

LEHIGH COUNTY AUTHORITY

August 11, 2014

WORKSHOP MEETING AGENDA

1. Call to Order
2. Review of Agenda
 - *Public Participation Sign-In Request*
3. Executive Sessions
4. Approval of Minutes
 - *July 14th, 2014 Workshop Meeting Minutes*
5. Public Comments
6. Action / Discussion Items

FINANCE AND ADMINISTRATION

- *Health & Safety Manual (Approval)*

WATER

- *None.*

WASTEWATER

- *None.*

7. System Operations Overview
8. Staff Comments
9. Solicitor's Comments
10. Other Comments
11. Adjournment

SEPTEMBER MEETINGS

Workshop Meeting
Board Meeting

September 8 – 12:00 p.m.
September 22 – 12:00 p.m.

PUBLIC PARTICIPATION POLICY

In accordance with Authority policy, members of the public shall record their name, address, and discussion item on the sign-in sheet at the start of each meeting; this information shall also be stated when addressing the meeting. Members of the public will be allowed 5 minutes to make comments/ask questions regarding non-agenda items, but time may be extended at the discretion of the Chair; comments/questions regarding agenda items may be addressed after the presentation of the agenda item. Members of the public may not request that specific items or language be included in the meeting minutes.

WORKSHOP MEETING MINUTES
July 14, 2014

The Workshop Meeting of the Lehigh County Authority was called to order at 12:23 p.m., on Monday, July 14, 2014, Chairman Asa Hughes presiding. Other Members present at the commencement of the meeting were: Tom Muller, Richard Bohner, Emrich Stellar, Scott Bieber and Norma Cusick. Authority Staff present were Aurel Arndt, Liesel Adam, Bradford Landon, Ed Bielarski, Frank Leist, Dan Standish, Pat Mandes and John Parsons.

REVIEW OF AGENDA

Mr. Arndt stated there would be no additional items for this meeting.

PUBLIC COMMENTS

None.

EXECUTIVE SESSION

Mr. Arndt stated there would be no Executive Sessions for this meeting.

APPROVAL OF MINUTES

June 18, 2014 Regular Meeting Minutes

On a motion by Ms. Cusick, seconded by Mr. Stellar, the Board unanimously approved the minutes of the June 18, 2014 Regular Meeting (4-0). Messrs. Bohner and Muller abstained.

ACTION AND DISCUSSION ITEMS

2013 Audit (Acceptance)

Mr. Stellar reported on behalf of the Audit Committee, made up of Messrs. Stellar and Nagle. He stated that the audit report prepared by Zelenkofske Axelrod LLC provided a clean opinion of the Authority's finances.

The scope of the 2013 Audit was different from prior years due to the completion of the Allentown water and sewer system lease in August 2013. In addition to this change in scope, the Authority was also required to make adjustments to reflect new requirements in financial reporting rules regarding how bond financing costs are reported. The provision in GASB 65 requires that bond financing costs be reported as a period cost rather than being deferred over multiple years. Therefore, the Authority's net position for 2013 was decreased to reflect this change. In addition, due to the onboarding of approximately 76 employees who transferred from the City of Allentown in 2013, the Audit process included an actuarial study to calculate the outstanding post-employment benefits due to these transferred employees, so the liability would be reflected in the Authority's finances.

Mr. Stellar also reviewed the Authority's history with the current auditors, Zelenkofske Axelrod LLC, explaining that their expertise in addressing concession arrangements through the audit process was invaluable to the Authority. He requested the Board consider renewing the contract with Zelenkofske Axelrod LLC for an additional year, recognizing this is a change from the Board's standard guidelines, which would require a new auditor be selected every fifth year. Mr. Hughes supported Mr. Stellar's position and asked the Board to table this decision until additional information could be gathered regarding pricing for the 2014 Audit.

On a motion by Mr. Muller, seconded by Ms. Cusick, the Board unanimously accepted the 2013 Audit as presented (6-0).

Water and Sewer Rules and Regulations Revisions (Approval)

Mr. Landon reviewed the proposed changes to the Authority's Water and Sewer Rules and Regulations (Rules), explaining that they are designed to provide additional specificity to the Authority's public documents. No changes to the Authority's actual practices are included in the proposed Rules.

The first change Mr. Landon outlined relates to bill collections procedures, explaining that the Authority administration may develop additional procedures to address customer requests for relief on their water or

sewer bill. He explained that many of these procedures already exist, and the proposed Rules clarify that the procedures are developed and administered by Authority staff.

The second change Mr. Landon outlined includes details for the abandonment of water or sewer services, including customer responsibilities for completing the removal of service laterals. Mr. Leist explained that these procedures have been in place for many years and have worked adequately. However, developers working within the City of Allentown are not familiar with the Authority's procedures, so the Rules change is proposed to codify those procedures and responsibilities into the Authority's official documents.

On a motion by Mr. Bieber, seconded by Ms. Cusick, the Board unanimously approved revisions to the Water and Sewer Rules and Regulations as presented (6-0).

Policy Revisions to Reflect Current Employee Structure (Approval)

Mr. Landon reviewed a listing of Authority policies that require changes to reflect new employee titles, roles and responsibilities. He explained the proposal does not include any changes to the content of the Authority policies.

On a motion by Mr. Muller, seconded by Mr. Stellar, the Board unanimously approved the Policy Revisions reflecting changes to employee titles and structure (6-0).

Kline's Island Sewer System (KISS) Model Recalibration of Interceptors from Keck's Bridge to the Little Lehigh Interceptor (Approval)

Ms. Mandes reviewed details of Capital Project Authorization Amendment S-08-5, explaining that the Authority and the City of Allentown had previously each developed wastewater flow models to better investigate and plan rehabilitation projects related to reducing peak wet-weather flows in the system. The current project amendment is requested to provide recalibration services so both models can be joined together and used for a more holistic approach to wastewater planning. She explained that in addition to planning rehabilitation projects for the reduction of peak flows, the combined model would also be used for regional wastewater capacity planning, Act 537 plan work, and ongoing operational planning to develop a more coordinated approach to operating the system during wet-weather events. Some discussion followed.

On a motion by Mr. Stellar, seconded by Mr. Muller, the Board unanimously approved the Capital Project Authorization Amendment S-08-5 and Professional Services Authorization for Arcadis, Inc. in the amount of \$66,000 (6-0).

Mr. Bieber asked for updates on the EPA Administrative Order and whether the Authority and its signatories had requested an extension to the December 31, 2014 deadline to eliminate all sanitary sewer system overflows. Ms. Mandes explained that an extension request had been drafted and is being circulated for signatures. In addition, an EPA representative has contacted the Authority requesting a meeting to discuss the Administrative Order.

Mr. Hughes asked for clarification of the notes provided about the expansion of wastewater treatment capacity, including the evaluation of the Jordan Creek as a potential discharge location. Ms. Mandes explained that the option to discharge to the Jordan Creek hinges on the effluent limits that may be required. The current requirements are very stringent, and a study to illustrate that less-stringent limits may be appropriate would be very costly. The Authority has the option to not complete the study, and the more stringent effluent limits would remain in place as part of the full options analysis to be completed.

Wastewater Capital Recovery Fees (Approval)

Mr. Arndt reviewed Resolution 7-2014-1 and the supporting detail, which illustrates the calculations used to develop the proposed update to the wastewater Capital Recovery Fees (Fees) for certain of the Authority's systems. There will be additional action in the future for other systems. He explained that the Municipality Authorities Act provides the method for calculating Fees, and the Authority's adopted Fees may not exceed the Fees as calculated via these requirements. The details provided show the current Fees, the maximum Fees allowed via the Municipality Authorities Act, and the proposed new Fees.

On a motion by Mr. Bieber, seconded by Ms. Cusick, the Board unanimously approved Resolution 7-2014-1, establishing the various components of the Authority's Capital Recovery Fees for various wastewater systems (6-0).

SYSTEM OPERATIONS OVERVIEW

Mr. Standish reviewed recent storm events that tested the Authority's new emergency power generators, stating that the systems were effective in maintaining service for all customers.

STAFF COMMENTS

None.

SOLICITOR'S COMMENTS

Mr. Landon informed the Board that the amendment to the Authority's Articles of Incorporation has been completed with acceptance and filing by the Pennsylvania Department of State, which means the Board of Directors will now have nine members, with the two new appointed members intended to be citizens of the City of Allentown.

OTHER COMMENTS

None.

ADJOURNMENT

There being no further business, the Chairman adjourned the meeting at 1:25 p.m.

Richard H. Bohner
Secretary

FINANCE & ADMINISTRATION

ACTION ITEMS

1. **Health & Safety Manual** (Approval)

The Authority’s Health & Safety Manual has been reviewed by new employee safety teams formed by the Risk Manager. The revisions include updates to policy statements and clarification of roles and responsibilities of safety teams, employees and the Risk Manager. Approval is sought so the manual can be rolled out and reviewed with all employees. (*white*)

DISCUSSION ITEMS

1. **None.**

INFORMATION ITEMS

1. **CMMS Upgrade and Expansion Project**

RJN installed the Cityworks application on June 24. Pilot phase is scheduled for August – October. Verizon Wireless is willing to provide sample mobile devices, ex. iPad, Android tablet, for evaluation during the pilot phase.

2. **WEB Map Upgrade Project**

CDM has delivered the pilot updated web map for LCA testing and evaluation. We expect to have the updated map Live for all employees by the end of July.

3. **Recently Purchased Investments – Certificates of Deposit (CDs)**

Fund	Bank	Location	Gross Amount	Date of Purchase	Date Due	Net Rate %
LLRI CR	TCF National Bank	Sious Falls, SD	160,000.00	7/9/14	1/11/16	0.45

Fund Descriptions for Investments:

Cons Wtr (2)	Consolidated Water (2)
LLRI CR	Little Lehigh Relief Interceptor Capital Reserves
Cons LL2 (314)	Consolidated Little Lehigh Relief Interceptor 2
WW Capac	Wastewater Capacity
2010 Wtr Cons A	2010 Water Construction, Series A Bond
Wtr R&R	Renewal and Replacement

WATER

ACTION ITEMS

1. *None.*

DISCUSSION ITEMS

1. *None.*

INFORMATION ITEMS

1. **Arcadia West Pumping Station Modifications**

Piping layout drawings were approved. A temporary bypass pumping plan is being reviewed. The four booster pumps were delivered to the site. The high service pump delivery date is anticipated around August 22nd. Plans are being finalized to maintain customer service while piping in the station is demolished. Electrical and SCADA tie-ins will be made as the work progresses.

2. **Pine Lakes of Lynn Township Pump Station Upgrade**

Currently this pump station is a hydro-pneumatic system that has proven to be problematic over time. This project will convert the hydro-pneumatic operated equipment to a variable frequency drive controlled double pumping system. Other miscellaneous improvements are included in the project scope. A RFP for engineering services will be sent in mid-August 2014.

3. **Allentown Division- Schantz Spring Chlorination Issue**

Alternative options in lieu of a CL₂ Booster Station as originally scoped by the City are being fully evaluated based on cost and feasibility. Backup power supply, more reliable chemical feed pumps, and full-time data recording are all being considered in an effort to reduce the potential for unchlorinated slugs of water in the future. Barry Isett Inc. has provided a proposal to determine costs of the alternate plan vs the original booster station. City of Allentown has agreed to the concept and has been authorized to proceed with the evaluation. The contract with Barry Isett is finalized and Isett is preparing to begin their work. This Project is identified as Un-Completed Work and will be funded by the City.

4. **Allentown Division- WFP Chemical Building Roof Replacement**

The Project includes modifications to the roof of WFP chemical storage area (i.e. installation of hatches), removal and replacement of (2) 8,000 gallon chemical storage tanks; and replacement of the 20-year old rubber membrane roof system. Construction has been underway since 3/31/2014. Water pipes, sprinklers, storm drains, etc. were moved first. Steel and other construction materials started arriving on May 19, 2014. Dismantling of the existing roof began on May 19, 2014. Both replacement sodium hypochlorite tanks are set in-place and on-line. Replacement tank #1 was certified for use by PaDEP on 6/5/2014. Replacement tank #2 was certified for use as of 6/27/2014. All four new hatches are now in place. The new membrane roof has been installed but still needs to have the warrantee inspection by Firestone. Firestone has tentatively scheduled the warrantee inspection for Aug 11, 2014. The anticipated completion date for the

project has been delayed again, pending the roof inspection, and is now revised to August 31, 2014. This Project is identified as Un-Completed Work and will be funded by the City.

5. Allentown Division- Water Main Replacement Program

The Board authorized the design phase of this project in October 2013 and a Professional Service Authorization was awarded to Gannett Fleming, Inc. The project will replace the required one-mile of main and an additional 1,475 LF for the first year "cycle 1". The project was advertised for bid on May 6, 2014 and bids were received on June 5, 2014. On June 18, 2014 the Board authorized the cycle 1 construction phase of this project and a Professional Service Authorization was awarded to Gannett Fleming, Inc. for construction management and inspection. Additionally the Board authorized Doli Construction Corp. (Doli) as the General contractor for the project. The notice of award and notice to proceed both have been issued to Doli. Currently Doli anticipates starting construction the week of August 11th with construction beginning on South 18th Street. Substantial Completion of Cycle-1 is expected in October 2014.

6. Developments

Water system construction is occurring in the following developments:

Valley West Estates, Phases 4, 5 & 6, 46 residential lots (sfd), UMT

Water system plans are being reviewed for the following developments:

Above & Beyond (personal care facility), 2 commercial lots, UMT

Diocesan Pastoral Center, 2 commercial lots, 3 additional lots and residual lot for existing cemetery, LMT

Grant Street Townes, 18 residential lots (sfa), WashT

Hamilton Crossings, 2 commercial lots with 20 buildings having retail, financial, convenience and restaurant uses, LMT

Hickory Park Estates, 3 residential lots (sfd), UMT

Hillview Farms, 31 residential lots (sfd), LMT/SWT

Indian Creek Industrial Park, 6 commercial lots, UMiIT, water and sewer

Lehigh Hills, 247 residential lots (sfa/sfd), UMT

Lehigh Hills, Lot 4, 1 commercial building, UMT

Liberty at Mill Creek, 2 industrial lots, UMT

Morgan Hills, 40 residential lots (sfd), WeisT, water and sewer

North Whitehall Commercial Center (Walmart), 5 commercial lots, NWT, water and sewer

Route 100 Bypass & Cetronia Road Proposed Commercial Development, 1 commercial lot with 4 buildings having auto, convenience, financial and day care uses, UMT

Shepherd's Corner, 1 commercial lot, LMT

Spring Creek Properties Settlement Subdivision (formerly Spring Creek Properties Subdivision I), 16 commercial and industrial lots, LMT

Trexler Business Center, Lot 1, 1 commercial building, LMT

Weilers Road Twins, 82 residential lots (sfa), UMT

West Park, Lot 8, 1 industrial building, UMT

Woodmere Estates, 60 residential units (sfd), UMT

Woodmont at Upper Macungie (formerly Rabenold Farms II), 288 apartment units and clubhouse, (Portion north of I-78), UMT

WASTEWATER

ACTION ITEMS

1. *None.*

DISCUSSION ITEMS

1. *None.*

INFORMATION ITEMS

1. **Infiltration and Inflow (I&I) Program Update**

Current Information:

- LCA and other City Signatories requested an extension for the EPA Administration Order (AO) completion date. Concurrently, LCA received a letter from EPA requesting a meeting with the Western Lehigh Sewerage Partnership to discuss what we have completed to date and what work needs to be completed to comply with the AO. This meeting has not been scheduled at this time. The AO issued in September 2009 stated “Respondents shall eliminate the discharges from the SSOs in the System no later than December 31, 2014.” The January – June EPA Report was submitted to EPA at the end of July.

Back-ground Information:

The following is work planned for 2014:

- Submission of reports to EPA and DEP.
- Rehab effectiveness metering in Phase 1 pipe lining project areas to determine the reduction in peak flows as a result of the rehab work.
- Phase 2 of Signatory pipe lining projects as determined by KCE.
- Rehab effectiveness metering in Phase 2 pipe lining project areas.
- WLI Manhole Inspections. This work is near completion.
- Test and seal project for branches of the WLI that were CCTVed in 2011 – 2012.
- Long term flow meters will continue on a limited basis. Two rain gauges and meters remain in the system.
- Alternative modeling and feasibility analysis to evaluate the various alternatives to achieve the preliminary objectives. The alternatives will include various combinations of I & I elimination, storage and capacity increases.
- Preliminary Program Objectives Evaluation Report will be submitted to DEP by the end of 2014. This document will define the current system performance and assess what it will take to achieve the system preliminary objectives. The report will include a discussion of the investigation and evaluation work completed including flow evaluation, SSES prioritization, modeling, current and future level of service, current and future system sizing requirements, and will propose the Level of Control for system operation.

- The development of the Capital Improvements Plan is scheduled to begin by the end of the year. This will identify the rehab needs, replacement needs, expansion requirements, costs of improvements and schedule for implementation to achieve the program objectives.
- The City and LCA hydraulic models have been combined by Arcadis. The model is referred to as the "KISS Model", Kline's Island Sewer System. A meeting was held with City representatives, the City Engineer, LCA representatives and our Engineer to discuss the combined model and to determine if additional flow monitoring is required to calibrate the models. Ten meters have been installed near the Park Pump Station to collect flow data for three to four months. The flow data will help the two models work together. Arcadis is updating the calibration of the KISS Model with the new flow data.

2. **Wastewater Treatment Capacity**

Current Information:

A meeting with Wastewater Capacity Team was held at the DRBC office. The DRBC was receptive to our concerns related to the newly drafted limits and grand-fathered loads. We will be providing the DRBC with suggested changes. The Wastewater Capacity Team will be updating the Board in September on the Land Application option, the DRBC limits and the preliminary conveyance issues.

Back-ground Information:

The Memo of Understanding (MOU) regarding working together on a joint Act 537 Plan with the City was never executed with the City. The MOU was revised as a result of the Concession. The City revised the MOU and returned to LCA. We are in the process of continued negotiations.

A Stakeholder's Advisory Committee (SAC) Meeting will be scheduled for summer 2014.

DEP has indicated that a Jordan Creek study must be submitted to DEP prior to the issuance of final effluent standards. If we want to avoid the study, then water quality standards would be imposed for effluent limitations. There is no work currently being done on the Jordan Creek discharge option.

A meeting was held with the DRBC to discuss updating the prospective effluent limits for the various alternatives. The model was refined and the grandfathered loads for Phosphorus and Ammonia have been updated based on the actual Kline's Island data. The new effluent limits have been developed and provided by the DRBC. The Engineering team held a meeting to discuss the revised effluent limits provided by the DRBC. A follow-up letter is being provided to the DRBC requesting back-up documentation and sources of data.

A meeting was held at the Pretreatment Plant with the DEP to discuss the land application option. Four individuals from DEP toured the area to see the various sites that are being investigated for land application of the plant effluent. DEP is still excited about this option but did present the requirement for total dissolved solids (TDS) which will be one of the challenges. In the next several months, the Wastewater Capacity Team will provide an update to the Board.

3. **Northern Lehigh Wastewater System**

The project is composed of the following:

Wastewater Treatment Plant (on a 5-acre tract at KidsPeace)

The North Whitehall Township (NWT) Board of Supervisors granted approval of the Conditional Use for the proposed WWTP. In late November 2012 the opposition, the Voice of the Jordan (Voice), appealed the NWT decision to Lehigh County Court of Common Pleas.

On June 5, 2013 the Court ordered “that the decision of the NWT Board of Supervisors dated October 23, 2012 is hereby reaffirmed”. On July 29, 2013 the Voice filed an appeal of the previous Court ruling to Commonwealth Court. Arguments in Harrisburg took place on December 11, 2013, a decision rendered by the Court on January 9, 2014 affirmed the lower Courts decision and Township approval. The Voice has filed a Petition with the Pennsylvania Supreme Court to hear the case. We are evaluating the timing of any legal action to request that the Court require the Voice to post a bond. **No Current Activity**

The total cost of the WTP including soft costs and KidsPeace acquisition costs is estimated at \$4.69 million.

Wal-Mart

Wal-Mart has put the proposed store on-hold indefinitely. Wal-Mart was a key financial contributor to the offsite conveyance facilities, which includes gravity sewers, a pump station and force main to deliver the wastewater from their proposed development and other future wastewater customers to the proposed wastewater treatment facilities at the Kids Peace site. Cost-sharing negotiations are on hold. **No Current Activity.**

KidsPeace Agreement

A revised amendment to the Agreement has been sent to KidsPeace. It primarily focuses the financial impact on the Jordan Creek Wastewater system because of KidsPeace’s sale of the 101 Acre parcel to Lehigh Carbon-Community College (LCCC). The 101 Acre parcel was an integral economic component for LCA in the 2006 Agreement. Since that revised amendment submittal, KidsPeace has filed for Chapter 11 Bankruptcy. We have retained an attorney who specializes in bankruptcy, Jack Seitz, to represent LCA in this matter. LCA has agreed not to contest the motion filed by the KidsPeace with the bankruptcy court that allows KidsPeace to retain the Acquisition Agreement after the bankruptcy proceedings. **No Current Activity**

Act 537 Plan (Plan) Revision

NWT continues to work on developing an alternate a solution for the wastewater treatment needs for a revised 1-5 year service area which would include a WTP located on the eastside of Route 309 that would discharge to the Coplay Creek. LCA met with NWT on November 21, 2013 to discuss the status of their efforts. NWT has requested that LCA work their engineer to obtain the information necessary to secure conceptual pricing for the WTP and to develop high level capital and operating cost estimates. **No Current Activity.**

4. Arcadia West WWTP Improvements

The 14-day Performance test was successfully completed on July 21. With this activity complete, we move forward with completion of the contract documentation. Projected project total expenses should be about \$3,350,000.00, which is less than the \$3,501,100.00 in the approved budget.

5. Park Pump Station Improvements

Fuel Tank Replacement

Staff anticipates bidding this project on August 8, 2014. Bid opening will be August 22. Total project costs are anticipated to be \$110,000.00. A recommendation for Board approval will be submitted for the September Workshop.

6. LCA WTP

Digester Mixer Replacements:

The General contractor has completed the installation of mixers in the first two digesters. The new mixers in the 3rd and final digester have been installed. We expect the project will be completed by the end of September 2014.

7. Allentown Division - WWTP-New Bar Rack at Headworks

The Project includes the replacement of the existing screen equipment with new coarse bar screens to minimize potential for jamming or mechanical malfunctions experienced by the existing screening equipment, resulting in discharges from Outfall 003 during high flow events. The project has been bid by the City and a contract in the amount of \$737,000 has been awarded to Blooming Glen Contractors. Given the long lead time for the equipment, we expected the bulk of the work to start in mid-June 2014. The City released the check for procurement of the screens on June 5, 2014. Infilco required 85% of the equipment costs to be paid in advance of shipment. Installation has been delayed until some issues with Blooming Glen are resolved. Godwin, the subcontractor supplying the bypass pumping equipment, will be on site August 11th. Both bar racks were delivered on July 31, 2014. A pre-construction meeting is was held on August 4, 2014. This Project is identified as Administrative Order / Un-Completed Work and will be funded by the City.

8. Allentown Division - WWTP-Replacement of Motor Control Centers

This Project will replace five aged motor control centers that provide power on a 24/7 basis to various parts of the WWTP. The motor control centers are located in areas where they are exposed to corrosive wastewater gas and have deteriorated considerably. Because of the age of the existing MCCs, replacement parts are nearly impossible to find. This equipment is critical for the daily operation of the WWTP. The design of the electrical upgrade has been awarded to CDM and kickoff meeting for project was held 2-12-14. Design is currently underway. A contract amendment with CDM has been approved and it will allow for additional design services that were not part of the original specifications. 90% design has been reviewed and comments were submitted back to CDM. Currently, the CDM projected construction schedule has the MCC fully installed and operational by August 2015.

9. Allentown Division - WWTP-Other Work

PPL Combined Heat & Power (CH&P) Facility:

The Combined Heat and Power (CH&P) facility at the Kline's Island WWTP which was constructed through Addendum No.3 to Energy Services Master Agreement between the City and PPL Energy Plus fired digester gas on the majority of the days during the month of June. PPL is in the process of shaking down for all of the components that makeup the facility. The production of electricity continues to be slowly increased as all of the bugs are worked out of the facility. In the month of June 286,356kWh of electricity was produced by the CH&P which reduced the plant's use of commercial power from the grid by 28%.

10. WWTP SCADA Upgrade

Transdyne conducted the radio communication study for the SCADA system upgrade on April 28, 2014. Additional walk through of the PSPS was conducted on June 16, 2014. We received their SCADA Upgrades System Propagation Study report on June 30, 2014. We are awaiting a revised proposal. Staff will review and incorporate into an updated capital project plan. This Project is identified as Un-Completed Work and will be funded by the City.

11. Lynn Township – WWTP Improvements, Phases 1 & 2

Gannett Fleming visited the plant on May 15th as part of their design effort. As a result of their visit, and on-going interaction on several design concepts, a revised scope of work was developed and presented for LCA approval. Among the proposed changes would be to defer installation of UV light and continue to use chlorine to disinfect the plant discharge to the creek. A revised Water Quality Management (WQM) Part II permit package will be submitted to DEP for approval and the specifications finalized for bidding the work. Gannett has obtained buy-in from DEP on the change in the design scope. LCA has reviewed the revised Design Engineer's Report, General Information Form and Design Modules that will accompany the WQM Part II permit application. Application will be made for PennVEST funding after

permits have been acquired. It appears that replacing the RAS pumps and blowers will be performed in-house. We learned that township adoption of a 55+ active adult community overlay district is still in the approval process. The impact that this district will have on the timing to upgrade the 80,000 GPD plant to 160,000 GPD (Phase 3) will need to be investigated with the affected property owners.

12. Allentown Division – Manhole Collars with Water Tight Frame and Covers (above-ground)

This project involves, where applicable, installing a 5-foot diameter, three to four foot deep concrete collar around 100 aged brick manholes identified by previous City staff. This technique will be used to secure a new water tight frame and cover onto the manhole. Where vehicular accesses to the manholes are problematic, alternative solutions will be investigated to secure new water tight frame and covers. This work will eliminate the potential for inflow and infiltration (I/I) entering these manholes, this eliminating the potential for sanitary sewer overflows (SSO's) from these manholes. The City has directed LCA to bring the project to a bid ready stage, but not to bid unless authorized to do so by the City. A RFP was issued and proposals were received on March 26, 2014 for engineering consulting services. A professional service agreement was approved administratively with Barry Isett & Associates (BIA) on June 25, 2014. The project is anticipated to be bid ready by the end of September 2014. The project is identified as Administrative Order and will be funded by the City.

13. Allentown Division – Sanitary Sewer Manhole Lining (below-ground)

This project will install a lining system in 47 aged brick manholes identified by previous City staff. This lining system will eliminate infiltration and will provide additional structural reinforcement to the manholes. The City has directed LCA to bring the project to a bid ready stage, but not to bid unless authorized to do so by the City. A RFP was issued for engineering consulting services and proposals were received. A professional service agreement was approved administratively with Barry Isett & Associates (BIA) on April 4, 2014. The project is anticipated to be bid ready by the end of August 2014. The project is identified as Administrative Order Work and will be funded by the City.

14. Allentown Division – Belt Filter Presses

The wastewater treatment plant has three belt filter presses that are used to dewater both wastewater sludge and water plant chemical sludge. This project will install a remanufactured belt press for existing BFP #1, and will rehabilitate in-place existing BFP #2 and #3. Units #1 and #2 will also get a new control cabinet. Board approval has already been received to purchase the remanufactured unit for BFP #1, OEM parts for BFP #2 and #3 and also for D'Huy Engineering to design the construction work for the entire project. Construction specifications are to be completed by late-July 2014. The project is being advertised on July 30, 2014. A mandatory pre-bid meeting is scheduled for August 11, 2014. Construction bids will be due on August 21, 2014. The project is planned to be completed by the end of 2014 and will be funded by LCA.

15. Allentown Division – Sanitary Sewer Evaluation Study (SSES)

This project involves field investigatory work to identify sources of inflow and infiltration (I/I) in the City's sanitary sewer system located in the Primary and Secondary basins as identified in the WR&A report. The work will include closed circuit television (CCTV) inspection of approximately 102,000 linear feet of sanitary sewer mains ranging in size from 8 to 36 inches in diameter. The work will include the inspection of approximately 550 manholes and sewer piping point repairs, joint repairs, smoke testing, and heavy cleaning. The design phase of this project was authorized administratively. The project was advertised for bid on March 20, 2014 and bids were opened on April 28, 2014. Board approval for the construction phase of the project was given on at the May 27, 2014 Meeting. The construction contract was awarded to Video Pipe Services and the Notice to Proceed was issued on June 23, 2014. The project has an anticipated completion date of September 23, 2014 (90 calendar contract). This project is identified as Administrative Order / Un-Completed Work and will be funded by the City.

16. **Wynnewood Terrace Pump Station and Force Main Replacement**

Design work is complete and DEP has granted the permit. Staff has initiated an application to PENNVEST for construction funding and is anticipated to meet the August 20th due date. We have received and responded to comments on the NPDES Permit. A "Letter of No Prejudice" has been solicited, due to Sanitary Sewer Overflows in 2014, so that bidding can start in late August.

17. **Wynnewood Terrace Collector System Rehabilitation**

In May, LCA applied for a grant from the PA Small Sewer Systems Grant Program. Submission was completed by the deadline. We expect notification of any awards at their September 9th meeting. We are seeking \$125,800 in grant for this \$148,000 test and seal project.

MEMORANDUM

Date: Aug. 5, 2014

To: Board of Directors and LCA Staff
From: Kevin German – Risk Manager
Re: Health & Safety Manual

While the focus on safety and safe working conditions for the Authority's employees has never been higher than it is today, there is always more to do when it comes to improving safety.

This Health & Safety Manual has been reviewed by the Risk Management Team, the management staff, and the Senior Risk Control Consultant of the Delaware Valley Insurance Trust – the organization that acts as our agent for Worker's Compensation and other worker's insurances. Their comments and suggestions have been incorporated into this Manual.

As the Health & Safety Manual indicates, the process of safety is always in action. There are numerous procedures for which Standard Operating Procedures need to be finalized. Each time we make a new facility acquisition, there are improvements that need to be made to ensure that they meet our standards for safety. Our employee policies are constantly being amended whether through changing insurance coverage's or changing employee demographics.

The Risk Manager and Human Resource Manager created a new risk management team. The main team consist of Risk Manager, Human Resource Manager and four individuals representing each team (team leaders). The teams are as follows Suburbs, Water Filtration Plant, Wastewater Treatment Plant and Distribution and Collection. The Suburban team meets once a month and the City teams meet every other month for individual team meetings. The teams will also have one combined team meeting yearly. All the teams have at least one bargaining unit participant and one management participant.

The Board is requested to review and give approval to this 2014 Health & Safety Manual.

Summary of Health and Safety Manual

Section 1 – Accident and Illness Prevention Program

- Added a full time Risk Manager and Human Resource Manager to the team.
- The Risk management team has four individual teams to enhance the efforts of each facility. Each office has a Facility Team Leader and at least one bargaining unit member is on the facility team.

Section 2 – New Hire Orientation

- Human Resource Manager will issue all medical forms and all personal information.

Section 3 – General Employee Safety Rules

- Updated Globally Harmonized System (GHS) and Safety Data Sheets (SDS).
- Eye protection for lab areas

Section 4 – Responding to Emergencies

- No changes

Section 5 – Disciplinary Policy

- This will only be a reference in the safety manual. The policy will be provided in the Employee Manual.

Section 6 – Accident/Injury Reporting Guidelines

- Added Modified Duty Guidelines to this section.

Section 7 – Personal Protective Equipment

- No changes

Section 8 – Hazardous Materials

- Risk Manager and Compliance Director are responsible for this program.
- Every employee will receive initial training on hazard communication standard. Required by the PA Worker and Community Right to Know Act.

Section 9 – Lockout/Tagout

- No changes

Section 10 – Confined Space Entry Program

- No changes

Section 11 – Blood Borne Pathogens

- No changes

Section 12 – Fire Protection

- Facility Team Leader are responsible for ensuring that adequate supply and correct type of extinguishers are at all Authority facilities and vehicles.

Section 13 – Excavating and Trenching

- No changes

Section 14 – Power Operated Hand Tools

- No changes

Section 15 – Office Safety

- No changes

Section 16 – Substance abuse

- Policy is described in the Authority's Employee Manual and/or Collective Bargaining Agreements.

Section 17 – Standard Operating Procedures

- No changes

Exhibits

Exhibit 1 – New Employee Orientation Checklist

- Part one will be completed by Human Resources
- Part two will be completed by the Supervisor

Exhibit 3 – Incident Report

- Incident report, Supervisor's report and Investigation report have all been updated.

Exhibit 5 – Accident Investigation Report

- New report

Exhibit 8 – Shoe Reimbursement Policy

- Updated reimbursement policy for both bargaining units and for the management staff

Exhibit 9 – Confines Space Entry Permit and Record

- Added new permit

Exhibit 11 – Near Miss and Unsafe Practice Reporting Form

- New addition

Exhibits 2, 4, 6, 7, and 10 – No Changes

Lehigh County Authority

Health & Safety Manual

Revised August 2014

Risk Management Team Members:

Kevin German – Risk Manager

Kathy Martin – HR Manager

Lance Babbitt – Facility Team Leader - Suburb Division

James Yoachim – Facility Team Leader - City Division – D/C

Bob Kennedy – Facility Team Leader – City Division - WFP

Steve Stahlberg – Facility Team Leader – City Division - WWTP

Manual # _____

Issued to: _____

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Commitment to Safety

The health and safety of every employee is important to each individual, their family, and the Lehigh County Authority (LCA). To maintain working conditions that ensure employee's safety. Each employee will be trained to safely complete their responsibilities, avoid accidents, and to protect themselves, other persons and physical property.

In addition, each employee has a personal responsibility to learn and practice safety and health protection constantly, both on the job and off. Each employee must be vigilant about risks and hazards and immediately report them to their supervisor.

In summary, all employees are expected to make safety the first consideration in all that we do and LCA will support this goal by providing training and offer resources to foster a culture of safety that runs through our entire organization.

Aurel M. Arndt, CEO

1. Risk Management Team Team Makeup and Responsibilities

The Authority has established a Risk Management Team (RM Team), comprised of several permanent members and several rotating members. It shall be the responsibility of the RM Team to coordinate on-site injury, illness and property damage prevention activities. This responsibility will only be able to be fulfilled with the cooperation of supervisors and employees.

The RM Team shall be comprised of a Risk Manager, Human Resources Manager, or other designee from the Authority's Administration group, Facility Team Leaders, and additional employees with experience in and responsibility for safety, and several other employee members who represent those employees most at risk in completing day-to-day responsibilities. At least one bargaining unit member should be on each team. The Facility Team Leaders shall be contacted when there has been an accident or any other issue that requires investigation and recommendation for policy improvement; the Facility Team Leaders shall consult with the Risk Manager and other members of the RM Team or with outside professional personnel to determine the best method for resolving all issues that are part of the Health and Safety Program.

The Risk Management Team will work with outside experts and agents of the Authority's insurers to identify procedures that potentially place the employees at risk, schedule training such that employees are familiar with the procedures that must be followed in performing their responsibilities, and investigate and report on accident findings to eliminate the risk of future repetition of the accident.

The Risk Management team shall also assist in safety functions within the Authority as follows:

- Annually inspect all Authority facilities to identify safety measures to ensure a safe working environment for all employees. Suggestions shall be made to improve or eliminate all areas of risk. Department managers will then be responsible to ensure that the identified risks are addressed as quickly as possible.
- Conduct initial accident investigation and root cause analysis and reporting.
- Where appropriate, report accidents and property damage to the Authority's management staff and insurers in a prompt manner after the accident report has been reviewed.
- Promote daily safety awareness through appropriate means, including periodic meetings, safety awareness luncheons, tailgate talks, posters, and training.
- Schedule or coordinate safety training for all employees on a periodic basis. Ensure that attendance is recorded at safety training exercises and, where appropriate, see that those missing the safety training are given the same training.
- Recommend new personal protective equipment for standard issue for employees.

- Issue an Annual Risk Management Report.
- Review facilities to be acquired or to be constructed to ensure that they meet the established safety requirements.

2. New Hire Orientation

This program applies to all employees who have either never worked for the Authority or have not worked for the Authority in the past 12 months.

This orientation is designed to ensure that employees are apprised of their duties and responsibilities under the Authority's Health and Safety programs; if there is a change in the employee's responsibilities, additional training will be provided. A "New Employee Safety Orientation Checklist" Form (see Exhibit 1) will be utilized during the orientation and the employee and the reviewer will both sign it upon completion; the signed form will be maintained in employee's personnel file.

The Human Resources Manager or their designee for employment-related issues, and the Risk Manager or RM Team Leader for health and safety-related issues shall typically complete the orientation. Other personnel may be involved as the checklists may identify.

Forms

New employees shall complete the following forms in their entirety:

- Emergency Contact Information
- Worker's Compensation

Safety Literature & Programs

New employees shall receive and review the following:

- Health and Safety Manual
- Employee Manual
- Commercial Driver's License Drug & Alcohol Policy
- HIPAA Notice of Privacy Practices
- Hazard Substance Communication (SDS) – (note: reviewed but not received)

Personal Protective Equipment

New employees shall receive or obtain some or all of the following (dependent on their job responsibilities):

- Hard hat
- Safety goggles
- Work gloves
- Uniform parts
- Hearing protection
- Safety shoes (see 'Foot Protection' in 7. Personal Protective Equipment)
- Raingear

- Reflective Safety Vest
- Special equipment as necessary (Arc Flash)

Each employee will be informed which items are required for his or her job by their supervisor.

3. General Employee Safety Rules

The following shall be the general safety rules that apply to all Authority employees. Some general rules may be covered in more detail throughout this Manual.

- Immediately report all work-related injuries to the job supervisor or your immediate supervisor. Failure to immediately report injuries and illnesses can delay treatment and make an injury or illness worse.
- Familiarize yourself with emergency telephone numbers and emergency building exits.
- Use personal protective equipment such as protective shoes, gloves, hard hat, safety vest, or any other equipment as the job assignment may require.
- Eye protection in lab or other areas when working with acids or bases.
- Wear hard hats whenever there is activity overhead that presents a hazard and on all operational, highway and construction areas, especially where operating equipment is present, or where required by a job site general contractor.
- Pretreatment plant (PTP) employees need hard hats and eye glasses at all times when in the plant. All LCA employees visiting or working at the PTP must abide by these rules.
- Wear full-face shields over safety glasses when grinding, chipping and cutting. Welding helmets with proper filter shall be worn when welding.
- Wear hearing protection in areas where noise levels exceed 85 decibels (dBA).
- Maintain clean and clear work areas at all times.
- Safety Data Sheets (SDS) are maintained for all chemicals and products that pose a hazard to employees; employees are required to familiarize themselves with all SDS sheets for items with which he or she is in contact with to ensure that they know how to protect themselves, properly handle the product, and properly treat for first aid.
- Follow proper lifting procedures; employees are expected to ask for assistance if the load poses a risk to a single individual.
- Do not wear jewelry or loose fitting clothing around rotating tools or machinery.
- Use or possession of alcohol or controlled substances during working hours, or arriving at work under the influence of alcohol or controlled substances, is strictly prohibited.
- Weapons or firearms are prohibited on Authority property, jobsites, or in company vehicles.
- Obey all posted signs and notices.
- Do not stand under suspended loads.
- Wear seat belts in all vehicles when on Authority business.
- Do not operate power tools and shop equipment without guards in place.

- Power tools must be grounded or double insulated.
- Lock and tag any equipment containing hazardous energy sources prior to any work being performed.
- Store flammable liquids in safety containers and labeled as to contents (SDS).
- Secure compressed gas cylinders at all times. Caps shall be replaced and resecured when the cylinder is not in use.
- Metal ladders shall not be used in or around electrical equipment. Wooden ladders shall not be used at all. All ladders shall be Type IA or Type IAA commercial grade.
- All trenches over 4 feet deep must be protected from collapse through sloping, benching, shoring, or use of a trench box if the trench is not sloped or benched.
- No employee shall enter a confined space without a permit or following the Authority's Confined Space Entry Procedures and being properly supervised.
- No employee shall operate any equipment that he/she is not properly trained or familiar with; where certification or licensing restrictions apply, the employee must have the required certification or license.
- **Supervisors** are responsible for communicating the general safety rules to all employees at the time of hire; employees are responsible for complying with the general safety rules.
- Employees must plan assignments and consider what risks will be involved; the appropriate safety equipment and tools shall be used to reduce the risk to the employee.
- All newly purchased equipment shall meet current safety guidelines or requirements.
- Use of a cell phone while driving an Authority vehicle, or a private vehicle when on Authority business, is prohibited, unless using a hands-free device.
- It is prohibited to use tobacco products of any kind while in Company vehicles or on Company property unless in a designated area.
- Avoid other forms of distracted driving such as eating or drinking while driving or wearing of ear buds/headphones in both ears.

4. Responding to Emergencies

The Authority must be prepared to deal with the disastrous effects of emergencies that can be caused by both natural and human elements. An Emergency Response Plan (ERP) has been developed to assist the Authority staff in an orderly and effective response to such emergencies.

If and when an emergency occurs, all employees shall refer to the ERP for guidance on responsibilities and steps to be taken to deal with the emergency. All activities shall be conducted in an orderly and safe manner to protect both the employee and the population.

All employees shall familiarize themselves with the location and content of the Authority ERP. Supervisors shall review the ERP with new employees as part of the new employee orientation process. Copies of the ERP are located with supervisors, members of the Emergency Planning Team, among other locations.

When responding to an emergency, all policies and guidelines described in this manual shall continue to be followed.

5. Disciplinary Policy

To reinforce safe work practices and maintain a safe workplace, all violations of safety policies, practices or procedures will be subject to progressive disciplinary action as described in the Authority's Employee Manual.

Incidents subject to such action will include not only the safety violation (the action or lack thereof) but also the failure of any onsite crew leader, supervisor or manager to identify and/or correct the violation.

A record of all violations and responses will be placed in the Employee's Personnel File. All such events will be handled in accordance with the Corrective Action provision in the Employee Manual.

6. Accident/Injury and Modified Duty Reporting Guidelines

Even though the Authority strives to provide a safe working environment for all employees, there may be an occasion when an employee is injured. Therefore, it is imperative that the appropriate steps are taken to ensure that the injured employee's medical needs are attended to and Authority liability is kept to a minimum. The following will serve as guidelines for responding to and reporting of any accident/injury:

Fatality

In the event of a fatality, the CEO will immediately be contacted who then shall be responsible for notifying the appropriate parties including the Risk Manager and/or HR Manager. The accident scene shall remain undisturbed until the police and/or medical personnel have released it. The on-site supervisor shall immediately obtain the names, addresses, and other pertinent contact information of all personnel who were in the vicinity at the time of the incident.

Injury

In the event of an injury, the immediate concern should be for the well-being of the injured employee.

- Immediately call for medical assistance, when required.
- Keep the injured person quiet and as comfortable as possible until relieved by qualified medical personnel.
- DO NOT move the person unless absolutely necessary to prevent further injury.
- DO NOT attempt First Aid/CPR unless you are qualified and have a current First Aid/CPR certificate.

All injuries, illnesses, and near accidents should be reported to a supervisor or the Risk Manager as soon as possible. The RM Facility Team Leader should also be contacted to allow internal investigation to proceed.

If an employee is seriously injured, they should be taken to the nearest medical provider. However, if the injury is not serious, the injured employee shall seek medical attention from a medical provider listed on the Authority's Worker's Compensation physician panel, located on an information bulletin board or check with immediate supervisor.

An injured employee may not return to work without proper discharge information from the care provider.

No medical provider paperwork or insurance information will be given to third parties (other than emergency responders) without written authorization from the employee, except as set forth in the Authority's Notice of Privacy Practices established to comply with the Federal Health Insurance Portability and Accountability Act (HIPAA).

First aid kits are kept in all field vehicles; first aid kits shall be inventoried at the direction of the **department supervisor** on a quarterly basis to ensure that adequate supplies are

available for emergency use. The Office first aid kit shall also be inventoried on a bi-monthly basis by a service company. There shall be **NO** oral medicines in first aid kits. Emergency phone or contact information shall be kept in all vehicles and in all Authority issued cell phones. The "Emergency Telephone Directory" shall be updated annually by the Authority's Emergency Planning Team.

Reporting

All current forms shall be available on the Public Directory in G:\PUBLIC\HEALTH & SAFETY subdirectory. Copies are attached to this Manual as Exhibits and are for reference only.

Dependent on the severity of the accident/injury or property damage, the proper Tier I, II, or III form shall be completed by the employee(s) directly involved. The form shall immediately be submitted to and reviewed by the direct supervisor, acknowledged, and forwarded to the Risk Manager within 24 hours of the incident. The Risk Manager will forward a copy of the form to the HR Manager if a Worker's Compensation Claim is to be filed. If an investigation by the RM Team is required, the Risk Manager will schedule such at the earliest possible time.

3-Tier Accident Reporting Procedure

Tier I - Incidents that do not result in property damage or do not require medical treatment should be reported using the "Near Miss and Unsafe Practice Reporting Form (see Exhibit 11). All accidents involving injury will utilize the First Aid Report (see Exhibit 2) and all accidents involving property damage will utilize the Property Damage Report (see Exhibit 2). Forms should be completed by the employee, foreman or supervisor by the end of the day that the accident occurred on and filed with the Risk Manager (or the HR Manager if the Risk Manager is not available.) The Risk Manager will be responsible for routing copies of the completed forms to supervisors, department heads, insurance administrators or any other individuals as necessary.

Tier II - All accidents which result in personal injury requiring professional medical attention or Authority property damage in excess of \$500.00 will utilize the LCA Incident Report (see Exhibit 3). Forms should be filled out by a supervisor or a RM Team member if a supervisor is not available. Attachments such as photos, sketches or Motor Vehicle Accident On-Site Report Form (see Exhibit 4) should be utilized to gain as much information as possible. Forms and all attachments should be completed and filed with the Risk Manager (or the HR Manager if the Risk Manager is not available) within 24 hours after the accident, if possible.

Tier III - All accidents which result in the loss of time and/or the potential for a second party claim for personal injury or property damage in excess of \$500.00, will utilize the Accident Investigation Report format (see Exhibit 5) and shall be filed with the Risk Manager (or the HR Manager if the Risk Manager is not available). Investigations will be conducted by a panel consisting of the RM Facility Team Leaders and the RM Team, or alternates, and completed within one week of the accident. At the discretion of the CEO, this procedure may be waived if the accident involves only property damage in excess of \$500.00.

** It is imperative that insurance providers be notified as soon as possible, if applicable.

Report forms are cumulative and may be completed by different individuals. Example: All Tier III accidents will require completion of both Tier I and Tier II forms as attachments. Attachments such as photos, sketches, or the Motor Vehicle Accident On-Site Report Form may be utilized for any accidents.

Whenever an accident occurs, if appropriate, the Witness Card Form should be utilized to gain pertinent information from anyone who witnessed the accident (see Exhibit 6).

Investigation

A successful investigation shall include the following:

- Review all forms and attachments relating to the occurrence.
- Conduct the investigation at the scene of the accident.
- Inspect the site conditions and equipment involved.
- Talk with the injured employee(s), if possible, and also interview all witnesses. Be sure that all questions are open-ended to adequately receive all pertinent information.
- Listen to conversations going on elsewhere at the scene.
- Test the statements against the accident scene to verify the given scenario could have happened.
- Encourage employees to give their ideas for preventing a similar accident in the future.
- Conduct a root cause and effect inquiry and share the results with all employees, as necessary.
- Identify corrective action(s) for each root cause and ensure that the recommendations are implemented.

The general format of the Accident Investigation Report will be:

- Purpose
- Scope
- Summary of Events
- Observations
- Conclusions/Root Causes
- Recommendations

A draft report will be distributed to the department supervisory staff and all parties involved for review and comment. Revisions to the report will be made based on comments and any additional interviews, inspections or research conducted.

The final report will be distributed to all department supervisory staff, all parties involved and the CEO. Recommendations will be acted upon by assigned parties.

The Investigating Panel shall be comprised of Risk Manager, selected Management and RM Team members. In the event a Team member is directly involved with an accident

or not available, an appointee will be made by the CEO, if recommended by the Risk Manager.

Record Keeping

Record keeping is necessary to track historic trends for program planning and budgeting, as well as for current and future regulatory compliance.

Record keeping will follow these general guidelines:

- | | |
|---------------|---|
| Tier I | Forms to be filed with RM files. |
| Tier II & III | Forms, attachments and reports will be filed in the RM files and personnel files. All backup materials including billing, legal action, time lost records, Worker's Compensation forms, etc. are to be attached to individual forms and kept in a secure location and file. |

Modified Duty Guidelines

Lehigh County Authority (LCA) will make a reasonable effort to help LCA employees who incur a work-related injury return to full, productive work status in a timely manner by identifying available temporary interim assignments for them. Modified duty is a privilege offered to employees that provides benefits to both LCA and to the employee. *LCA maintains no permanent modified duty positions.*

When an employee suffers an injury/illness and is unable to perform the essential job functions of their positions, consideration will be given to a modified duty assignment. Whether the injury/illness is work-related or non-work-related will ultimately be determined by LCA's Workers' Compensation carrier. Falsifying an injury or illness is a violation of LCA policy and subject to the disciplinary action up to and including termination.

- Promotional processes and transfers while on modified duty will be at the discretion and approval of the Department Manager and/or in accordance with Union contracts.
- If the employee is fit for modified duty, but there is no suitable assignment available, he or she will continue receiving worker's compensation, if eligible.
- Modified duty assignments are not to be used for employees unable to perform the essential functions of the job due to matters not related to work-related illness or injury.
- Upon receipt of a medical release form from the physician releasing the employee for full duty, the employee is required to report back to work as of the date on the release from the physician. Failure to report back to work in accordance with the medical release date may result in disciplinary action up to and including termination.

7. Personal Protective Equipment

All Authority employees shall be issued Personal Protective Equipment commensurate with their job responsibilities. Each employee shall be responsible to maintain such issued equipment. Replacement of damaged or lost equipment will be addressed as noted herein. A "Personal Safety Equipment Receipt" shall be used where new or replacement equipment is issued (see Exhibit 7).

Head Protection

- Head protection equipment shall meet the performance standards of American National Standards Institute (ANSI) Z89. (Hard hats will be replaced every 5 years)
- Hard hats shall be worn:
 - On all construction sites
 - When overhead falling hazards exist
 - When required by a job site general contractor
 - When working within a roadway right-of-way
- A hard hat will be issued to all employees whose job responsibilities are expected to place them in a situation where it will be required.
- It will be the employee's responsibility to replace a lost hard hat.
- A worn or damaged hard hat will be replaced by the Authority at no cost to the employee if the old hard hat is returned.
- Hard hats are not to be worn backwards and should be adjusted to recommended specs.
- Employees shall wear the hard hat on a site until the immediate supervisor informs them that its use is no longer needed.

Eye and Face Protection

- Eye and face protection shall meet the performance standards of ANSI Z87.
- Safety glasses shall be worn when there is risk of damage to the eyes. A face shield over safety glasses shall be worn when there is a risk of injury to the face.
- A set of approved safety glasses will be issued to all employees whose job responsibilities are expected to place them in a situation where it will be required.
- For employees who have prescription glasses that meet the requirements, the Authority will furnish or pay for full side shields for those prescription glasses.
- All employees and visitors entering an area where flying debris may be present must wear safety glasses with full side shields.
- A full-face shield shall be worn over safety glasses whenever performing grinding, chipping, cutting, and working with chemicals (excludes the lab).

- Safety glasses shall be worn when performing testing in the laboratory.
- A welding helmet with a lens of appropriate tint shall be worn to protect the eyes from welding flash.
- It will be the employee's responsibility to replace any lost safety glasses.
- The Authority will replace any damaged non-prescription safety glasses at no cost to the employee if the old pair is returned.
- Employees shall provide prescription safety glasses at their own expense but once furnished, if damaged through work use, the Authority will pay for replacement lenses.

Hearing Protection

- Employees are required to wear earplugs or ear muffs when operating power tools or working in noisy environments. (When you must raise your voice to carry on a conversation with a person an arms length away is a good indicator that hearing protection should be used.)
- Earplugs are available in inventory at each facility.
- Earplugs provided for use in the field are foam type and are to be disposed of at the end of each workday; a new pair should be used each day.
- Employees should have clean hands when inserting ear plugs to prevent skin irritation.

Hand Protection

- Employees shall wear work gloves whenever necessary to protect the hand from lacerations.
- Employees working with chemicals shall wear chemical-resistant gloves appropriate for the hazard. Consult the appropriate SDS for a glove recommendation if working with a chemical product.
- Depending on the use, some chemical-resistant gloves may be washed with detergent and water after use and stored in a clean place to facilitate drying.
- Disposable latex rubber or nitrile gloves shall be utilized when working with drain pipes, in manholes, or any other areas where they may come in contact with human waste or fluids.
- Non-disposable gloves will be replaced when they are damaged or worn. It will be the employee's responsibility to replace lost gloves if the gloves are returned.

Foot Protection

- Safety shoes shall meet the performance standards of ANSI Z41.
- Field employees and all other employees visiting an outdoor job site shall wear a sturdy work shoe with solid leather uppers and steel or carbon toes.

- The employee shall purchase the initial pair of shoes upon reporting to work as a new employee. Thereafter, the employee shall replace work shoes as necessary; however, the Authority will provide funding for replacements in accordance with the current Safety Shoe Reimbursement Policy (see Exhibit 8).

Protective Clothing

- Protective clothing will be issued to employees where exposure to the environmental conditions necessitates such need. This includes uniforms and lab coats on a normal basis, and includes aprons where chemical, flammable, or biological issues exist.
- When in roadways, construction sites, and highway rights of way, reflective safety vests must be worn day or night including a hard hat.
- It will be the employee's responsibility to replace lost protective clothing, worn-out or damaged clothing must be returned to receive a replacement.

Respiratory Protection

- Proper respiratory protection devices shall be furnished by the Authority for those activities that require such protection such as working in hazardous atmospheres. Employees who are cleared to perform such work shall receive adequate annual training in the proper use.

8. Hazardous Materials

To ensure that information about the dangers of all hazardous chemicals used by the Authority is known by all affected employees, the following hazardous information program has been established. Under this program, all employees will be informed of the contents of the Globally Harmonized System (GHS) and Hazard Communication Standard (HCS), the hazardous properties of chemicals with which they work, safe handling procedures and measures to protect themselves from these chemicals.

This program applies to all LCA work operations where employees may be exposed to hazardous chemicals under normal working conditions or during an emergency situation.

The Risk Manager and Compliance Director are responsible for the program and updating this plan as necessary. Supervisors will help in any training needed.

- Whenever feasible, the use of hazardous materials in the workplace shall be minimized and non-hazardous alternatives shall be selected over hazardous alternatives.
- Hazards associated with materials being purchased shall be identified prior to purchasing and the proper protective equipment shall be acquired if necessary.
- Prior to using any new hazardous material, a hazard assessment shall be completed. Adequate safety precautions for protecting employees shall be established and all employees potentially using said materials shall be trained in their safe handling and use. A similar hazard assessment process shall be used prior to employees engaging in non-routine tasks.
- In areas where corrosive or irritating chemicals are utilized, an eyewash station shall be located to provide protection in the event of an eye accident.
- Flammable materials shall be stored in protected locations away from floor drains, ignition sources and combustibles. Small quantities shall be stored in flammable storage cabinets.
- Flammable liquids and fuels shall only be stored in their original container or in safety cans equipped with self-closing lids.
- Spill response equipment appropriate for the types and quantities of hazardous materials shall be provided. Employees shall be trained in the safe manner to clean up a spill for the types of materials that they work with. Employees should not attempt to clean up spills for unfamiliar materials; such spills shall be handled by evacuating personnel, securing the area, and notifying trained spill responders in accordance with the Emergency Response Plan.
- Employees who work with flammable materials shall be trained on an annual basis in how to properly respond to fires using portable fire extinguishers.

Container Labeling

Hazardous material containers will be clearly labeled as to the contents, note the appropriate hazard warning, and list the manufacturer's name and address.

The RM Facility Team Leader will ensure that all secondary containers are labeled with either an extra copy of the original manufacturer's label or with labels indicating the identity of the substance and the appropriate hazard warning.

Safety Data Sheets (SDSs)

The Risk Manager or Facility Team Leaders are responsible for establishing and monitoring the organization's SDS program. They will ensure that procedures are developed to obtain the necessary SDSs and will review incoming SDSs for new or significant health and safety information. They will see that any new information is communicated to affected employees.

Employees purchasing materials which have a degree of hazard must request an SDS for all hazardous chemicals to which employees are exposed. If an SDS is not received with the delivery, the employee shall immediately re-request a copy of the SDS and advise the RM Facility Team Leader that the SDS has not been received. Until such SDS is received, the material shall not be used.

SDSs will be readily available to all employees during each work shift. If an SDS is not available, contact the RM Facility Team Leader.

Copies of SDSs for all hazardous chemicals to which employees are exposed or are potentially exposed will be kept in a hanging folder adjacent to the safety bulletin board in each department.

Employee Training and Information

The Risk Manager and Compliance Director are responsible for the Hazard Communication Program and will ensure that all program elements are carried out.

Everyone who works with or is potentially exposed to hazardous chemicals will receive initial training on the hazard communication standard and this plan before starting work. As required by the PA Worker and Community Right to Know Act, refresher programs shall be provided on an annual basis. Each new employee will attend a health and safety orientation that includes the following information and training:

- An overview of the PA Worker and Community Right to Know Act, **Globally Harmonized System (GHS) and Hazard Communication Standard (HCS)**
- The hazardous chemicals present at his/her work area
- The physical and health risks of the hazardous chemicals
- Symptoms of overexposure
- How to determine the presence or release of hazardous chemicals in the work area
- How to reduce or prevent exposure to hazardous chemicals through use of control procedures, work practices and personal protective equipment
- Steps the organization has taken to reduce or prevent exposure to hazardous chemicals
- Procedures to follow if employees are exposed to hazardous chemicals

- How to read labels and SDSs to obtain hazard information
- Location of the SDS file and written Hazard Communication program

Prior to introducing a new chemical hazard into any section of this organization, each employee in that section will be given information and training as outlined above for the new chemical hazard.

Hazardous Non-Routine Tasks

Periodically, employees are required to perform non-routine tasks that are hazardous. Examples of non-routine tasks are: confined space entry, tank cleaning, and painting reactor vessels. Prior to starting work on such projects, each affected employee will be given information about the hazardous chemicals he or she may encounter during such activity. This information will include specific chemical hazards, protective and safety measures the employee should use, and steps the organization is taking to reduce the hazards, including ventilation, respirators, the presence of another employee (buddy systems), and emergency procedures.

List of Hazardous Chemicals

A list of all known hazardous chemicals used by our employees is included in the hanging file located adjacent to the safety bulletin board in each department.

When new chemicals are received, this list must be updated by the laboratory supervisor (including date the chemicals were introduced) within 10 days.

9. Lockout/Tagout

This program establishes the minimum requirements for the lockout of energy devices whenever maintenance or servicing is done on machines or equipment. It shall be used to ensure that the machine or equipment is stopped, isolated from all potentially hazardous energy sources and locked out before performing any service or maintenance, where the unexpected start-up of the machine or equipment or release of stored energy could cause injury.

Only qualified, authorized employees shall operate a machine or equipment that may bring them in contact with live electrical circuits.

Lockout/tagout devices shall bear the name of the employee and the date it was applied. Keys to lockout devices shall remain under the exclusive control of the employee applying the lockout.

Where equipment is fed by multiple energy sources or may contain unusual hazards such as charged capacitors or fly wheels, written lockout/tagout procedures shall be developed and posted on the equipment.

In the event that an absence makes it necessary to cut a lockout device, this shall be accomplished by a supervisor who received appropriate training in lockout/tagout training and after a good faith effort has been made to locate and notify the absent employee. Upon returning from an absence, the employee shall be notified by their supervisor prior to starting work that their lockout device was removed.

Lockout Procedure

- Notify all affected employees that servicing or maintenance is required on a machine or equipment and that the machine or equipment must be shut down and locked out to perform the servicing or maintenance.
- Locate and identify all energy sources and the energy isolating devices to which lockout devices are to be attached.
- If the machine or equipment is operating, shut it down by the normal stopping procedure.
- De-activate the energy-isolating device so that the machine or equipment is isolated from the energy source.
- Apply lock and tag device to each energy-isolating device.
- Be sure to dissipate all stored or residual energy.
- Test the controls to verify the equipment cannot restart.
- Proceed with servicing.

Restore Equipment to Service

- Check area around machine or equipment to ensure that all nonessential items have been removed and that the machine or equipment is operationally intact.
- Check the work area to ensure all employees are removed from area.
- Verify that controls are in a neutral position.
- Notify affected employees that lockout/tagout devices are being removed.
- Remove the lockout device.
- Reenergize the machine or equipment.
- Notify employees that the machine or equipment is now ready to be put back into normal use.
- Follow standard startup procedures.

Training

- Annual training coordinated by the RM Facility Team Leaders shall be given to those employees who are responsible for the type of maintenance that requires lockout/tagout procedures.

10. Confined Space Entry Program

Purpose

These are the minimum requirements and standards for maintenance within and entry into confined spaces.

Definitions

Atmospheric Contaminant – a harmful substance or material in air usually occurring in the form of a dust, fume, gas vapor or mist.

Confined Space – any tank, vessel, station or area so enclosed that adequate dilution ventilation is not obtained by natural air movement. (Examples include sewer manholes, wet and dry wells, pump room, sewer meter pits, valve pits, sludge digesters, grit chambers, Parshall Flume chambers, pipe galleries, sewage pump stations, water well stations, etc.).

Dust – finely divided solid particles dispersed in air which have been formed by mechanical means such as grinding, crushing, blasting and drilling.

Fume – solid particles dispersed in air resulting from some chemical or physical process that involved a change of state.

Gas – a formless fluid occupying the space of enclosure.

Dilution or Power Ventilation – forced ventilation provided to dilute the concentrations of dusts, fumes, gases, vapors or mists in the atmosphere of all or part of the place of employment.

Immediate Supervisor – that employee at the jobsite authorized to direct the activities of another employee.

Local Exhaust Ventilation – that type of ventilation in which suction is applied at the point of generation of fumes, dusts, gases, vapors and mists.

Mist – liquid droplets suspended in air.

Permissible Exposure Limit (PEL) – maximum concentration of an airborne contaminants which an employee may safely be exposed to. PELs are legally enforceable exposure limits promulgated by the US Occupational Safety and Health Administration. These limits are available from the Risk Manager.

Threshold Limit Value (TLV) – maximum concentration of airborne contaminants which an employee may safely be exposed to. TLVs are exposure guidelines published by the American Conference of Governmental Industrial Hygienists. These limits are available from the RM Facility Team Leaders.

8-hr Time-Weighted Average (TWA) – average exposure limit applicable to an 8-hr work shift

Short Term Exposure Limit (STEL) – exposure limit applicable to a 15-minute period of exposure

Ceiling Limit – exposure limit above which no exposure is permitted

General Requirements

Responsibility – responsibility for the safety of all personnel in a confined space rests on the immediate supervisor who directs/approves the entry or an on-site leader appointed by a supervisor. This supervisor must make sure that appropriate entry procedures, including atmospheric testing is implemented before employees are permitted to enter the confined space. Employees are responsible for following all procedures described here and shall report any deficiencies observed prior to entering a confined space.

Employee Familiarity – no employee shall enter a confined space unless the employee has received instruction and training in proper entry procedures and use of safety equipment. This training must be provided by the Authority even if the employee has received training from a prior employer, he/she must receive the Authority's confined space training prior to entering a confined space. In addition to these Regulations for Entry to Confined Spaces, manufacturer's instructions and manuals in the use of the required safety equipment shall be utilized in training employees.

Precautions in the Confined Work Space for Normal Maintenance

- No open flames
- No cigarette lighters, cigarettes, etc.
- No spark-producing tools or equipment
- No smoking

Equipment Necessary for Entry

- Hard hats
- Safety shoes
- Gloves
- Rain gear, rubber boots (as required)
- A calibrated four gas meter which measures oxygen, Lower Explosive Limit, hydrogen sulfide, and carbon monoxide
- Self-contained breathing apparatus (standby)
- Safety harness, tripod, fall protection and retrieval winch or pulley system
- Safety glasses and goggles
- Blower and hose
- Confined Space/Manhole entry log/permit
- Ladder (as required)

Cleaning of Protective Equipment

- Authority will provide protective equipment.
- It shall be the supervisor and crew chiefs responsibility to see that the equipment is maintained in a clean and sanitary condition.
- Respiratory equipment shall not be passed from one employee to another until it is cleaned and disinfected.
- Respiratory equipment and replacement units shall be stored when not in use in approved containers.

Maintenance of Testing Devices and Equipment – all atmospheric testing devices and respiratory protective equipment shall be maintained at all times to ensure that they are in satisfactory working condition. The RM Facility team leaders shall make minimum monthly checks on the equipment when not in use.

Posting of Entry Procedures – entry procedures for confined spaces will be posted, when possible, adjacent to tanks, vessels, below-ground level stations or other areas which are defined as confined spaces and entered. Entry procedures shall be posted on service trucks and/or equipment used at the entry site.

Maintenance of Records – records of each entry, atmospheric sampling in confined spaces, along with procedures used to sample, shall be kept by the supervisor and maintained in a master file at each facility.

Preparation for Entry

Identification – permit-required confined spaces shall be identified by signage, stencil or other means which identifies the space as requiring a permit to enter.

Barriers – where applicable, guards and warning devices shall be set up at the entrance before the cover is removed.

Aeration – lids, covers, etc. shall be opened 15 minutes for aeration before entry.

Communication – ascertain what methods are available to contact the supervisor. Test the method of communication chosen to ensure proper operation. Notify the supervisor prior to entering and after leaving each confined space. In an emergency, notify 911 immediately then your supervisor. Supervisor should contact any units close by to respond and possibly assist. Supervisor should try to get to the scene as soon as possible and update Risk Manager.

Ventilation – turn on dilution ventilation equipment and wait 10 minutes. A trained person shall then take air samples at various levels (low, middle and high) within the confined space.

Air Sampling – shall be taken at various levels continuously within the confined space to be certain that the atmosphere has an adequate supply of oxygen and that combustible gases have been diluted to a safe concentration prior to and during occupancy.

Acceptable Air Levels

Oxygen Level	19.5 and 23.5%
Lower Explosive Limit	Below 10%
Hydrogen Sulfide	Less than 5 ppm
Carbon Monoxide	Less than 12.5 ppm

Confined spaces may be entered directly after testing, if no hazard exists. In the Suburban Division air samples shall be taken once per month within each Class 2 Water Station to ensure that oxygen and combustible gas levels are within the “normal” atmospheric range. A record of these measurements shall be archived with the Operations Department manager.

Unsatisfactory Atmosphere Discovered by Testing

1. The space shall be evacuated and workers shall not be permitted to enter.
2. Power ventilation shall be used in a continuous manner.
 - a. Purge power blower hose at street level for at least 1 minute; be sure that vehicles and blower are placed so that exhaust fumes will not displace the air in the confined space.
 - b. Operate blower in space for at least 10 minutes at maximum rated speed with outlet damper, if any, fully open. For better distribution the output end of the blower hose should be at the midpoint on a sidewall of the space (i.e., manhole) with the hose opening pointed toward the end wall.
 - c. Perform a second test away from direct output of blower. If satisfactory conditions exist, the space may be entered.
 - d. In the event that an unsatisfactory atmosphere still exists, entrance to the space may only be entered using self-contained air.
 - e. Continuous atmosphere monitoring is required for spaces where conditions can quickly change such as in manholes, wet wells, vaults and pump stations.

Additional Tests – additional tests to be performed in the confined space after entry, or as necessary:

- a. After initial entry – test for gas by probing in the area of all duct entrances and then generally throughout the space.
- b. Removal of water may permit gas to flow into a manhole; therefore, before entering a manhole, an additional test shall be made after the manhole has been pumped or a minimum water level has been reached with continuous pumping.

- c. If ducts are plugged and any plugs are removed for rodding ducts, pulling in cable, etc., immediately test for combustible gas at the ducts that were opened.
- d. When crews begin work, continuously monitor oxygen/combustible gas test and at all times have available:
 - A standby worker(s) – definition – what are they to do, what don't they do? Standby worker is competent person and will monitor air levels and perform rescue if needed and be in contact with supervisor. Alert crew of any danger.
 - A self-contained breathing apparatus approved by NFPA
 - A safety harness, tripod and retrieval winch shall be used to enable non-entry rescue.

Entry Requirements (see Exhibit 9 – Confined Space Entry Permit and Record)

Manholes – Permit Entry

1. At the selected manhole to be inspected, the nearest upstream and downstream manhole covers shall be removed.
2. Ventilate the space for a minimum of ten (10) minutes before testing the atmosphere.
3. Test the atmosphere using properly calibrated atmosphere monitoring equipment. Test for oxygen first since the other sensors may not function properly if oxygen levels are below 19.5%.
4. If the results of atmospheric monitoring are acceptable, complete the entry permit and proceed with the entry. If the results are unacceptable, continue forced air ventilation until air levels are acceptable.
5. Any employee entering the manhole must wear a hard hat, gloves, eye protection, safety harness and lifeline at all times.
6. Lifelines will be connected to a tripod and winch which will allow for non-entry rescue by the attendant. If self-contained air is required, two workers shall be stationed above ground.

Wastewater Meter Stations – Permit Entry

1. The dilution ventilation equipment must be operated for 10 minutes prior to testing the atmosphere. The ventilator and gas monitoring equipment should remain in continuous operation during occupancy of the lower level.
2. Atmosphere monitoring equipment will be utilized to determine if an oxygen deficiency, explosive or toxic atmosphere exists. Record the results of the testing on the entry permit. Testing equipment shall remain in continuous operation, sampling air in the lower level, during occupancy.
3. The employee entering the station must wear a safety harness and lifeline at all times. Before entry, the safety harness is to be attached to the tripod retrieval winch located on the upper level above the opening to the lower level.

4. A standby worker in the upper level for each worker in the lower level shall be available during occupancy in case of rescue.

Emergencies

Emergency procedures shall be reviewed prior to entering the space. In most cases when non-entry rescue equipment is used, outside emergency responders will be called on in the event of a confined space emergency, it must be confirmed in advance that the rescue service is equipped to provide confined space rescue services. Otherwise, the employee entry team must be trained in performing confined space rescue. This training must include an annual hands-on, rescue simulation in a representative confined space.

Training

Confined space entry procedures shall be reviewed internally by the Authority on an annual basis with all employees whose responsibilities require them to potentially enter such spaces. On a **two-year cycle**, all employees whose job responsibilities require them to potentially enter such confined spaces shall attend training outside of the Authority.

Disciplinary Policy

Owing to the high risk associated with entering confined spaces, failure to follow the prescribed policy will result in disciplinary action taken against all employees associated with the failure, including the authorizing supervisor. Such disciplinary action may bypass one or more of the progressive discipline steps outlined in the Authority's Employee Manual.

11. Blood Borne Pathogens

This program is designed to protect employees from exposure to blood borne pathogens either through the administration of First Aid/CPR, while cleaning bodily fluids or working on drain lines that may contain infectious agents.

The following employees routinely come into contact with infection hazards:

- Sewer workers

The following employees may infrequently come into contact with potentially infectious materials:

- First aid volunteer
- Housekeeping staff

Universal Precautions

- All blood, other potentially infectious materials and unknown body fluids shall be treated as if known to be infected with the Hepatitis B Virus (HBV), Human Immunodeficiency Virus (HIV) or other blood borne pathogens regardless of the perceived risk of the source person.
- Employees shall wash their hands and other exposed skin with soap and water as soon as possible after removing gloves and other personal protective equipment or following exposure to blood or other potentially infectious material.
- Contaminated broken glassware or other sharp objects should not be picked up directly by hand. All contaminated sharp materials shall be placed in puncture resistant containers and properly decontaminated or disposed; broken glassware containers are kept in the Authority's Laboratories and compliance offices.

Vaccinations

- Those employees whose responsibilities potentially place them at risk shall be offered the following vaccinations:
 - tetanus vaccination every 7 years
 - hepatitis B vaccination every 10 years
- Those employees who decline to be vaccinated shall complete a Hepatitis B Vaccination Waiver that shall be placed in their personnel file (see Exhibit 10).

Decontamination

Spills of potentially infectious materials shall be cleaned up using the following procedure:

- Restrict access to the area
- Put on personal protective equipment. Eye protection, gloves and an impermeable disposable apron are appropriate for most spill clean-up situations.
- Cover the spilled material with paper towels

- Apply fresh 1:10 bleach in water solution on top of the paper towels. Other disinfectants approved by the US EPA may be substituted for bleach.
- Allow a few minutes of contact time with the bleach
- Place materials into biohazard bag. If sharps or broken glass is present, use a remote handling technique such as a dustpan or large tweezers to pick up the debris.
- Wipe down the spill area with additional bleach solution followed by soap and water.
- Carefully remove Personal Protection Equipment. Place gloves and apron into biohazard bag.
- Wash hands and any exposed surface with soap and water.

A similar cleaning protocol can be used to decontaminate equipment that has come into contact with blood or other potentially infectious materials. A bio-contaminate container is located in the Authority's Laboratories and Suburban office.

Post-Exposure Prophylaxis and Follow-up

Any employee who suffers an exposure event (touch blood, sustain a needle-stick injury) shall immediately notify their supervisor. These employees will then be offered a confidential post-exposure evaluation and follow-up through the Authority's workplace medical provider that will consist of:

- Documentation of the route of exposure and the circumstances related to the incident
- Identification and infectivity status of the source individual (if possible)
- The employee will be offered the option of having their blood collected for testing.
- The employee will be offered post-exposure prophylaxis in accordance with the current recommendations of the US Public Health Service.
- The employee will receive counseling regarding precautions to take during the period after the exposure incident and the potential illnesses to be alert for and report any related experiences to appropriate personnel.

After performing the post-incident evaluation, the physician shall provide a written opinion that addresses:

- Whether the hepatitis B vaccine is indicated and if the employee has received the vaccine, or evaluation following an incident; and
- That the employee has been informed of the results of the evaluation; and
- That the employee has been told about any medical conditions resulting from exposure to blood or other potentially infectious materials.

Training

Employees shall be trained on possible infection hazards associated with their work and how to protect themselves from infection. At a minimum, infection hazards shall consist of exposure to the causative agents for Hepatitis and Acquired Immune Deficiency Syndrome (AIDS).

12. Fire Protection

This program provides guidelines that are designed to protect employees and the jobsite from fire hazards.

- The RM Facility team leaders are responsible for ensuring that there is an adequate supply and the correct type of fire extinguishers at all Authority facilities and in all Authority vehicles.
- If a fire extinguisher is used, the RM Facility team leader shall be notified immediately and a replacement or refill shall be provided as soon as possible.
- Fire extinguishers placed within Authority facilities will be plainly marked and prominently located such that they are available during an emergency.
- All Authority vehicles shall be equipped with an emergency fire extinguisher.
- On an annual basis, the Risk Management Team will coordinate the inspection, maintenance, and, if necessary, the replacement of all fire extinguishers.
- On an annual basis, the RM Facility team leader shall conduct a fire drill for their responsible location and report to Risk Manager when completed.
- Training in the proper use of fire extinguishers will be conducted for all employees as coordinated by the RM Team. Proper training shall be offered to new hires.
- Tobacco use of any kind is prohibited in all Authority facilities, Authority vehicles, and at customer premises, unless in authorized smoking areas.

All facilities shall undergo a documented fire risk inspection by a qualified individual on a periodic basis. The inspection shall target at a minimum:

- Excessive fuel loading inside facilities
- Unrestricted access to fire extinguishers
- Emergency egress and emergency lighting
- Sprinkler head clearance
- Electrical systems and components
- Utility rooms and installations
- Container grounding and bonding practices

Sprinklers shall be inspected and flow tested on an annual basis.

Work areas shall be kept clear of debris. Accumulations of combustible materials inside structures (paper goods, wood, and clothes) shall be kept to a minimum to reduce the fuel load. Utility rooms shall not be used for storage of combustible materials.

Flammable liquids shall be stored in approved containers. Whenever feasible, flammable liquids shall be stored in approved flammable liquid storage cabinets, modular storage facilities or rooms. Combustibles shall not be stored in the vicinity of

flammable liquid storage cabinets. Grounding and bonding shall be used when dispensing flammable liquids.

Each facility shall have a written emergency action plan. With respect to fire, the plan shall address:

- Procedures for reporting a fire or emergency; and
- Procedures for emergency evacuation, including type of evacuation and exit route assignments; and
- Procedures to account for all employees after the evacuation.

Hot Work

Hot work (work involving welding, brazing or cutting) shall be performed in a designated hot work area or shall be subject to a hot work permit. Requirements for the hot work program include:

- Flame and spark-producing equipment shall be inspected to ensure it is in good repair.
- Verify sprinklers where provided are operational and will not be taken out of service while the hot work is performed.
- Verify that no combustible gases, vapors, dusts, fibers or liquids are in the vicinity of the work area. Verify tanks and equipment previously containing such materials have been cleaned and purged. If there is a possibility of a leak developing in nearby piping, equipment or tanks, monitor the area continuously. A combustible gas monitor shall be utilized to monitor oxygen levels and lower explosive level. Acceptable levels are as follows:

Oxygen	between 19.5 and 23.5%
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Lower explosive limit	Less than 10%
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- In stable work environments, monitoring need only occur once per shift at the start of the hot work. In environments subject to change (e.g., welding in a confined space, work in sewers), monitoring shall be performed continuously.
- If arc welding will occur, welding flash curtains shall be utilized to confine slag and ultraviolet light.
- Surrounding floor areas shall be swept clean of debris. If the flooring is combustible, the floor shall be wet down.
- A fire extinguisher shall be available within 10 feet of the hot work area.
- All combustible materials shall be relocated at least 35 feet from the hot work area. If relocation is not possible, protect fixed combustible materials with metal guards or flame proof covers or other non-combustible spark barriers.
- Protect all floor and wall openings within 35 feet of the operation by tightly covering or providing non-combustible spark barriers.
- Identify a qualified individual to serve as a fire-watch. This individual shall watch

for dangerous sparks in the hot work area, as well as on floors above and below.

- Document that all fire prevention activities are complete in the attached hot work permit. Hot work permits are valid for one shift only. After completing the hot work, the permit shall be kept on file for one year.
- The hot work area shall be patrolled for at least one half hour after work has been completed to look for hot spots.

13. Excavating and Trenching

This program is designed to ensure that appropriate safeguards are employed to protect employees working in excavations and trenches.

- When excavation operations are scheduled, the estimated location of underground utility installations shall first be identified. For planned projects, contact PA One Call at 811 or by web entry and allow a minimum of three days for the utilities to respond. If conducting an emergency excavation, contact PA One Call at 811 and wait for all utilities to be marked in a timely matter and proceed with extreme caution.
- When excavation operations commence, the underground utilities shall be located by safe and acceptable means and those utilities shall be protected while exposed as necessary to protect employees.
- A stairway, ladder, ramp, or other safe means of egress shall be located in trench excavations that are 4 feet or more in depth so as to require no more than 25 feet of lateral travel for employees. If the distance exceeds 25 feet, a second means of egress shall be provided.
- Personal protective clothing and equipment shall be worn by all employees while on a jobsite. (hard hat, safety shoes, eye protection, reflective vest, and gloves)
- Employees shall not locate themselves under loads handled by lifting equipment.
- Employees shall stand away from any vehicle being loaded or unloaded to avoid being struck by any spillage or falling material.
- Adequate protection shall be given to the trench area when there is the potential for water accumulation in the trench. The water removal equipment shall be positioned such that it is away from the trench walls and removed water is directed away from the excavation.
- Excavated material shall not be stored near the top edge of the trench to prevent materials from falling or rolling into the excavation. Excavated material must be at least two feet away from the edge of the trench to properly safeguard those working in the trench.
- Proper methods and equipment shall be employed to prevent the side walls of an excavation from collapsing. Sloping is one approach that does not require special equipment. When using sloping, the walls of the trench shall be sloped to the angle of repose – that angle where collapse of the trench is considered safe.
- See the “Allowable Slopes” section below for additional guidelines on sloping.
- If sloping is not feasible, then a trench box or shoring shall be used. Only trained and qualified personnel shall install a trench box or shoring.
- Proper traffic control and signage shall be maintained when working in any highway right-of-way.
- Where oxygen deficiency (atmospheres containing less than 19.5 percent oxygen) or a hazardous atmosphere exists or could reasonably be expected to exist, such as in excavations in landfill areas or excavations in areas where

hazardous substances are stored nearby, the atmospheres in the excavation shall be tested before employees enter excavations greater than 4 feet (1.22 m) in depth.

- When backfilling a trench, bracing and other support equipment shall not be removed until the depth of the trench has reached a level safe for employees to work within.
- At any time that an employee is in the trench, at least one person must be in attendance at the top of the trench to observe the trench activity and to summon help if an emergency should occur.
- Only certified trained employees shall operate heavy equipment at any excavation site.

Allowable Slopes

United States Occupational Safety and Health Administration specifies:

SOIL OR ROCK TYPE	MAXIMUM ALLOWABLE SLOPES (H:V)(1) FOR EXCAVATIONS LESS THAN 20 FEET DEEP(3)
STABLE ROCK	VERTICAL (90°)
TYPE A (2)	3/4:1 (53°)
TYPE B	1:1 (45°)
TYPE C	1 ½:1 (34°)

(1) Numbers shown in parentheses next to maximum allowable slopes are angles expressed in degrees from the horizontal. Angles have been rounded off.

(2) A short-term maximum allowable slope of 1/2H: 1V (63°) is allowed in excavations in Type A soil that are 12 feet (3.67 m) or less in depth. Short-term maximum allowable slopes for excavations greater than 12 feet (3.67 m) in depth shall be 3/4H: 1V (53°).

(3) Sloping or benching for excavations greater than 20 feet deep shall be designed by a registered professional engineer.

Type A means cohesive soils with an unconfined, compressive strength of 1.5 ton per square foot (tsf) (144 kPa) or greater. Examples of cohesive soils are: clay, silty clay, sandy clay, clay loam and, in some cases, silty clay loam and sandy clay loam. Cemented soils such as caliche and hardpan are also considered Type A. However, no soil is Type A if:

- (i) The soil is fissured; or
- (ii) The soil is subject to vibration from heavy traffic, pile driving, or similar effects; or
- (iii) The soil has been previously disturbed; or
- (iv) The soil is part of a sloped, layered system where the layers dip into the excavation on a slope of four horizontal to one vertical (4H: 1V) or greater; or
- (v) The material is subject to other factors that would require it to be classified as a less stable material.

Type B means:

- (i) Cohesive soil with an unconfined compressive strength greater than 0.5 tsf (48 kPa) but less than 1.5 tsf (144 kPa); or
- (ii) Granular cohesionless soils including: angular gravel (similar to crushed rock), silt, silt loam, sandy loam and, in some cases, silty clay loam and sandy clay loam.
- (iii) Previously disturbed soils except those which would otherwise be classed as Type C soil.
- (iv) Soil that meets the unconfined compressive strength or cementation requirements for Type A, but is fissured or subject to vibration; or
- (v) Dry rock that is not stable; or

(vi) Material that is part of a sloped, layered system where the layers dip into the excavation on a slope less steep than four horizontal to one vertical (4H: 1V), but only if the material would otherwise be classified as Type B.

Type C means:

- (i) Cohesive soil with an unconfined compressive strength of 0.5 tsf (48 kPa) or less; or*
- (ii) Granular soils including gravel, sand, and loamy sand; or*
- (iii) Submerged soil or soil from which water is freely seeping; or*
- (iv) Submerged rock that is not stable, or*
- (v) Material in a sloped, layered system where the layers dip into the excavation on a slope of four horizontal to one vertical (4H: 1V) or steeper.*

14. Power Operated Hand Tools

This program is designed to ensure the safety of employees when using power operated hand tools.

- Before using, all power operated tools shall be inspected by the operator and assured to be in proper and usable condition. Any tool not in usable condition should immediately be removed from use, tagged as defective and reported to your supervisor.
- All electric power operated tools shall either be double insulated or have a functional ground plug. Any tool found to not meet these requirements should immediately be removed from use, replaced, and reported to your supervisor.
- Extension cords for hand tools used in wet locations shall be equipped with ground fault protection.
- Electric cords shall not be used for hoisting or lowering tools.
- Connections for pneumatic power tools shall be inspected and secured to prevent the tool from becoming accidentally disconnected.
- Compressed air shall not be used for cleaning unless reduced to less than 30 psi and then only with appropriate personal protective equipment in use to prevent risk to eyes.
- All fuel-powered tools shall be turned off while being refueled, serviced, or while undergoing maintenance.

15. Office Safety

This program is intended to ensure the safety of all employees who work in or visit the office.

- All buildings are a smoke free zone. Smokers are required to go outside and smoke in designated smoking areas.
- Always close a file cabinet when finished or leaving the area; never leave a file cabinet drawer pulled out or open.
- Computer workstations shall be inspected as part of the annual RM Team inspection to ensure they meet ergonomic standards and that employees are positioned correctly to avoid injury from improper alignment of body and appendages.
- In the event of a fire or upon hearing the fire alarm sounding, all employees shall immediately vacate the building using the nearest exit. Once outside the building, employees shall assemble in the designated parking lot so that all employees can be accounted for and to direct emergency response personnel if all employees are not accounted for.
- Rubbish, empty boxes, cartons, etc. shall be placed in the designated trash receptacles. Empty boxes left on floors inside the building pose a tripping hazard that should be avoided.
- Electrical and communication wires shall not be placed such that employees walk over them. If such a placement is necessary, the wires shall be placed in a shielding device designed for safe crossing.
- Employees walking throughout the building should look straight ahead and not read or review materials as they walk. Inattention risks injury.
- Transporting equipment or materials through the building should be done with caution and utilizing proper transportation equipment such as a hand truck if the load is bulky or of sufficient weight that it poses a risk to employees.
- Employees shall report any loose rug, wires, or any other material that might pose a tripping hazard to the immediate supervisor who shall take immediate action to eliminate the hazard. Until a permanent solution is found, the hazard should be identified or barricaded to protect other employees.
- Space heaters are not allowed in the facility unless necessitated by an emergency. Small electric heaters under desks are allowed as long as they are thermostatically controlled with ground plug.
- Open flames of any kind are strictly prohibited.
- Employees should remain vigilant for intruders in the office. If unescorted, suspicious individuals are encountered, immediately notify a supervisor. All visitors should have signed in with the receptionist on entering the building.
- Panic/emergency buttons located in customer service areas shall be used any time an employee feels threatened by any individual entering the Authority's offices.

16. Substance Abuse

There will be zero tolerance for the abuse of drugs and alcohol in the workplace.

All employees shall be subject to a pre-hire drug testing as well as for reasonable suspicion of usage.

All employees who operate an Authority vehicle and are involved in an accident shall be subject to drug and alcohol testing as soon as possible after the accident.

Employees with commercial driver licenses shall additionally be subject to random periodic and post-incident drug and alcohol testing as required by the US Department of Transportation (DOT) regulations, as outlined in the Authority's Employee Manual.

A positive test result shall result in an immediate unpaid suspension from work activities pending a substance abuse investigation.

Additional procedures for responding to a positive drug tests are described in the Authority's Employee Manual and/or Collective Bargaining Agreements.

17. Standard Operating Procedures

New procedures will be developed as new activities, equipment, and responsibilities are identified. New procedures are therefore incorporated by reference. Copies of new procedures will be filed in the Health & Safety subdirectory on the computer network.

A standard format shall be followed for each new Standard Operating Procedure (SOP) utilizing a template found in the Forms Directory on the Authority's computer network.

SOPs shall be reviewed on at least an annual basis for accuracy and completeness. As part of the initial review or annual review, a Job Safety Analysis (JSA) will be completed that will review the risks associated with the tasks and the appropriate methods to reduce the potential for injury. The responsibility for the review shall be borne by the department manager in which the activity occurs.

EXHIBIT 1
LEHIGH COUNTY AUTHORITY
NEW EMPLOYEE SAFETY ORIENTATION CHECKLIST
PART ONE - EMPLOYEE

Employee Name	Employee Number
Employment Date	Job Title
Location	Department

Instructions: To ensure that all new employees receive proper orientation, the following applicable Health and Safety forms and items must be completed and/or discussed with employees by the Risk Manager, Human Resource Manager or other designated staff. Mark each item with a checkmark (✓) when completed or note N/A if not applicable to this employee. Upon appropriate signatures, insert the forms in the employee's Personnel File as a permanent record.

EMPLOYMENT FORMS

<input type="checkbox"/>	Employee Manual
<input type="checkbox"/>	Emergency Contact Information
<input type="checkbox"/>	HIPAA Notice of Privacy Practices
<input type="checkbox"/>	Copy of Driver's License
<input type="checkbox"/>	Key Agreement

FITNESS FOR DUTY PROGRAMS

<input type="checkbox"/>	CDL or Agency Specific Drug and Alcohol Testing Requirements *
<input type="checkbox"/>	Substance Abuse in the Workplace *

WORK-RELATED INJURIES

<input type="checkbox"/>	PA Workers' Compensation Information
<input type="checkbox"/>	Employee's Acknowledgement Under Section 306 (f.1(1)(i) of the Pennsylvania Workers' Compensation Act
<input type="checkbox"/>	Delaware Valley Workers Compensation Trust information
<input type="checkbox"/>	Posted Panel of Doctors

SAFETY AND SECURITY

<input type="checkbox"/>	General Safety Rules (employee responsibilities, precautions, procedures, and enforcement)
<input type="checkbox"/>	Hazardous Substances (review agency hazards)
<input type="checkbox"/>	First Aid/CPR Providers, First Aid Kits, and Medical Emergency Procedures
<input type="checkbox"/>	Emergency Notification and Evacuation (exits, fires, bomb threats)
<input type="checkbox"/>	Vaccine Program
<input type="checkbox"/>	Building Security Procedures
<input type="checkbox"/>	Workplace Violence Policy and Incident Reporting (agency procedures) *
<input type="checkbox"/>	Domestic Violence and the Workplace *
<input type="checkbox"/>	Smoking Policy *
<input type="checkbox"/>	Access Procedures

The applicable items above have been reviewed, and I have been provided with copies of the applicable items.

Employee Signature	Date
--------------------	------

I have reviewed the applicable items above with the employee.

Signature / Title	Date
-------------------	------

* (Employee Manual)

EXHIBIT 1
LEHIGH COUNTY AUTHORITY
NEW EMPLOYEE ORIENTATION CHECKLIST
PART TWO - SUPERVISORY

Employee Name	Employee Number
---------------	-----------------

Instructions to the Supervisor: Use the following list as a guide to orient the new employee; consider the needs of the new employee when determining which items may not be applicable. Mark each completed item with a checkmark (✓) or note **N/A** if not applicable to this employee. After completion, sign and date the form, and return it to the personnel clerk to be attached to PART ONE of this checklist and inserted in the employee's Official Personnel Folder.

Work Hours and Absences	
	Work Hours, Lunch, Break Periods (use of Alternate Work Schedules)
	Call-in Time/Contact Person
	Leave Requests and Approval Procedures
	Family Medical Leave Act
	Overtime Procedures
	Photo ID
Job Responsibilities	
	Duties and Responsibilities/Position Description
	Job Standards/Expectations
	Probationary Period Requirements/Training
	Performance Evaluation (procedure, reviewing officer)
	Promotions
	Employee Training Plans/Opportunities
Safety and Security	
	Safety/Security Regulations and Emergency Evacuation Procedures
	First Responder Lists and AED Locations
	Reporting Requirements for Injuries and Accidents and Workplace Hazards
	Reporting Workplace Violence/Threats
	Work Unit Smoking Policy/Smoking Location
	CDL Safety-Sensitive Duties, CDL Prohibitions, Testing/Licensing Requirement, Consequences
	Right to Know MSDS Forms/Procedures
	Fitness for Duty
	Medical/Prescription Medication

Communications and Office Procedures	
	Formal and Informal Channels of Communication and Bulletin Boards
	Tour of Office/Introduction to Staff
	Customer Courtesy and Conduct
	Telephone Usage (local, toll, personal)
	USER ID for Internet, E-mail, etc.
	Intranet/Internet Capabilities/Restrictions
	General Office Procedures (mail services, clerical support, ordering supplies, photocopying, faxing)
	Agency Equipment, Use of Supplies, and Equipment Policy
	Personal Electrical Device Policies (radios, beepers, cell phones, etc.)
	Travel Regulations/Corporate Card, Automobile Use, Vehicle Accident Procedures
	Work Rules/Prohibitions, Code of Conduct
	Dress Restriction/Uniform Policy
Employee Interaction	
	Employee Suggestion Program
	Complaint Procedures *

My supervisor has reviewed the listed applicable items with me.

Employee Signature	Date
--------------------	------

I have reviewed the applicable items above with the employee.

Supervisor Signature	Date
----------------------	------

EXHIBIT 2

a-2

PROPERTY DAMAGE REPORT

EMPLOYEE (s): _____ DATE: _____
DEPARTMENT/POSITION: _____ TIME: _____ am/pm
PROPERTY OWNER'S NAME _____ PHONE: _____
ADDRESS: _____
PROPERTY DAMAGED: _____ < \$500
_____ > \$500 (complete FORM b-2)
EXPLAIN ACCIDENT: _____
(where and how)
RECOMMENDATIONS: _____

SUPERVISOR _____ EMPLOYEE _____
(use back if necessary)

a-1

FIRST AID REPORT

EMPLOYEE: _____ DATE: _____
DEPARTMENT/POSITION: _____ TIME: _____ am/pm
NATURE OF INJURY: _____
TREATMENT GIVEN: _____
WAS PROFESSIONAL MEDICAL ATTENTION GIVEN? NO YES (complete FORM b-1)
EMPLOYEE SENT: BACK TO WORK HOME OTHER
EXPLAIN ACCIDENT: _____
(where and how)

RECOMMENDATIONS: _____

SUPERVISOR _____ EMPLOYEE _____
(use back if necessary)

EXHIBIT 3

LEHIGH COUNTY AUTHORITY

INCIDENT REPORT

This form should be used to report all accidents involving injury or property damage.

Page 1 – Incident Description should be completed by the employee and submitted to the employee's supervisor immediately following the incident.

Page 2 – Supervisor's Report should be completed by the supervisor within 24 hours following the incident and submitted to Human Resources. Human Resources will submit claims to the appropriate insurance carrier.

Page 3 – Investigation Report. An accident investigation should be scheduled within two to five work days of the incident and should be completed by a minimum of two (2) investigators. The final report should include:

- Purpose
- Scope
- Summary of Events
- Observations
- Conclusions/Root Causes
- Recommendations of corrective action and completion times
- If appropriate, recommendations for disciplinary action

The completed Investigation Report should be submitted to Human Resources within one (1) week of the incident for distribution to appropriate parties and recommendations of further action.



INCIDENT REPORT

Incident Description – Please attach any additional information if there is not sufficient space on this form. This form should be completed within 24 hours of incident and should be submitted to your direct supervisor.

Incident Location (name and address)	Employee(s) Involved	
Date / Time (a.m. / p.m.) of Incident	Time Employee Began Work	
Supervisor's Name	Date / Time Employer Notified	
Type of incident (<i>Select all that apply</i>) <input type="checkbox"/> Accident (Attach accident report) <input type="checkbox"/> Conduct <input type="checkbox"/> Employee Injury <input type="checkbox"/> Harassment <input type="checkbox"/> LCA Property Damage <input type="checkbox"/> Safety Violation <input type="checkbox"/> Other Property Damage (<i>provide contact information for property owner</i>) <input type="checkbox"/> Weapons Possession or Use <input type="checkbox"/> Other (Explain) <input type="checkbox"/> Workplace Violence		
Who witnessed this incident? (<i>Provide contact information for non-employee witnesses.</i>)		
Incident Description (<i>Be as specific as possible in your description of what the employee was doing and what tools, equipment, materials or chemicals were used when the accident or illness occurred.</i>)		
Nature and Extent of Injury or Property Damage (<i>Be as specific as possible in your description including the extent, if any, of property damage, injuries to person, medical treatment given, extenuating circumstances, etc.</i>)		
Did employee receive medical treatment? <input type="checkbox"/> Yes <input type="checkbox"/> No (<i>If yes, provide date of treatment and name and address of medical provider.</i>)		
Was any Authority policy violated? <input type="checkbox"/> Yes <input type="checkbox"/> No (<i>If yes, try to be specific about which provision(s) was/were violated and the extent of the violation.</i>)		
By my signature below I acknowledge that I have provided the information in this report, and to the best of my ability, have verified the accuracy of this information.		
_____	_____	_____
(<i>Print Reporting Employee's Name</i>)	(<i>Reporting Employee's Signature</i>)	(<i>Date</i>)

Supervisor's Report

Has the Authority or this employee experienced similar prior incidents? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, please provide details, including date, time, location, person(s) involved and corrective action taken:
Was there an incident report filed for this/these previous incidents? ? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, please provide the incident date(s).
For this incident, what actions were taken: <input type="checkbox"/> Corrective action was taken in accordance with Authority policies (please provide details):
<input type="checkbox"/> Authority representatives, other than Supervisor, were notified (please provide details):
<input type="checkbox"/> Police were contacted (please provide details, including their response):
<input type="checkbox"/> Other actions (please provide details):
By my signature below I acknowledge that I have provided the information in this report, and to the best of my ability, have verified the accuracy of this information. _____ (Print Supervisor's Name) _____ (Supervisors's Signature) _____ (Date)

Employee Acknowledgement

By my signature below I acknowledge that a supervisor has shown this report to me and reviewed its contents with me. This review included an explanation that should I have additional or different information, or viewpoint, that I think is important to this incident, I have the right to provide an attachment to this report with this information. _____ (Print Subject Employee's Name) _____ (Subject Employee's Signature) _____ (Date)
--

Investigation Report

Describe causes or contributory factors (e.g. equipment failure, procedural inadequacy, human error:

Unsafe equipment: Yes No If yes, describe

Unsafe conditions: Yes No If yes, describe

Unsafe acts: Yes No If yes, describe

Recommendations to prevent recurrence of similar incidents (e.g. SOP revision, employee retraining, error analysis, mechanical revisions or modifications).

Recommendations to be implemented (what is to be completed and by whom:

Schedule for Implementation of Recommendations:

Signatures:	
Lead Investigator:	Date:
Other Investigator:	Date:
Other Investigator:	Date:

WITNESSES

1 . Name _____
Address _____
_____ Phone _____

Where was witness? _____

2 . Name _____
Address _____
_____ Phone _____

Where was witness? _____

3 . Name _____
Address _____
_____ Phone _____

Where was witness? _____

PERSONS INJURED

1 . Name _____ Age _____
Address _____
_____ Phone _____

Nature of injuries _____

Where was injured per son taken? _____

2 . Name _____ Age _____
Address _____
_____ Phone _____

Nature of injuries _____

Where was injured per son taken? _____

3 . Name _____ Age _____
Address _____
_____ Phone _____

Nature of injuries _____

Where was injured per son taken? _____

EXHIBIT 4



LEHIGH COUNTY AUTHORITY

1053 SPRUCE STREET
PO BOX 3348
ALLENTOWN, PA 18106
610-398-2503
610-398-8413 FAX

ACCIDENT REPORT

Keep this form in the glove compartment of your car. In case of an accident fill in all available information right at the scene.

A

DAMAGE TO YOUR VEHICLE

Name of Insured _____

Make of Car _____

Motor No. _____

Driver's Name _____

Address _____

Home Phone _____ Work Phone _____

Damage _____

Police Report? ___Yes ___No

Name of Police Dept. _____

If witness or witnesses are in another car and refuse to give their names, write down the license number.

License No. _____ License No. _____

#B

DAMAGE TO PROPERTY OF OTHERS

Owner _____ Phone _____

Address _____

_____ State Lic. _____

Make of Car _____ Year _____

Driver _____ Phone _____

Address _____

Chauffeur or Driver's License No. _____

Is other car insured? _____ Name of Co. _____

Damage: NOTE CAREFULLY _____

DETAILS OF ACCIDENT

(Additional Remarks cont'd):

Date _____ Time _____

Place of Accident (name streets) _____

Road surface and condition _____

Weather conditions _____

#C

DAMAGE TO PROPERTY OF OTHERS

Owner _____ Phone _____

Address _____

_____ State Lic. _____

Make of Car _____ Year _____

Driver _____ Phone _____

Address _____

Chauffeur or Driver's License No. _____

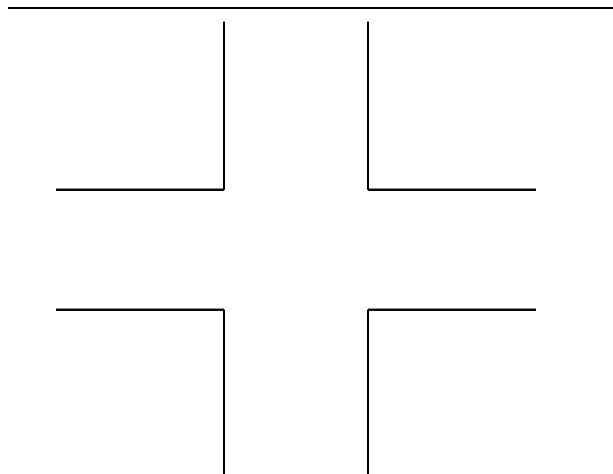
Is other car insured? _____ Name of Co. _____

Damage: NOTE CAREFULLY _____

Going which direction
Speed (Mph)
Which Side of Street
Distance from Curb
Signals (Horn or Hand)

OUR CAR	OTHER CAR

Indicate point of collision and briefly describe what happened: _



POINT OF IMPACT

CHECK (X) FOR EACH VEHICLE

A (Your Vehicle)	B	C		A (Your Vehicle)	B	C	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Front	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Lt. Side
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Rt. Front	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Rear
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Lt. Front	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Rt. Rear
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Rt. Side	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Lt. Rear

Signature

EXHIBIT 5

ACCIDENT INVESTIGATION REPORT

Summary Description

Purpose

Scope

Summary of Events

Observations

Conclusions

Recommendations

Causes Leading to Accident

EXHIBIT 6

WITNESS CARD

Date of Accident _____ Location _____

How did accident occur? _____

Was anyone injured? _____

What was your involvement in the accident? _____

Name of Witness _____ Date _____

Address _____ Telephone _____

Name of Insured _____

Any other important comments:

EXHIBIT 8

LCA SAFETY SHOE REIMBURSEMENT POLICY

Each current or newly hired employee, anticipated to be actively involved in the field or performance construction, maintenance or other plant activities shall report to work with appropriate safety footwear.

The Authority shall furnish safety shoes to SEIU and SMWA bargaining unit employees in accordance with the respective labor agreement.

Reimbursement shall also be available to other qualified administrative, management or engineering staff, as well as part time employees upon prior review and recommendation of the Risk Management Team. Such reimbursement shall be 100% of the cost of the shoe up to a maximum of \$120.

The Authority has established a voucher program. Under the programs employees are able to purchase shoes through approved vendors. The vendor will bill LCA for the appropriate subsidized amount with any remaining balance paid by the employee at the time of purchase.

EXHIBIT 10

VACCINATION WAIVER

I understand that due to my occupational exposure to potentially infectious materials I may be at risk of acquiring hepatitis B virus and/or tetanus infections. I have been given the opportunity to be vaccinated with hepatitis B and/or tetanus vaccines, at no charge to myself. However, I have decided to decline the hepatitis B tetanus vaccination at this time. I understand that by declining these vaccines I continue to be at risk of acquiring these serious diseases. If in the future I continue to have occupational exposure to potentially infectious materials and I want to be vaccinated, I can receive either or both vaccination series at no charge to me. I hereby agree that I will not hold the Lehigh County Authority, its directors, staff or agents responsible for any liability, loss, charge, damage or expense caused or incurred as a result of my not taking part in any vaccination program.

Print Employee Name: _____

Employee Signature

Date

EXHIBIT 11

NEAR MISS AND UNSAFE PRACTICE REPORTING FORM

NEAR MISS AND UNSAFE PRACTICE REPORTING FORM

All employees are encouraged to report all near-miss incidences and unsafe work practices or equipment. This form is intended to provide adequate information to correct and prevent incidences that nearly resulted in an injury-producing accident or unsafe work practices or equipment that may lead to accidental injuries and/or property damage.

With the reporting of near-miss and unsafe practice or equipment information, we can proactively create a safer working environment for all employees.

(Form on Reverse Side)

The following is a report of Near-miss Unsafe Equipment Unsafe Practice
(Please Check One)

Employee(s) Involved: (Optional)	
Location of Incident & or Equipment #	Work Order Generated Yes <input type="checkbox"/> No <input type="checkbox"/>
Date/Time of Incident:	Date or Report:
Description of Incident:	
Date Reported to Supervisor:	Supervisor's Name:
Employee's Signature: (Optional)	Date:

SUBMIT FORM TO YOUR IMMEDIATE SUPERVISOR