



MICHIGAN PREMIER LAUNDRY

METHODS AND PROCEDURES

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PART I

INTRODUCTION

BACKGROUND INFORMATION

Michigan Premier Laundry (MPL) is an off-site central laundry which is currently owned and operated by McLaren-Bay Region, Ascension St. Mary's Hospital, Ascension St. Joseph Hospital, HealthSource Saginaw, and Covenant Health System. Established in 1969, the philosophy of Michigan Premier Laundry was to consolidate methods of operations and standardize products. Thus far 614 million pounds of hospital laundry has been processed and shipped to our end users. Like other industries, we are also bound by agencies and commissions. This report will display to our valued customers how serious we are about all aspects of the laundering process that we embark upon each day. We recognize the importance of the linen we launder and how important our products are to achieve high-quality patient care. To display how serious we are, we have prepared this "Methods and Procedures for Handling Soiled and Clean Linen at Michigan Premier Laundry". This report will reveal the methods of handling soiled and clean linens at MPL.

PURPOSE

This report seeks to point out the methods used for processing linen at MPL. We intend to display how we abide by the standards imposed upon our industry by MIOSHA as well as those established by the Healthcare Laundry Accreditation Council (HLAC) and other agencies and commissions. HLAC is a non-profit, independent organization comprised of voluntary board members who work or serve in the healthcare industry. HLAC's mission is to publish the highest standards for healthcare laundries and provides an inspection and accreditation process for laundries seeking to further strengthen their operational policies, procedures and employee skills and knowledge. HLAC standards focus on a variety of objectives. The inspection process reviews the textile processing cycle, occupational safety, training, quality control and regulatory issues. A laundry, such as ourselves, that has chosen to pursue HLAC accreditation is an industry leader and has made a commitment to provide the highest level possible of products and services to the customers they serve. The standards and practices we abide by will assist the healthcare facilities we serve in fulfilling their infection control and patient care responsibilities and obligations.

SCOPE AND LIMITATIONS

Clean linen is an essential component in obtaining excellent patient care at the facilities we serve. Effective distribution and utilization of this linen is essential in maintaining a successful linen supply program. The linen used by MPL customers are standardized products which are part of an ongoing circulating inventory in which a given item is used at the hospital, collected after use, returned to the laundry to be sorted, washed, pressed, dried, ironed, folded, packed, and returned to our end users, whereas the cycle repeats itself once again. This

distribution cycle must meet certain criteria to maintain the linens integrity and quality. MPL is a unique operation and the methods used here may not be the same as those used by other non-related industries.

SOURCES AND METHODS OF COLLECTING DATA

Information for this report was gathered from both primary and secondary research. The major portion came from the general operations of MPL which was substantiated by various personal interviews and observations.

REPORT PREVIEW

The logical presentation of this report should allow the reader to better understand the various stages of the laundry process which takes place at MPL daily. This report will also point out to the reader what methods and practices are in place throughout the entire laundry process that are related to any infectious, quality, training and maintenance control measures we have in place and follow. This report will also concisely explain how we handle the flow of both soiled and clean linen as it moves from one process to another at MPL.

PART II

SOILED LINEN OPERATION

SOILED LINEN PICK-UP PROCEDURE

MPL tractor trailers arrive daily to pick up the soiled linen which has been placed in our two-way transportation carts from our end users. The soiled linen contained within these transportation carts is placed in clear/blue plastic bags. It is not necessary to use colored bags to differentiate between certain classes of soiled linen. MIOSHA's Universal Precautions contained in our Exposure Control Plan clearly states that all soiled linen shall be considered infectious and contagious and should be handled accordingly. We ask our end users to remove as much foreign materials such as trash, instruments and any other non-linen related materials from the soiled linen before it is sent back to the laundry. The full carts of soiled linen are then rolled onto and secured inside the trailer to be transported back to MPL. It is important to note that MPL is starting to phase in the use of plastic carts which will eventually replace the magnesium carts that are in the system.

SOIL LINEN DOCK

Upon arrival, the MPL truck driver backs the tractor trailer, box truck, or van into the garage located on the southwest side of the building. Once parked, the truck driver removes each cart that contains soiled linen from the cargo area and places six of them at a time on the elevator car. The carts are then transferred to the soil sorting department which is contained on the second floor of the building. This garage and elevator are only used to unload the soiled linen from the trucks. We have another elevator on the opposite side of the building which is used for transferring clean carts back down to the main floor.

SOIL LINEN SORTING

After the soiled linen has arrived in the soil sorting department, the carts are taken to the starting point of the soil sorting line. The carts of soiled linen are placed on a lift table so they may be safely positioned in front of the employee(s) who will open each clear plastic bag. Once the plastic bag is opened, the soiled linen contained in these bags is placed on the soil sorting conveyor. The soiled linen then begins to move down the conveyor where linen sorters sort the linen into predetermined classifications. The linen sorters are trained to treat all soiled linen as if it is infectious and contagious. Therefore, they must wear all required PPE. The linen they are sorting is then placed into slings capable of holding 150/242-pounds of soiled linen. These slings are contained in carts on wheels which are easy to move once the predetermined level and weight of linen is achieved. For example, one sling cart will contain 150/242-pounds of bath towels whereas another contains 150/242-pounds of bath blankets. Once the predetermined weight is achieved another employee transfers the sling cart to one of two scales to verify its weight. Once weighed, it is then moved to the programming area to be placed onto the Ryco/Etech Rail System which automatically transfers the 150/242-pounds of soiled linen contained in the slings into an overhead monorail system which automatically will move each sling over the chutes of one of three continuous batch washers located on the bottom floor. Once over the tunnel chute, sequentially, each sling is automatically opened so the goods contained in each sling can be loaded into the first chamber of the tunnel washers. Each item has a stored number in order to know the wash cycle to be used.

CART INSPECTION, REPAIR AND CLEANING

Once the soiled linen has been removed from the two-way transportation carts, they are placed into a cart washing area which is separated from the soil-sorting area to reduce any cross-contamination issues. Once in the staging area, trash is removed from the cart, large pieces of trash are removed with a picking arm and small debris is vacuumed out. All carts are then sprayed with MICROKILL {FDA registered disinfectant, see SDS for more detail} solution on the sides and bottoms. The MICROKILL is left on the surface for three (3) minutes minimum; the solution can air dry on the carts. All stains are hand treated with cleaner and then washed until the cart is clean and ready to be used for clean linen. The netting on the plastic carts are sprayed with a disinfecting spray or removed and washed if necessary. A plastic liner is placed in the bottom of each transportation cart. After the cart has been adequately cleaned, it is then inspected by maintenance and the appropriate repairs are made and documented. Cleaned carts are taken to the clean elevator car to be transported downstairs to the main floor to be utilized and packed with clean linen once again. In summary, the carts containing soiled linen arrived at the laundry on our transportation vehicles. The carts of soiled linen are then transported upstairs on an elevator car designated strictly for soiled linen. The carts of soiled linen are then moved to the sorting area where the bags of soiled linen are opened one by one and placed on the sorting conveyor. Once the carts are emptied, they are taken to the cart wash staging area where they are cleaned with an FDA registered disinfectant. Once this process is complete, the clean carts are then placed on a different elevator so they can be sent back downstairs to be reused.

It is important to note that this entire process took place on the second floor of the laundry which is separated from the finishing area which is located on the first floor. This separation eliminates the potential for any cross-

contamination between the soil sort area located on the second floor and the finishing area located on the first floor. Finally, MPL maintains a positive air pressure on the first floor in the finishing area to prevent any potential cross contamination between the soil sort area and the finish area.

PART III

WASHING, PRESSING, AND DRYING OPERATIONS

WASHING PROCESS

The primary wash systems utilized at MPL are a 150-pound, 16- module Lavatec Continuous Batch Washing System, a 150-pound, 8-module Milnor Continuous Batch Washing System and a 242-pound, 13-module Kannegeisser Continuous Batch Washing System. All these washing systems are located on the first floor directly below the soil sorting department. All washers are loaded via the Ryco/Etech Rail Sling System which is in the soil sort department. All tunnel washers are located on the first floor behind a wall on the west side of the building.

RYCO/ETECH RAIL SLING SYSTEM

Once a given classification of goods has achieved its required weight, the sling is taken over to the hoist area to be programmed and placed on to the overhead Ryco/Etech Rail System which is used to sequentially load all tunnel washers. Before the sling is placed on to the Ryco/Etech Rail System, a programmer inputs the classification or type of linen to be programmed and its weight so it may be stored in memory throughout the wash, press and drying process. Each sling is sequentially paired up with another sling containing the same classification of linen as itself so they may be paired up in the drying process. Once the programming is complete, the programmer, with the use of a trolley and hoist, places the sling straps on to the trolley so it may be transferred to the Ryco/Etech Rail System. The programmer has the capability of storing 60-slings each on both the Lavatec and Milnor lines and 24-slings on the Kannegeisser line.

Every two minutes the sling which is at the "hopper" position on the Ryco/Etech Rail Sling System will automatically drop into the tunnel washer chutes which are attached to the front end of each of the tunnel washers. Once empty, the sling automatically returns to the Ryco/Etech Rail System hoist area to be placed onto an empty sling cart to be refilled with soiled linen. The remaining full slings on the Ryco/Etech Rail System will then automatically advance forward until the command from the tunnel CPU releases the next sling of linen into the first module of each tunnel washers.

LAVATEC TUNNEL WASHING SYSTEM

A sling containing 150-pounds of linen is automatically dropped into the Lavatec CBW washer via a chute into the first module or chamber of the Lavatec CBW washer. As it enters the first module water begins to flush the linen into the first module of the sixteen-module tunnel washer to obtain its initial required water level. After two minutes has expired, the linen in module one is then transferred into module two.

The items in module one will transfer to module number two. The items in module two will at the same time transfer into module three and so forth. Each module is responsible for a given purpose in the wash process. Modules one through four will flush and rinse the soil from the items. Modules five through eleven are responsible for the soap and bleaching baths. Modules twelve through sixteen are responsible for rinses and sour bath to successfully activate the bleaching agent. Once reaching module sixteen the items in this module will transfer into a press whereas the items are pressed to remove as much water as is possible before the items are automatically transferred into a dryer by Softrol systems.

To summarize, the first four modules of the Lavatec tunnel washer basically rinse and flush as much soil from the linen as possible before they enter modules five through eleven where most of the chemical cleaning action takes place. The temperatures in modules one through four are programmed not to exceed temperatures of 110 degrees or more so we do not set stains which may occur from the presence of blood, feces, urine and other damaging foreign matter. As the items enter modules five through eleven the water temperatures, with the aid of steam injectors, begin to rise to 140 degrees Fahrenheit so the chemicals activate and perform to their optimum potential. The total wash cycle time of any given load in the tunnel washer is approximately 28 to 32 minutes before it moves from the first module of the tunnel washer until it is transferred into the press. Chemical titration reports (see Appendix A) are conducted by a chemical technician every month on the Lavatec tunnel washer. The reports and information generated from these titrations contain pertinent information of which is recorded and filed for the review of management at MPL and their customers.

The chemicals we currently use are as follows:

- Remedy (detergent)
- Advacare disinfectant
- Eco-Star Turbo Boost
- TurboCharge NPII (alkali)
- TurboFresh (softener)
- Injection Sour (ph balance)
- Turbobrite (bleach)
- Turbotex (bleach eliminator)

The Safety Data Sheets for these products, as well as all the chemical agents and products utilized at MPL, are contained in the employee "Right to Know Center" located in the employee lunchroom for the employees or any other interested parties review.

AQUABATCH /AQUADRAIN FILTERING SYSTEM

The AquaBatch is a filter system specifically designed to remove hair, lint and sand out of the Lavatec Tunnel. Water is pumped out of the rinse zone at the lowest point, filtered, and transferred back into the same compartment.

The AquaDrain is a bag filtration system used to filter the back flush water from the AquaBatch. An oscillating filter bag removes the solid particles from the back flush water reducing the amount of lint, sand, debris and COD.

KANNEGIESSER PRESSING SYSTEM

Once a given category of linen is in module sixteen of the tunnel washer, it is in the final phase of the washing process. In two minutes, as stated above, the washed item in module sixteen will then transfer into the press basket which is attached to the back end of the tunnel washer. This is a fully automated process. Keep in mind, once a given classification of linen is hung into the air on the Ryco/Etech Rail System in soil sort, the washing, pressing, and drying processes are now fully automated until the items are dried and then need to be hung into the air to be sent out to the finishing department.

Once the items are in the press basket, the ram head begins to move down into the basket to extract as much water from the linens as is possible. This process takes approximately 90-seconds. The amount of pressure applied to the items in the basket is 40-bar or 580 psi. Once the press process is complete, the items are then transferred to the Kannegiesser conveyor where the pressed "cake" is paired with a similar class of goods into a Softrol bag before being loaded into the next available dryer.

MILNOR TUNNEL WASHING SYSTEM

The Milnor Tunnel Washing System works in a similar fashion to the Lavatec Tunnel Washing System, mentioned above. Soiled linen is automatically discharged into a chute located in the soil sort department which is connected to the Milnor tunnel washer located directly below. Once in the washer, the soiled linens are saturated with water to flush them into the first chamber of the tunnel washer. Every two minutes the items in chamber one will then automatically transfer to chamber number two and so forth until it reaches the eighth chamber where the now washed goods will then be transferred into the single stage press.

Each chamber of the tunnel washer is responsible for a certain function in the washing process. Chambers one through three are responsible for the flushing process where we try to remove as much organic matter as possible before we start the actual soap and bleaching baths, which is done in chambers four through six. For the bleaching agent to be effective, it is necessary for us to reach a wash temperature of 140-degrees Fahrenheit in chambers four through six. To achieve this, steam at 315-degrees Fahrenheit is directly injected into these chambers to assure that this objective is met. In the final two chambers, we will add sour to achieve a pH factor of 7.5 and then rinse and drain before transferring the 150-pound batch of linen into the 50-bar single stage press. Again, all the chemicals and corresponding SDS used in this process are in the "Right to Know Center" located in the employee lunchroom for all to review.

AQUABATCH /AQUADRAIN FILTERING SYSTEM

The AquaBatch is a filter system specifically designed to remove hair, lint and sand out of the Milnor Tunnel. Water is pumped out of the rinse zone at the lowest point, filtered, and transferred back into the same compartment.

The AquaDrain is a bag filtration system used to filter the back flush water from the AquaBatch. An oscillating filter bag removes the solid particles from the back flush water reducing the amount of lint, sand, debris and COD.

MILNOR PRESSING PROCESS

Once in the press basket, the 150-pound batch of linen is pressed using a hydraulic ram head which is forced down upon the linen at 725 psi for ninety seconds. The goal is to remove as much water as possible to limit the amount of time we must dry each item to minimize our daily natural gas consumption.

Once the items have been pressed, the now "cake" shaped batch of linen is transferred onto the Kannegeisser lift conveyor, before being transferred to a Softrol bag. Once the Softrol bag has been loaded with two 150-pound batches of similar items, the bag will be automatically transferred to the first available Kannegeisser dryer.

KANNEGEISSER TUNNEL WASHING SYSTEM

A sling containing 242-pounds of linen is automatically dropped into the Kannegeisser CBW washer via a chute into the first module or chamber of the Kannegeisser CBW washer. As it enters the first module water begins to flush the linen into the first module of the thirteen-module tunnel washer to obtain its initial required water level. After two minutes has expired, the linen in module one is then transferred into module two.

The items in module one will transfer to module number two. The items in module two will at the same time transfer into module three and so forth. Each module is responsible for a given purpose in the wash process. The current chemical inject points for this tunnel washer are as follows. Compartment 1-TurboCharge II NP and Remedy, Compartment 2-3 TurboBrite, Compartment 4-11 Disinfectant and Remedy, and Compartment 12-13 Injection of Sour and TurboFresh. Once reaching module thirteen the items in this module will transfer into a press whereas the items are pressed to remove as much water as is possible before the items are automatically transferred into a dryer by Softrol systems.

To summarize, Compartment 1-TurboCharge II NP and Remedy, Compartment 2-3 TurboBrite, Compartment 4-11 Disinfectant and Remedy, and Compartment 12-13 Injection of Sour and TurboFresh. The temperatures in modules one and two are programmed not to exceed temperatures of 110 degrees or more so we do not set stains which may occur from the presence of blood, feces, urine and other damaging foreign matter. As the items enter modules 2-3 through the water temperatures, with the aid of steam injectors, begin to rise to 140

degrees Fahrenheit so the chemicals activate and perform to their optimum potential. The total wash cycle time of any given load in the tunnel washer is approximately 28 to 32 minutes before it moves from the first module of the tunnel washer until it is transferred into the press. Chemical titration reports (see Appendix A) are conducted by a chemical technician every month on the Kannegeisser tunnel washer. The reports and information generated from these titrations contain pertinent information of which is recorded and filed for the review of management at MPL and their customers.

The chemicals we currently use are as follows:

- Remedy (detergent)
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The Safety Data Sheets for these products, as well as all the chemical agents and products utilized at MPL, are contained in the employee "Right to Know Center" located in the employee lunchroom for the employees or any other interested parties review.

AQUABATCH /AQUADRAIN FILTERING SYSTEM

The AquaBatch is a filter system specifically designed to remove hair, lint and sand out of the Kannegeisser Tunnel. Water is pumped out of the rinse zone at the lowest point, filtered, and transferred back into the same compartment.

The AquaDrain is a bag filtration system used to filter the back flush water from the AquaBatch. An oscillating filter bag removes the solid particles from the back flush water reducing the amount of lint, sand, debris and COD.

KANNEGIESSER PRESSING SYSTEM

Once a given category of linen is in module thirteen of the tunnel washer, it is in the final phase of the washing process. In two minutes, as stated above, the washed item in module thirteen will then transfer into the press basket which is attached to the back end of the tunnel washer. This is a fully automated process. Keep in mind, once a given classification of linen is hung into the air on the Ryco/Etech Rail System in soil sort, the washing, pressing, and drying processes are now fully automated until the items are dried and then need to be hung into the air to be sent out to the finishing department.

Once the items are in the press basket, the ram head begins to move down into the basket to extract as much water from the linens as is possible. This process takes approximately 90-seconds. The amount of pressure applied to the items in the basket is 40-bar or 580 psi. Once the press process is complete, the items are then transferred to the Kannegiesser conveyor where the pressed "cake" is paired with a similar class of goods into a Softrol bag before being loaded into the next available dryer.

KANNEGIESSER DRYER SYSTEM

Once the cakes are discharged from the Kannegiesser or Milnor press they are transferred onto a Kannegiesser lift conveyor. The lift conveyor then takes the cake to the overhead transfer conveyor which transfers the cake onto a Softrol bag on the loading station. Once the cake or cakes have transferred into the bag the bag will automatically discharge and stage itself by bag lift #1 to be lifted to the next elevation. Once the bag goes on the lift #1 and discharges to the first rail elevation it will then go on lift #2 to be raised to the dryer room elevation. Once the bag on lift #2 reaches the dryer room elevation it will then discharge to the dryer storage rail where it will be sorted or released to one of six loading conveyors. Once it is decided that the bag of goods is going to the dryers it will stop above 1 of the 10 loading conveyors where it will stop, stabilize, and then be released onto the conveyor which is placed between two dryers. The load will then go into whichever dryer is ready to accept it. The bag will then be released and go to bag lift #3 where it will then be lowered to the return rail to be returned to the bag loading area to repeat the process over again.

Once the load in the dryer finishes its cycle it is discharged onto the discharge conveyor which runs along the back of the dryers. The discharge conveyor runs the goods to an incline conveyor then it dumps the goods into a dry goods bag that is stationed under the incline conveyor. Once the goods discharge into the bag the bag will release on go to bag lift #4 where the bags are lifted to the clean/dry storage rail that discharge to the finish floor.

SMALL BATCH WASHING AND DRYING PROCESS

Occasionally non-standard linen, such as cubicle curtains and sleep center bedding arrive in carts with the standard linen, once these items are sorted from the standard items they are put in a chute or delivered to a special laundry area to be washed as "special items".

The non-standard items or "special items" are washed in conventional washers. There are 5-conventional washers used for this purpose; one 35-pound, one 55-pound, one 65-pound and two 80-pound. These washers are manually loaded by MPL employees who are required to wear PPE (eye, nose, mouth protection, cover gown, and rubber gloves) when handling the soiled linen.

Once the soiled linen is loaded into the washers the employee uses a Caviwipe (disposal disinfecting wipe) to wipe down the door, handle and inside frame to remove any possible containments; then dispose of the wipe in

the trash basket located near the washers. All the above-mentioned washers have pre-programmed wash cycles and the laundry chemicals are automatically injected in the appropriate amount for the designated cycle.

After the wash cycle is complete the laundry is placed into one of the corresponding dryers four 170-pound dryers. The appropriate dry time is selected based on the type of linen item being placed in the dryer. Upon completion of the drying cycle these "special items" are folded to customer specifications and packed in a cart for delivery to the customer.

PART IV

FINISHING DEPARTMENT OPERATIONS

IRONING

Ironing consists of running an item through a flatwork ironer. Each ironer utilizes steam to heat the ironer chest. The linen going through these ironers travels across heated chest and rollers which have chest surface temperatures of 320-degrees. Before the ironing process begins, every item is quickly inspected for stains, tears, or holes, rejected items are not fed into the ironer. These discarded items are then placed into a rewash (if stained), mending or rags depending on the degree of tear or hole. Each ironer runs between 60 and 130-feet per minute. Once exiting the ironer, the ironed item is then sent through a machine which automatically folds and stacks the item onto a discharge conveyor. Every year, each ironer is cleansed and the pads and covers on each of the ironer rolls are replaced. Vacuum motors attached to each ironer remove the now condensed steam from the ironer chest and returns the condensed water back to the vented receiver tank located in the boiler room which feeds make up water to the boilers which generate the steam we use in the plant.

STEAM TUNNEL SYSTEM

Not all linens are sent through the ironers. Another method of ironing is through the Steam Tunnel System. Special items, such as cover gowns, patient gowns, warm up jackets, and OR Scrubs are sent through the Steam Tunnel System.

The items are hung on one of four hanger stations where they end up on a storage rail to be run through the steam tunnel. The steam tunnel injects steam to relax the fibers of the garments to eliminate wrinkles then a gas fired burner aids in the drying process. Once the items exit the steam- tunnel they end up on one of three automated storage rails until the work leader pulls the items to the sortation area. Once the items run through the automatic sortation process, they will continue to the two FAX folders where the items will be folded and placed into stacks for the packer to tie and place in packing carts.

FOLDING

There are several items that do not need to be ironed. These items are either contained in dryer slings on an overhead rail system or are placed into a dryer cart. These items are then manually taken to the appropriate finish area. Once there, the items in dryer slings are opened and safely emptied into a dryer cart which is positioned in a lift table. The items which are not in a dryer sling, but are already in dryer carts, are safely positioned onto a lift table. The lift tables allow the operator to lift the cart towards them so the linens in them can easily and safely be removed from the cart. Once an item is removed from the cart, the operator inspects the item and then will either hand fold or place the item neatly into a machine which will automatically fold, stack, and discharge the item onto a discharge conveyor.

Once an item is folded and stacked it will either be placed directly into a transportation cart or into a temporary storage bin or shelf until it is needed to fill an order. Other folded and stacked items are tied together and then placed into a cart, bin or shelf until it is needed to be packed for an order.

PACKING

Now that an item has been folded and stacked, it is now available to be packed and sent back to our end users. All the accounts we serve have a standard order which lists the amounts of an item they will need for their next delivery. These standard orders are in a web-based system (linen master). These orders can be changed or adjusted according to the customer's need for an item(s). The orders automatically print at designated times, once the pick tickets are printed, they are given to each packer, so they understand exactly what it is they are to pack for this delivery.

Upon receiving a copy of the customers pick tickets, each packer can now begin to pack the items they are responsible for into two-way transportation carts. The packer will first sequentially pack items, so the entire cart is effectively utilized. For example, one cart can hold 600 top sheets, 500 bath towels or 400 under pads. Sometimes the packers will combine two or more different items in the same cart, so the cart is fully utilized. For example, a packer may pack 200 top sheets, 200 bath towels, and 3 or 4 bags of mops in one cart. Most customers are set up as a calculated weight customer, however others are set up as a clean weight customer which creates an additional step after packing. Clean weight carts must pass off the scale and be scanned into the linen master program. The scanner adds the cart and the items to the program for invoicing purposes. Once the carts have been weighed and scanned, they are moved to the dock area for shipping.

On any given day we may pack up to 75,000-95,000 pounds of linen. This is the reason why we must make effective use of the carts available to us each day. If carts are full of linen and are not emptied at the facilities we serve, the cart cannot be returned so we may reuse it for another account. Therefore, it is vitally important that our customers refrain from using our delivery carts for storage. This creates a shortage of carts at the laundry facility. There have been times we had to stop production because we did not have a cart to pack linen into. Once a standard order has been packed, the cart is then labeled so we may identify which facility the cart of linen will go to when it is time based on a predetermined delivery schedule.

Before a cart packed full of linen is placed on the storage dock, it is covered with a clear plastic cart cover. This cover remains on the cart until it is delivered and is securely placed in the facilities we serve. Once inside, the cart cover is then removed and discarded. One must realize we have two separate docks. Once dock is used for soiled linen carts, and the other dock is used for delivery of clean linen. The two docks are in separate locations on opposite ends of the building which prevents any cross contamination resulting from soiled linen coming in contact with clean linen.

DELIVERY

Once all the carts of linen for an order have been packed and positioned onto the clean linen dock, these carts can now be delivered. At the appropriate time, the truck driver will load the carts of clean linen for an account onto the trailer. Once complete, the driver secures the cart inside the trailer then closes the trailer door. To make effective use of our deliver trailers, assuming there is enough room, we may deliver two or more accounts on the same trailer.

Once the truck driver arrives at an account, he positions the trailer safely at a dock bay and begins to unload the carts of clean linen off the trailer. For those accounts without a dock, he positions the trailer as close as he can to the delivery point and makes effective use of the lift gate option on the trailer to unload the carts of clean linen. Once the trailer is emptied, the truck driver closes the trailer door so he may go off to his next destination or he returns to MPL to reload.

Every day the driver allows fresh air to circulate inside each trailer and delivery vehicle. The inside of all delivery vehicles is swept daily to remove any debris left behind from pick-ups and deliveries. Also, on a weekly basis the delivery vehicles are spray washed with MicroKill, an EPA registered disinfectant. This is done weekly or when there is visible soil in the vehicles.

PART V

SUMMARY AND CONCLUSION

The purpose of this report was to identify the methods and procedures by which we handle soiled and clean linen at MPL. In this report we identified how we maintain and practice a high degree standard of operation when we handle soiled and clean linen. Infectious and cross contamination control measures and practices which are in place define how we shall handle soiled and clean linen throughout the entire laundering process. We identified that the soil sort department is located on the second floor of the laundry, whereas the finishing department is located on the first floor. We determined there is constant positive air pressure in the laundry facility which prevents cross contamination between the two departments. We determined that all the soiled linen which comes into the laundry is treated as if it were infectious. Therefore, we make good use of all the practices defined and mandated by MIOSHA and HLAC which are listed in our Exposure Control Plan.

We identified in this report that the soiled linen is sorted, washed and pressed in rooms which are separated from the finishing department area, virtually eliminating any potential cross contamination issues which may arise by soiled linen coming in contact with clean linen. We also identified how the linen is washed, pressed, dried then placed into the finishing department to be inspected, ironed, folded, and packed.

We identified the safeguards which are in place in all departments at the laundry which serve to prevent cross contamination of soiled linen and clean linen. The processes we use to sort, wash, press, dry, inspect, iron, fold, pack, and deliver linen all have built in safeguards which insure the linens we provide to our end users are clean and free of any living bacteria and organisms which may have survived the wash process. Finally, the temperatures maintained on our ironer chests during the ironing process serve as the last line of defense against any remaining living organisms, if this ironing is part of the finishing process.

As stated earlier, we take very seriously the functions we perform at MPL. We do not take lightly the importance of every step taken during the laundering process. The methods and practices in place allow us to follow all the requirements imposed upon us and the customers we serve by MIOSHA and any other agencies and commissions.

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