

STATEMENT OF BASIS

PPL MARTINS CREEK STEAM ELECTRIC STATION (SES) MARTINS CREEK, PENNSYLVANIA PAD 987 393 212

I. INTRODUCTION

PPL Martins Creek SES (hereafter called the “Facility”) is subject to an Environmental Protection Agency (EPA) program promulgated under the Hazardous and Solid Waste Amendments (HSWA). This program is generally known as “Corrective Action” and is designed to insure that facilities subject to HSWA have investigated and cleaned up any releases of hazardous waste or hazardous constituents that may have occurred at their property. Although not a permitting program per se, EPA uses the administrative procedures of the Hazardous Waste Permit Program, found in 40 CFR Part 124, to finalize decisions under the HSWA Corrective Action Program.

This Statement of Basis is for PPL Martins Creek SES. It describes the history of environmental contamination and cleanup at the Facility and it explains the reason for EPA’s proposal regarding corrective action at the Facility.

After a thorough site inspection of the Facility, and an evaluation of past environmental cleanup activities and current operating procedures, EPA believes that no further corrective action is necessary at the Facility at this time. The purpose of this document is to solicit public comment on the proposal that no further corrective action is required at the Facility.

II. FACILITY BACKGROUND

The Facility is located along the western bank of the Delaware River, off of Foul Rift Road in Martins Creek, Northampton County, PA. The 700 acre site is a steam-powered electric generating station. It uses two coal-fired and two oil-fired boilers to produce electricity. The Facility is located in a mixed agricultural/residential area (see Figure 1).

The Facility generates large amounts of fly ash and bottom ash, approximately 55,000 tons in 2000. The ash is disposed of in on-site basins that operate under residual waste permits issued by the PA Department of Environmental Protection (PADEP). Hazardous waste generation has been reduced to approximately 3,000 pounds per year through waste minimization efforts by the facility. However, due to a lead paint removal project, the Facility generated approximately 11 tons in 2000. The hazardous waste is disposed of at permitted off-site facilities.

III. SUMMARY OF FACILITY WASTE MANAGEMENT AREAS - The following units manage waste material or have managed it in the past (see Figure 2).

Metal Cleaning Waste Basins - These two (2) basins were used for the storage of acid waste that was generated from cleaning the boilers. The basins were lined with hypalon liners. They were retired in 1984. The basins were cleaned. Soil and groundwater samples were taken to ensure

that the area was clean. The closure plan and closure activities were approved by the Pennsylvania Department of Environmental Resources (PADEP), the precursor agency of the PADEP. PADEP approved the closure construction by letter dated 1/17/86.

Ash Basin #1 - This basin is used for the disposal of bottom ash generated during the combustion of fuel. The bottom ash settles out in the basin and the water discharges to the Delaware River. This discharge is regulated by a National Pollutant Discharge Elimination System (NPDES) permit issued by PADEP. The impoundment is permitted and monitored by PADEP. The Facility is authorized to operate the basin as a Residual Waste Disposal Impoundment. The groundwater surrounding the basin is monitored quarterly to insure that the basin is not contaminating the groundwater.

Ash Basin #2 Area - This area consists of three parts: the fly ash basin, the Industrial Waste Treatment Basin area, and the Low Volume Waste Basin. Groundwater surrounding the area is monitored quarterly to insure that the units are not contaminating the groundwater.

Fly Ash Basin - This basin formerly received fly ash from fuel combustion. It was closed with the material left in place in 1979.

Industrial Waste Treatment Basin - This basin receives cooling tower blowdown, demineralization regeneration waste, and discharges from the main plant sumps and the coal yard sump. The basin is lined with a 30 ml. hypalon liner. Suspended solids settle out in the basin and the water discharges to the Delaware River. This discharge is regulated by a NPDES permit issued by PADEP.

Low Volume Waste Basin - This basin formerly received discharges from the main plant sump stations and the coal yard sump station. It was lined with a 30 ml. hypalon liner. In 1994, a fuel oil spill was pumped to this basin for containment. After that, the basin was closed. The basin was cleaned out and soil and groundwater samples were taken to assure that the area was clean. The closure plan and closure activities were approved by PADEP. PADEP approved the closure construction by letter dated 12/1/97.

Ash Basin #3 - This former fly ash basin was retired in 1989. The basin was closed with the material in place. The groundwater was monitored from 1987 to 1995 to ensure that the groundwater was not contaminated by releases from the basin.

Ash Basin #4 - This basin is used for the disposal of fly ash generated during the combustion of fuel. It sometimes receives cooling tower blowdown water. It is lined with a 30 ml. hypalon liner. The ash settles out in the basin and the water discharges to the Delaware River. This discharge is regulated by a NPDES permit issued by PADEP. The impoundment is permitted and monitored by PADEP. The Facility is authorized to operate the basin as a Residual Waste Disposal Impoundment. The groundwater surrounding the basin is monitored quarterly to insure that the basin is not contaminating the groundwater.

Hazardous Waste Drum Storage Area - Hazardous waste that is generated at the Facility is stored for less than ninety (90) days in an enclosed building until it is taken off site for disposal at permitted hazardous waste facilities.

Sump Stations - There are two main sump stations: one for the coal fired units and one for the oil fired units. These sumps collect system cooling water. The cooling water is sent to the Industrial Waste Treatment Basin. Any chemical releases that may escape the secondary containment structures are captured in the sump areas for cleanup. There is also a sump in the coal yard. It collects rainwater runoff from the yard. The rain water runoff is also sent to the Industrial Waste Treatment Basin.

IV. HISTORY OF RELEASE AND CLEANUP

Past releases at the Facility were cleaned-up by containment and removal of the released material, and by removal of contaminated soil when the release escaped the engineered containment structures. The materials released were primarily fuel oil, ethylene glycol, and fly ash. PADEP was notified of the nature and extent of the releases and the clean-up efforts. Cleanups were conducted in accordance with PADEP direction, when applicable. Changes in operational procedures were made to prevent future releases, when appropriate.

One fuel oil release at the Combustion Turbine Site required more extensive clean-up because the oil migrated into the soil and groundwater. A rupture in the fuel supply line in 1990 caused the release of fuel oil to the surrounding soil and groundwater. The clean-up included the removal of the oil and contaminated soil. A soil vapor and groundwater extraction system was also installed and operated to remove contamination that migrated into the soil and groundwater. PADEP approved the cleanup by letter dated 2/5/97.

V. POTENTIAL EXPOSURE TO CONTAMINATION

PPL Martins Creek SES monitors the groundwater at the site and several surrounding residential properties to insure that contamination is not being released by the waste management units. On-site groundwater is sampled quarterly for metal contaminants and annually for volatile organic chemicals related to operations at the site. Surrounding residential wells are sampled annually for metal contaminants. In July 2000, down-gradient residential wells were sampled for both metal and organic contaminants.

The groundwater quality at the Facility and in down-gradient residential wells meets the National Primary Drinking Water standards that apply to public water systems.

There are four media through which humans could be exposed to potential releases:

- **Air:** Currently, there is no known or reasonably suspected contamination to either outdoor air, or indoor air from any of the Waste Management Units at the Facility.

- Groundwater: Currently, there is no known or reasonably suspected contamination of the groundwater at the Facility.
- Surface Water: Currently, there is no known or reasonably suspected contamination to the surface water from the Facility.
- Soil: Currently, there is no known or reasonably suspected contamination to the soil at the Facility.

Based on a review of all the information received concerning previous spills at PPL Martins Creek SES, as well as the current conditions of the Waste Management Units, the EPA has determined that no further corrective action is required at this Facility at this time.

VI. PUBLIC PARTICIPATION

EPA is requesting comments from the public on its proposal that no further corrective action is required at this Facility at this time. The public comment period will last forty-five (45) calendar days from June 19, 2001, the date that a notice of this proposal is published in a local newspaper. Comments may be sent to EPA in writing at the EPA address listed below. All commentors will receive a copy of EPA's final decision and a copy of the response to comments.

A public meeting will be held upon request. Requests for a public meeting should be made to Ms. Maureen Essenthier of the EPA Regional Office (215-814-3416) by July 19, 2001.

The Administrative Record contains all information considered by EPA when making this proposal that no further corrective action is required at this Facility at this time. The Administrative Record is available at the following location:

U.S. EPA Region III
1650 Arch Street
Philadelphia, PA 19103-2029
Hours: Mon-Fri, 9:00 A.M. - 5:00 P.M.
Contact: Maureen Essenthier
Voice: (215) 814-3416
Fax: (215) 814-3113
E-mail: essenthier.maureen@epa.gov

Following the forty-five (45) calendar day public comment period, EPA will prepare a final decision which will address all written comments and any substantive comments presented verbally at a public meeting, if one is held. This final decision will be incorporated into the Administrative Record. If the comments are such that significant changes are made to the proposal that corrective action is not needed at this Facility, EPA will seek public comments on the revised proposal.

Issued July 19, 2001

**Administrative Record for RCRA Corrective Action Final Decision
PP&L, Inc., Martins Creek Facility
Martins Creek, PA
PAD 987 393 212**

Volume 1

1. PP&L letter to EPA, 4/26/01, regarding waste management
2. PP&L e-mail to EPA, 4/5/01, regarding monitoring of Basin #3
3. Groundwater Quality Summary for 2000, March 2001
4. Telephone communication with Lisa Hannigan, DEP Hydrogeologist, 3/19/01
5. Environmental Indicators Evaluations, 9/22/01
 - Current Human Exposure Under Control
 - Migration of Contaminated Groundwater Under Control
6. Telephone communication with Don Ontco, PP&L, regarding residential well sampling results, 9/14/00
7. Residential well water sampling results for 8/00
 - a. PP&L transmittal letter with data summary package, 8/8/00
 - b. EPA e-mail regarding analytical methods
 - c. PP&L sampling plan with letter dated 7/19/00
 - d. EPA e-mail regarding sampling, 7/7/00
8. PP&L response to EPA information request
 - a. Cover letter with response summary, 6/20/00
 - b. Attachment 1 - Groundwater data
 - c. Attachment 2 - Low volume waste basin closure information
 - d. Attachment 3 - Ash Basin #3 closure information
 - e. Attachment 4 - Pollution incident history
 - f. Attachment 5 - Fuel oil remediation
 - g. Attachment 6 - Groundwater monitoring data for 1999
9. EPA information request letter, 4/20/00
10. PA Department of Environmental Protection groundwater quality assessments
 - a. Lisa Hannigan memos, dated 4/3/00, 7/21/9, and 12/22/94
11. Telephone communication with Lisa Hannigan, PADEP, regarding groundwater quality,

1/14/00

12. Telephone communication with Lisa Hannigan, PADEP, regarding monitoring compliance, 8/25/00
13. Telephone communication with John Drabic, PP&L, regarding needed environmental information, 1/12/00
14. Memo from Donald Ontko, PP&L, regarding residential wells sampled by PP&L
15. EPA site inspection summary, 9/7/99
16. PA Department of Environmental Protection Residual Waste Permit - Ash Basin #1, 8/12/99
17. PA Department of Environmental Protection Residual Waste Permit - Ash Basin #4, 1/5/99
18. Groundwater monitoring for Ash Basin #2
 - a. Report dated 5/3/99
 - b. Report dated 10/27/98
19. Groundwater Sampling and Analysis Plan of Basin No. 1, Basin No. 4, and Low Volume Waste Basin, 2/99
20. Information on other releases: 7/31/97, 3/27/96, 8/9/93, 1/4/93, and 12/90 (combustion turbine generator site)
21. Closure of the Low Volume Waste Basis
 - a. PA Department of Environmental Protection certification letter, 12/1/97
 - b. PA Department of Environmental Protection closure plan approval, 11/15/96
 - c. PP&L information letter, 3/20/96
22. Combustion turbine generator site remediation
 - a. PA Department of Environmental Protection clean up approval letter, 2/5/97
 - b. PP&L 1996 Semi-Annual Post-Operation Report, 12/9/96
23. PA Department of Environmental Resources Site Visit and Meeting report, 8/4/93
24. Metal Cleaning Waste Basin closure
 - a. PP&L letter with attachments, 3/13/91
 - b. Closure Plan, 1/5/84
25. EPA Preliminary Assessment Report, 8/14/91