays and poisonous dusts.

The method in the use of "Diversol," the disinfectant used in dish washing, is still not understood by many mess halls. Mr. Snelson, Chief Steward, is reissuing instructions to all kitchens as to the standard method to be practiced. The Sanitation Department will send inspectors out to the mess halls to see that these instructions are carried out.

#### LATRINES:

Twelve urinals in Unit I were condemned because of leakages. Unit II has requisitioned cement and screen laths to repair wash basins and urinals and it has proven satisfactory.

The wash basins in Unit I and III are in poor condition.

Unit III has varnished all toilet seats to prevent cracks.

Many toilet seats in Unit I and II are cracked and cracking because of lack of varnishing. We understand that the varnish for this work is available. However, it has not been done because of the lack of men. A few months ago when we observed that it might be a good idea to let the block janitors in Unit I and II have some varnish and brushes to protect these seats, we were told that the work would be done in a few weeks. If this work cannot be accomplished within a few weeks, we will reiterate our request.

Walls in the shower rooms are in poor condition.

#### SEWERAGE PLANTS:

All Unit Sewerage Plants are operating in a satisfactory manner. The personnel are fairly aware of the operations of the system. Contractors are now working to repair many of the existing mechanical faults.

Reeds are blocking the effluent ditches of all Units. Unless these are cleaned out soon, we may expect the existence of mosquito breeding grounds.

All effluents are being properly chlorinated.

#### BLOCK SANITATION:

Since there is so much to be desired in various blocks of the Project, a general "Clean-up Day" has been proclaimed on Saturday, December 18. Proper publicity and support from the various Divisions are expected. With the desire of the residents to start a new year with a "clean slate" well known to us, we are fairly assured of cooperation from them.

#### COMMUNITY ENTERPRISES AND INDUSTRIES:

Canteens: All canteens except the Main Canteen in Unit I are

in a satisfactory condition. The Main Canteen needs a general clean-up.

Barber and Beauty Shops. All Barber and Beauty Shops are satisfactory except the Block 12 unit which still needs hot water connections.

Shoe Shops. There is need for proper heating facilities in these shops.

All Industry groups were operating satisfactorily.

#### GARBAGE AND TRASH DISPOSAL:

The garbage disposal pit at Unit III is being used satisfactorily. Inspection showed that all garbage was covered daily and there was little evidence of flies.

The pit at the piggery in Unit I needs covering more frequently.

Trash burning is carried out daily. However, due to the residents allowing accumulations of rubbish all around the block area, collection is somewhat hampered. One of the objects of the General Clean-up Day is to fix in the minds of the residents that there is a definite spot where trash can be disposed for collection and piles of trash any other place will not be collected for disposition.

#### WAREHOUSE AND REEFERS:

All warehouses and reefers were found orderly and in good condition. There is need for some hooks to keep the warehouse doors closed.

#### SCHOOL SANITATION:

Recreation Hall Schools are now being kept cleaner with the aid of the Block Managers. Sweeping compounds are not used, therefore, there is much dust. Plans are to issue saw dust mixed with oil to the schools for the control of dust. This will be mixed by the Sanitation Department.

There is need for dust control work about the new adobe schools. Plans have been made by the school authorities for the oil surfacing of the school grounds, and they have been sent to Washington for approval. Temporary control will be practiced with the aid of the Operations Division by irrigating and sprinkling.

Janitorial supplies and work at these adobe schools are still unsatisfactory in comparison to block janitorial work.

INSECTS:

Mosquitoes. No problem exists. There have been isolated cases where fire barrels were found breeding larvres. The mosquito crew is now burning grass along ditches and oiling the effluent water about twice a week. We may expect mosquitoes by the latter part of February.

Flies. The common housefly has decreased due to colder weather and more rigid control at the garbage pits. Formalin solution poisons are being put out at the tin can dump pile and the results are satisfactory.

Cockroaches. Cockroach infestation within kitchens are on the increase. A few barracks are now affected within Unit I. It has been suggested to the kitchens that cereal and grain products be assigned to one part of the store room so that these can be cleaned out more readily. Barrack residents have been cautioned to keep all food products in tightly sealed cans and to clean out their room.

Silverfish, Flour and Saw-toothed Grain Beetles. Grain and cereal products show only slight infestation. These are being cleaned out to prevent infestation of the remaining products.

RECOMMENDATIONS AND GENERAL COMMENTS:

The conditions within the Block latrines are approaching a deplorable state. Wash basins and urinals are leaking; walls in some are in an unsanitary condition; and many toilet seats are cracked or cracking because of lack of varnishing. There is a need for immediate action on this matter.

To minimize the forming of pools within blocks, gravel of a large size should be made available to the residents so that it may be used for drainage pits. It might also be a good idea to order excelsior and pass it on to the residents having coolers. The cost of the excelsior will be offsetted by the difference in the cost and amount of water used, it being known that a well packed evaporative cooler will use a minimum of water to maintain maximum efficiency.

There is need also for an appointed Sanitarian on the Project. It is believed that the Sanitation Division can accomplish much more by being directed by an experienced person who has been educated in this line of work. Also, at times, relationship between the Department and the residents are somewhat strained when a difference of opinion exists as to what might be considered a sanitary hazard or problem. An appointed Sanitarian might help to solve some of these difficulties.

T. R. Nishimoto, Supervisor  
Division of Sanitation

COLORADO RIVER WAR RELOCATION PROJECT

Division of Sanitation

Poston, Arizona

February 15, 1944

REPORT TO: A. Pressman, M.D., Director, Health & Sanitation  
FROM: T. R. Nishimoto, Supervisor, Division of Sanitation  
SUBJECT: Report on General Sanitation Within Camps 1, 11, and 111  
from January 15 to February 15, 1944

WATER:

All bacteriological reports for Unit 11 & 111 were "safe for human consumption". Two reports for Unit 1 suggested re-examination.

All water and sewerage mains were reported in good condition.

Plans for the flushing and disinfecting of the water mains within Unit 1 were discussed with Mr. Bowman. February 17 and 21 has been set as the date when this work will be done. Proper notices will be given to the residents.

Residual chlorine readings were found low in all three units but are considered adequate.

FOOD:

Milk & Dairy Products. All milk and dairy product were found satisfactory.

Meat. All meat with the exception of Beef delivered on the week of February 7 were found in excellent condition. The Beef in question were found unsatisfactory because of the inadequate space in the Unit 1 Reefer which necessitates their laying on racks.

Vegetables & Fruits. All vegetables with the exception of some 35 crates of lettuce were found in good condition. There were some spoiled oranges delivered from the Quartermaster Division.

Canned Goods & Staples. With the transfer of many of the Subsistence warehouses to the former camouflage plant a system of storage is possible. The high ceilings and more space will insure cooler circulation of air during the summer months than was possible in the Project warehouses.

Working conditions are also improved.

Cereal and Grain Products. 1--Some silverfish infestation still exists in the paste products in the 208 warehouse. 2--A few red flour beetles were found in some sacks of flour. Aside from these infestations all other products were found in a good condition.

#### MESS HALLS & KITCHENS:

Some difficulties were encountered in the store rooms of many of the kitchen within the Project. Mr. Snelson instructed that all store room keepers to arrange their food products in keeping with good Sanitary practice. Most kitchens has cooperated.

|| The mess hall & kitchen making the greatest improvement was the Personell mess hall in Unit 1.

|| There seems to be a certain laxness upon the new employees of mess halls and kitchens in complying with the request that all mess hall workers have a chest examination prior to working. A recommendation should be sent to the Employment division requesting that they refuse work assignment sheets to food handlers who cannot prove that they have been examined.

A program consisting of series of meetings of mess hall workers will be started soon with the consent of the Stewards' Department. These meetings will consist of:

- 1--Apprising food handlers of their responsibilities in governing community health.
- 2--Outlining and demonstrating proper dish and utensil washing procedures with and without the use of disinfectant.
- 3--Demonstrating the proper placing of foods within refrigeration units.
- 4--Teaching what constitutes a sanitary inspection and how to maintain and operate their mess halls and kitchens in an sanitary manner.

#### LATRINES:

All latrines were found in satisfactory condition. With the repair of wash troughs and urinals accelerated in the last month. Further trouble with leaks are not anticipated.

Toilet seats has been re-varnished in most instances and are now protected against the water and disinfectant used in washing.

#### SEWERAGE PLANTS:

All disposal plants are being operated satisfactorily. Unit 1 has had check gates installed. Other necessary work were done. The Ph. reading of the sludge in the various Units were: Camp 111 7.2 Camp 11 7.2 and Camp 1 6.8.

Unit 1 will be checked again to determine whether lime addition is necessary.

The effluent was chlorinated properly in all units but the proper disposition of it has not as yet been worked out.

#### GARBAGE AND TRASH COLLECTION:

Truck breakdowns has interrupted garbage collection.

Collection of inedible garbage had been unsatisfactory and the problem of blocks burying and disposing of this type of garbage in the block areas were experienced. Contacts were made with the garbage crews and the offending kitchens and we asked for their cooperation in getting all inedibles to the garbage pit.

The old garbage pit has been filled and a new pit has been dug.

Covering is done daily.

Trash collection has been satisfactory.

#### INDUSTRIES:

The Tofu & Moyashi factories were being operated under sanitary conditions.

The Noodle factory in Unit 1 has much to be desired. The building is dirty. Utensils can be kept cleaner and personal cleanliness can be improved upon. Proper notices were sent.

#### COMMUNITY ENTERPRISE:

All canteens, Beauty shoppes and warehouses were found in good order. Soda water and some pears procured by the Enterprise were found unsatisfactory.

#### BLOCK SANITATION:

The conditions within the blocks are unsatisfactory in Unit 1 and 11. Residents are not cooperating in separating garbage from trash and

are in some cases burning it within the block areas with the resultant residue of unburnt garbage which constitutes a nuisance.

Fish ponds are not kept clean. An increase has also been noted in that people are disregarding our suggestion that slop pails be used with inside faucets. An intensive program will be carried out again to stamp out this practice this month.

Fowls raised by Residents within Blocks are creating a nuisance and menace to the community health. A uniform ruling should be made by the Community Council prohibiting the raising of fowls and animals within the Block area.

This would aid us in control work.

#### SCHOOL SANITATION:

Conditions were slightly improved in school buildings.

Dust control work is as yet unsatisfactory.

#### WAREHOUSES, REEFERS & ABATTOIR:

Warehouses are in need of some cleaning up but are considered satisfactory.

An improvement can be made in the meat reefer if a system of rollers and rails could be installed, which would increase the hanging capacity approximately twice thereby overcoming the necessity of laying meat on racks.

#### PESTS:

Mosquitoes. A few mosquitoes are being discovered within Blocks and control work will be started this week. Numerous larvae are being found in the sewerage effluent lakes and in the overflow ditch bounding the north side of Unit 1.

Flies. Flies were found breeding profusely at the piggery pit. Our recommendation that the pit be kept covered with dirt has not been followed. Contacts were made with the Agriculture Dept. and we again asked that a program of covering be put in effect at once. Fly spray guns are expected in the near future for fly control work within the Project.

Rats. Reports that rats are in the Project were made by the Unit III Disposal plant. Exterminating work with poisons will be attempted since the proximity of the disposal plant will insure that children and animal pets will not be about.

Roaches. All kitchens are now infested with roaches. 14 kitchens have an extensive infestation.

Control work consists of spraying with insecticide, cleaning up and the application of Sodium Flouride.

GENERAL COMMENTS:

The program of heavily chlorinating water in Unit 1 is expected to improve the quality of water.

Experiences during the past two years has proved that March and April are the months when flies and mosquitoes are of greatest nuisance in Poston. Conditions existing within Blocks and at the local Piggery must be corrected to facilitate control work.

There will be a general change of personell within the Sanitation Department this month and we are asking for the continued cooperation from other Divisions.

T. R. Nishimoto, Supervisor  
Division of Sanitation

TRN/mk