



PECO ENERGY

PECO Energy Company  
PO Box 2200  
Sanatoga, PA 19464-0920

December 21, 1998

Mr. H. J. Miller  
Administrator, Region I  
U.S. Nuclear Regulatory Commission  
475 Allendale Road  
King of Prussia, PA 19406

Dear Mr. Miller:

Per Limerick Generating Station - Unit 1 Technical Specifications, Docket Number 50-352, Appendix B "Environmental Protection Plan," notification is being made of submittal of non-routine reports to Pennsylvania State Agencies.

Under Appendix B, Section 5.4.2 "Non-routine Reports," LGS is required to submit a report of any non-routine occurrence to the Commission. The non-routine event involved the release of 500 gallons of 12% sodium hypochlorite to the environment. The release was caused by a failure of the tank discharge fittings and subsequent leaks from the secondary containment.

Attached are the reports sent to the Pa Department of Environmental Protection, Pennsylvania Emergency Management Agency and the Montgomery County Emergency Planning Commission. The event is referenced under the USCG National Response Center Number 462231.

If you have any questions regarding this submittal, please contact me at (610) 718-2500.

Sincerely,

Will Coyle  
Environmental Compliance Manager

cc:

LGS Env File  
W. Coyle  
M. Alphonso  
T. Moore

IE 23

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PDR ADOCK 05000352  
P PDR



PECO ENERGY

PECO Energy Company  
PO Box 2300  
Sanatoga, PA 19464-0920

November 13, 1998

Ms. Donna Suevo  
PA Department of Environmental Protection  
Division of Storage Tanks  
Lee Park, Suite 6010  
555 North Lane  
Conshohocken, PA 19428

Dear Ms. Suevo:

On November 2, 1998 the Limerick Generating Station reported the release of an RQ for sodium hypochlorite, National Response Center Case Number 462231. The attached 15 day Follow-up Report is being sent to meet the requirements set forth in Section 304 (c) of EPCRA (42 U.S.C. 11004 (c)) and Section 206 (d) of the Hazardous Material Emergency Planning and Response Act (35 P.S. 6022.206 (d)).

If you have any questions regarding this issue please contact Will Coyle, Acting Environmental Compliance Manager at (610) 718-2500.

Sincerely,

Michael P. Gallagher,  
Plant Manager

MPG/AJF:vc

cc: J. D. von Suskil  
W. J. Coyle  
M. J. Alfonso  
J. J. Rogan  
Environmental files

1. Name, address and telephone number of the individual filing this report.

Michael P. Gallagher, Plant Manager  
Limerick Generating Station  
Sanatoga, PA 19464

(610) 718-2000

2. Name, address and telephone number of the installation or site where the incident occurred.

Limerick Generating Station  
Evergreen and Sanatoga Roads  
Sanatoga, PA 19464

(610) 718-2000

3. Date, time and location of the incident.

Review of tank level indicators revealed the release began at 2100 hours on November 1, 1998. The level did not drop enough to trip the low level warning at the Station. On November 2, 1998 at 0618 hours the release was detected by Station personnel.

The release occurred from the Unit 1 temporary sodium hypochlorite storage tank. The tank was located 10 ft south of the Unit 1 acid/chlorination building on a paved surface. Secondary containment was constructed around the tank, however the containment allowed 350 gallons of the total 500 gallons lost from the tank to be released to the environment.

The product flowed along a crack in the asphalt until reaching a grass swale along the eastern edge of the asphalt. Following the path of least resistance the product flowed along this swale and into a culvert. Traveling through the culvert the product was halted at its northern end by existing debris and soil. Approximately 120 gallons of product was recovered from the culvert.

4. A brief description of the circumstances causing the incident.

The incident was caused by an incompatible fitting attached to the temporary sodium hypochlorite storage tank. The component failed approximately 5 days after installation. The resulting leak was released to the environment through holes in the temporary secondary containment.

5. Description and estimated quantity (by weight or volume) of materials or wastes involved.

350 gallons of a 12.5% solution of sodium hypochlorite was released to the environment. This equates to 437 pounds of sodium hypochlorite (RQ = 100 pounds). The pH range of this material is 10 to 12 depending on hydroxide concentration and age.

6. An assessment of any contamination of land, water or air that has occurred due to the incident.

There was no release to water or air.

Land contamination covered an approximate area of 250 ft in length, 24 to 72 inches in width and up to 24 inches deep. 75 feet of this area consisted of asphalt and was sampled and removed. 125 feet of this area consisted grass and soil along a swale and was sampled and removed. 50 feet of this area consisted of a 14 inch diameter culvert running 5 ft beneath a roadway. The culvert was flushed repeatedly and rinsed with a 5% solution of sodium sulfite.

7. Estimated quantity and disposition of all recovered materials or wastes that resulted from the incident, and plans for ultimate disposal.

Upon completion of excavation and decontamination, 120 cubic yards of waste material have been generated. Two 55 gallon drums of product soaked materials must be disposed of as hazardous waste. All other solids are being handled as residual wastes.

All liquids were pumped into the Unit 1 Cooling Tower to assist in algal control during the restoration of the sodium hypochlorite injection system. Under normal operating conditions, 500 gallons of sodium hypochlorite is injected into the cooling tower daily.

8. A description of what actions you intend to take to prevent a similar occurrence in the future.

Integrity testing will be performed on all new or temporary tanks, lines and containment systems.

Compatibility analyses will be performed on all new or temporary systems and components with regard to chemical, physical and environmental interferences.



PECO ENERGY

PECO Energy Company  
PO Box 2300  
Sanatoga, PA 19464-0920

November 13, 1998

Mr. George Bartow  
Coordinator LEPC  
Montgomery County Office of Emergency Preparedness  
Eagleville Road  
Eagleville, PA 19403

Dear Mr. Bartow:

On November 2, 1998 the Limerick Generating Station reported the release of an RQ for sodium hypochlorite, National Response Center Case Number 462231. The attached 14 day Follow-up Report is being sent to meet the requirements set forth in Section 304 (c) of EPCRA (42 U.S.C. 11004 (c)) and Section 206 (d) of the Hazardous Material Emergency Planning and Response Act (35 P.S. 6022.206 (d)).

If you have any questions regarding this issue please contact Will Coyle, Acting Environmental Compliance Manager at (610)718-2500.

Sincerely,

Michael P. Gallagher  
Plant Manger

MPG/AJF:vc

cc: J. D. von Suskil  
W. J. Coyle  
M. J. Alfonso  
J. J. Rogan  
Environmental files

PENNSYLVANIA EMERGENCY MANAGEMENT AGENCY  
P.O. BOX 3321  
HARRISBURG, PA 17105

HAZARDOUS MATERIAL EMERGENCY NOTIFICATION REPORT

THIS REPORT has been prepared by or on behalf of the below-named company or individual in order to provide emergency notification information about a hazardous material release that occurred from a facility or vehicle that is either owned or operated by the named company or individual. Submission of this report is required by Section 304 (c) of the Emergency Planning and Community Right-to-Know Act of 1986 (SARA Title III) (42 U.S.C. 11004 (c)) and Section 206 (d) of the Hazardous Material Emergency Planning and Response Act (35 P.S. 6022.206 (d)).

RELEASE INFORMATION

1. Name of Company, Owner or Operator:

PECO ENERGY- Limerick Generating Station

2. Address of Company, Owner or Operator:

Limerick Generating Station

Evergreen and Sanatoga Roads

Sanatoga, Pa 19464

3. Chemical Name of Substance Released:

12.5% solution, Sodium Hypochlorite

4. Quantity Released (LB):

437 pounds

5. Location of Release: (describe site of release at the facility or, if a transportation accident, the highway milepost, intersection or other appropriate identifier):

The release occurred from the Unit 1 temporary sodium hypochlorite storage tank. The tank was located 10 ft south of the Unit 1 acid/chlorination building on a paved surface. Secondary containment was constructed around the tank, however due to existing holes in the containment 350 gallons of the total 500 gallons lost from the tank was released.

On 11/3/98 excavation resumed and was completed to a depth of 6 inches along the entire length of the spill (excluding pavement). Excavation greater than 6 inches began the afternoon of 11/3/98. Soil removal was allowed to proceed at 3 to 6 inch intervals due to potential underground interferences. Soil color and odor were used as indicators for hypochlorite contamination. 20 g soil samples were taken at increasing depths and from the excavation side walls until contamination levels were found to be <0.02 ppm residual oxidant.

The spill was found to terminate at the end of a 50 ft culvert running beneath a site road. Initial contamination levels in the culvert were 740 ppm residual oxidant. Lewis Environmental pumped approximately 120 gallons of product from the culvert and performed the first of three 300 gallon water flushes through the pipe. Contamination levels were reduced to 37 ppm residual oxidant upon completion of the initial flush.

Excavation continued on the grass area on 11/4/98 and the contaminated pavement area was cut and prepared for excavation later that day. Excavation reached depths up to 21 inches in low-lying grass areas to achieve contamination levels below 0.02 ppm residual oxidant.

The south end of the culvert (upstream) was excavated to a point where further excavation would impact the road support and was halted. Contamination levels were less than 1 ppm residual oxidant in this area. The north end of the culvert (downstream) was excavated the evening of 11/5/98. Upon removal of the soil and asphalt, free product was found at a depth of 10 inches. Excavation continued around the face of the pipe and eventually exposed 16 inches of the pipe and to a depth of 14 inches. At this point contamination levels were found to be less than 1 ppm residual oxidant and the excavation was halted due to road support impact.

The second flush of the culvert was performed 11/6/98. 300 gallons of water was pumped into the south end of the culvert and collected at the north end. The levels were reduced to 11 ppm residual oxidant.

The third and final flush included a wash with 100 gallons of a 5% sodium sulfite solution and rinse with 200 gallons of water on 11/6/98. Sodium sulfite was used to neutralize any remaining sodium hypochlorite solution. Contamination levels were reduced to <0.02 ppm residual oxidant, completing remediative activities in the culvert.

Asphalt removal continued at a width of 5 feet and depth of 6-9 inches to where soil samples came back less than 0.02 ppm residual oxidant. Initially, low levels of contaminant (less than 15 ppm residual oxidant) were found in the pavement underlayers.

Backfilling operations commenced immediately upon completion of sampling due to nuclear safeguard restrictions on excavation. Verbal approval was received from the Pa DEP to backfill as documented in the attached letter dated November 5, 1998 from J.J. Rogan.

The excavation and backfilling were completed on 11/6/98. Final grading and repaving operations will be on-going.

The product flowed along a crack in the asphalt until reaching the grass swale along the eastern edge of the asphalt. Following the path of least resistance the product flowed along this swale and into a culvert. Traveling through the culvert the product was halted at its northern end by existing debris and soil. Approximately 120 gallons of product was recovered from the culvert.

The release did not leave the Site nor did it reach navigable waters.

6. Date, time and duration of Release:

Review of tank level indicators revealed the release began at 2100 hours on November 1, 1998. The level did not drop enough to trip low level warning at the Station. On November 2, 1998 at 0618 hours the release was detected by Station personnel performing scheduled rounds.

7. Release was into: Air \_\_\_\_\_ Surface Water \_\_\_\_\_ Sewer \_\_\_\_\_  
Ground X Highway Surface \_\_\_\_\_

8. Actions taken to respond to and contain the release, including the name of the any cleanup contractor. (provide complete description - use separate page if necessary):

Initial Response:

The release was caused by a chemically incompatible camlock fitting attached to the temporary tank. To isolate the fitting and the leak, the valve upstream of this fitting was closed. Booms and spill pads were used to contain and redirect the flow as it exited the secondary containment. A load of earth and stone was dumped at the pavement-grass interface to stop flow to the grass area. The tarpaulin placed beneath the tank and containment during construction acted as a partial catch-basin for product leaking through the secondary containment.

Cleanup and Restoration:

Lewis Environmental was contracted to perform the Site cleanup and restoration. Spill pads and booms were deployed to absorb the remaining free product collecting in cracks and depressions in the pavement, containment basin, tarpaulin and grass.

Decontamination and removal of all free product from the spill area was completed on 11/2/98, excluding the downstream culvert. Containment was placed beneath the valve and fitting to prevent further contaminant release.

To prevent release to waterways and other non-contaminated areas due to rain or catastrophic tank failure, an earthen berm was constructed at the downstream end of the release. Lewis Environmental maintains 24 spill response coverage.

9. Any known or anticipated acute or chronic health risks associated with the release (describe in detail - if not appropriate, state none):

None.

10. Advice on medical attention for exposed individuals (if appropriate):

There were no injuries or personnel exposures as a result of this release.

11. Actions to be taken to mitigate potential future incidents (describe in detail):

Integrity testing will be performed on all new or temporary tanks, lines and containment systems.

Compatibility analyses will be performed on all new or temporary systems and components with regard to chemical, physical and environmental interferences.

THIS REPORT was prepared by the undersigned on behalf of the company or individual named in paragraph 1. The information provided herein is true and correct to the best of my knowledge and belief.

NOTE: If you have any suggestions about preparation of this report, call the Pennsylvania Emergency Management Agency at (717) 783-7250 between 8am and 4pm Monday through Friday.

Prepared By:

Michael P. Gallopp

(Name)

Plant Manager

(Title or Position)

(610) 718-2000

(Telephone Number)

11/13/98

(Date)



PECO ENERGY

PECO Energy Company  
PO Box 2300  
Sanatoga, PA 19464-0920

November 13, 1998

Mr. Dick Rodney  
Commonwealth of Pennsylvania  
Pennsylvania Emergency Management Agency  
P.O. Box 3321  
Harrisburg, Pa 17105

Dear Mr. Rodney:

On November 2, 1998 the Limerick Generating Station reported the release of an RQ for sodium hypochlorite, National Response Center Case Number 462231. The attached 14 day Follow-up Report is being sent to meet the requirements set forth in Section 304 (c) of EPCRA (42 U.S.C. 11004 (c)) and Section 206 (d) of the Hazardous Material Emergency Planning and Response Act (35 P.S. 6022.206 (d)).

If you have any questions regarding this issue please contact Will Coyle, Acting Environmental Compliance Manager, at (610)718-2500.

Sincerely,

Michael P. Gallagher  
Plant Manager

MPG/AJF:vc

cc: J. D. von Suskil  
W. J. Coyle  
M. J. Alfonso  
J. J. Rogan  
Environmental files

PENNSYLVANIA EMERGENCY MANAGEMENT AGENCY  
P.O. BOX 3321  
HARRISBURG, PA 17105

HAZARDOUS MATERIAL EMERGENCY NOTIFICATION REPORT

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Limerick Generating Station

Evergreen and Sanatoga Roads

Sanatoga, Pa 19464

3. Chemical Name of Substance Released:

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The excavation and backfilling were completed on 11/6/98. Final grading and repaving operations will be on-going.

9. Any known or anticipated acute or chronic health risks associated with the release (describe in detail - if not appropriate, state none):

None.

10. Advice on medical attention for exposed individuals (if appropriate):

There were no injuries or personnel exposures as a result of this release.

11. Actions to be taken to mitigate potential future incidents (describe in detail):

Integrity testing will be performed on all new or temporary tanks, lines and containment systems.

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NOTE: If you have any suggestions about preparation of this report, call the Pennsylvania Emergency Management Agency at (717) 783-7250 between 8am and 4pm Monday through Friday.

Prepared By: Michael P. Gallagher  
(Name)  
Plant Manager  
(Title or Position)  
(610) 718-2000  
(Telephone Number)  
11/13/98  
(Date)