

SIERRA CLUB, ET AL. V. MIDWEST GENERATION, LLC PCB 13-15

RESPONSE TO MOTION FOR PARTIAL SUMMARY JUDGMENT

EXHIBIT 15

ENSR PHASE I OF THE WILL COUNTY STATION, 1998

Commonwealth Edison Company

Chicago, Illinois

Phase I Environmental
Site Assessment of
Commonwealth Edison
Will County Generating Station
529 E. Romeo Road
Romeoville, Illinois

ENSR Consulting – Engineering – Remediation

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1.0 INTRODUCTION

1.1 Objectives and Scope of Work

ENSR was retained by Commonwealth Edison (ComEd) to perform a Phase I environmental site assessment of the Will County Generating Station facility located at 529 E. Romeo Road in Romeoville, Illinois.

The purpose of this Phase I ESA was to assess the environmental status of the subject site with regard to "recognized environmental conditions," which are defined by the ASTM (see E 1527-97) as, "the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property." According to the ASTM, "the term is not intended to include *de minimis* conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies."

The ESA was conducted in accordance with the Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process established by the ASTM (ASTM Designation E.1527-97).

1.2 Study Limitations

This report describes the results of ENSR's initial due diligence investigation to identify the presence of recognized environmental conditions affecting the subject facility and/or property. In the conduct of this due diligence investigation, ENSR has attempted to independently assess the presence of such problems within the limits of the established scope of work, as described in ENSR's July 31, 1998 proposal.

As with any due diligence evaluation, there is a certain degree of dependence upon oral information provided by facility or site representatives which is not readily verifiable through visual inspection or supported by any available written documentation. ENSR shall not be held responsible for conditions or consequences arising from relevant facts that were misconstrued, concealed, withheld, or not fully disclosed by facility or site representatives at the time this investigation was performed.

This report and all field data and notes were gathered and/or prepared by ENSR in accordance with the agreed upon scope of work and generally accepted engineering and scientific practice in effect at the time of ENSR's investigation of the site.

This report, including all supporting field data and notes (collectively referred to hereinafter as "information"), was prepared or collected by ENSR for the benefit of its Client, ComEd. ENSR's

Client may release the information to other third parties, whom may use and rely upon the information to the same extent as ENSR's Client. However, any use of or reliance upon the information by a party other than specifically named above shall be solely at the risk of such third party and without legal recourse against ENSR, its parent or its subsidiaries and affiliates, or their respective employees, officers or directors, regardless of whether the action in which recovery of damages is sought is based upon contract, tort (including the sole, concurrent or other negligence and strict liability of ENSR), statute or otherwise. This information shall not be used or relied upon by a party that does not agree to be bound by the above statement.

1.3 Report Organization

ENSR reviewed a substantial volume of information regarding the ComEd facility during the course of this environmental due diligence investigation. This report represents our best efforts to synthesize the most salient information collected and reviewed. The report contains the following sections:

- *Chapter 2: Site Location and Description*, provides an overview of the subject property, including a description of the site history and a discussion of the various activities currently taking place.
- *Chapter 3: Environmental Document Review*, provides a description of ComEd's documents reviewed at each facility and at ComEd's corporate office. The document review included only materials that pertained to site contamination and not documents regarding environmental regulatory compliance.
- *Chapter 4: On-Site Contamination*, evaluates the subject property for the presence of a hazardous material or petroleum hydrocarbon contamination problem due to past or present activities taking place on the site. This analysis also considers land uses in the immediate vicinity that may adversely affect the subject property through off-site migration of contaminants from known releases.
- *Chapter 5: Summary of Findings*, provides a summary of our findings regarding recognized environmental conditions.
- *Chapter 6: References*, identifies the various sources of information used in the preparation of this report, including persons interviewed, and documents and files evaluated.

2.0 SITE LOCATION AND DESCRIPTION

2.1 Site Location

ComEd's Will County station facility, located at 529 E. Romeo Road in Romeoville, Illinois, operates as a coal-fired, electric power generating facility. The subject property is located on the south side of Romeo Road along the eastern banks of the Des Plaines River.

The subject property is bordered to the north by Romeo Road, beyond which is wooded land; to the east is the Chicago Sanitary & Ship Canal; to the south is Material Services Corporation; and to the west is the Des Plaines River. The ComEd switchyard is located to the west side of the main generating building and was not included as a part of this environmental assessment. Figure 2-1 is a site location map.

2.2 Description of Property and Facility Layout

The subject property encompasses approximately 215 acres of land and is occupied by the main generating building and several ancillary buildings and structures. Figure 2-2 is a site plan for the facility.

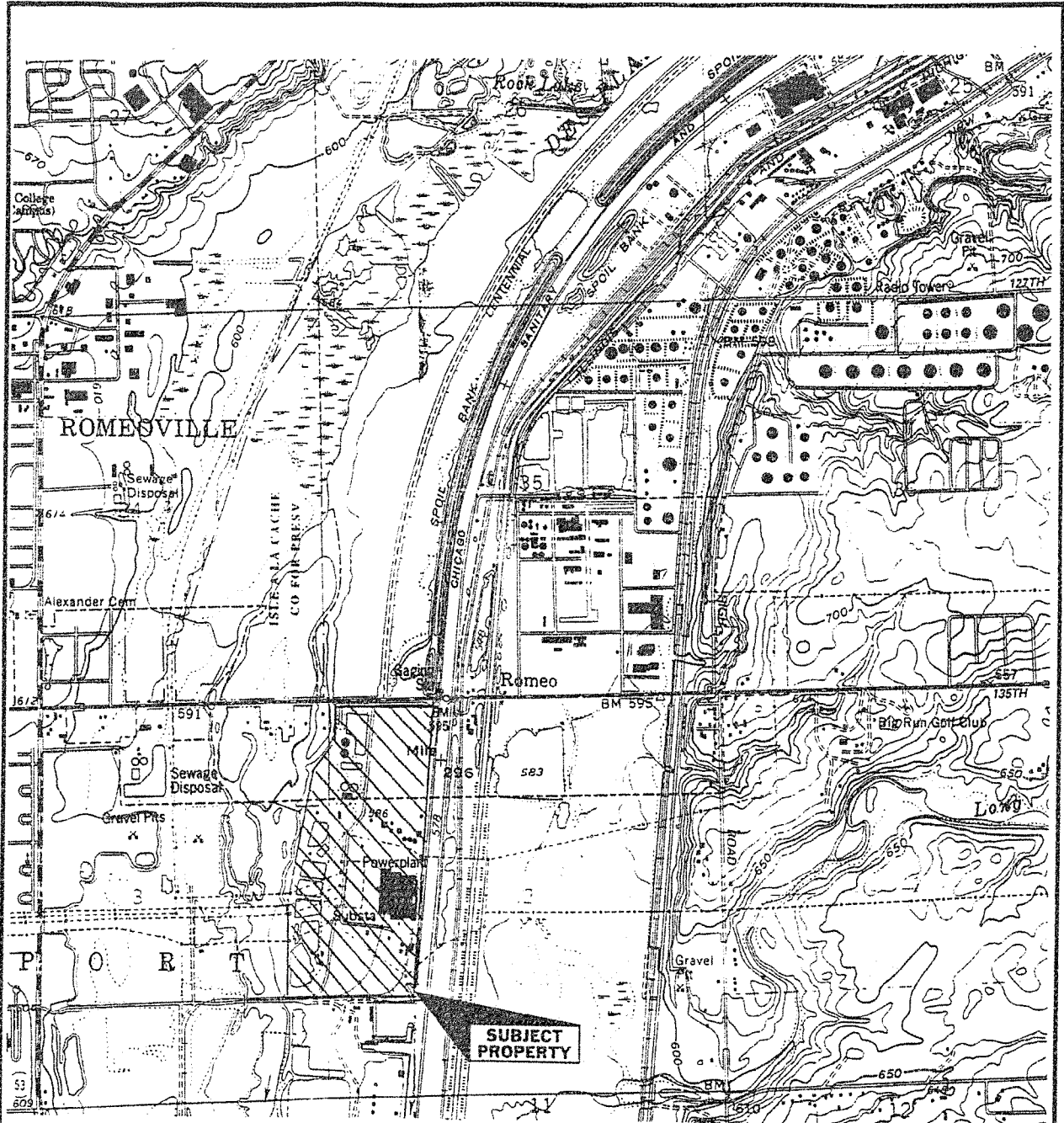
The main generating building, located on the eastern portion of the subject property, contains the boiler room and turbine room. The boiler room contains four boiler units. Unit 1 has a generating capacity of 160 megawatt (MW) and was placed into service on July 27, 1955. Unit 2 has the generating capacity of 167 MW and was placed into service on March 14, 1955. Unit 3 has the generating capacity of 278 MW and was placed into service on June 28, 1957. Unit 4 has a generating capacity of 542 MW and was placed into service on June 25, 1963.

Combined cribhouses for Units 1 & 2, and individual cribhouses for Unit 3 and Unit 4 are all located directly east of the main generating building on the banks of the Chicago Sanitary & Ship Canal. The buildings contain traveling screens which screen intake cooling water from the canal prior to being pumped into the plant.

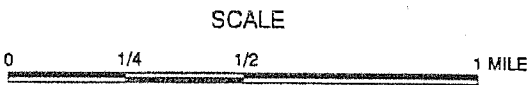
A maintenance shed is located directly south of the Unit 4 stack. A drain pipe was observed discharging into a 55-gallon drum on the north side of the garage. According to Mr. Dan Dammer, Compliance Specialist, the oil discharge is from a leaking Unit 4 ID fan.

A former maintenance garage is located south of the fly ash silo area. The garage was inaccessible at the time of ENSR's site inspection. A 275-gallon aboveground storage tank (AST) was observed through a window of the garage. The contents of the tank were unknown.

The fly ash silo area is located south of the main generating building. The area contains a control building and ten fly ash silos which store fly ash prior to off site disposal.



SOURCE: USGS 7 1/2 Minute Topographic Quadrangle, Peckn, Illinois, dated 1993



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FIGURE 1
 SITE LOCATION MAP
 ComEd - Will County Station
 529 E. Romeo Road
 Romeoville, Illinois

DRAWN: TEB	DATE: September 22, 1998	PROJECT NO.: 1801-023-700	REV: 1
FILE NO.:	CHECKED: TEB		

A storage building containing two water AST is located directly west of the fly ash silos. The aboveground storage tanks (ASTs) were formerly part of the wastewater treatment system but are no longer used. The building is used store station parts and materials.

Nine, 55-gallon drums were observed stored on a drum rack in a grassy area located south of the hydrobins and are full of sand. According to Mr. Dammer, the drums were used for fire prevention training exercises.

A small office trailer was observed in the far southeast corner of the subject property near the cooling water discharge. Three out-of-service transformers were observed stored on the east side of the trailer.

Large piles of bottom ash and slag were observed stored on vacant land in the southeast corner of the subject property. According to Mr. Dammer, the piles were placed there temporarily and were awaiting off-site disposal by Mineral Solutions, Inc., (MSI).

South Area Runoff Basins No's. 2, 3 and 4 are located directly north of the bottom ash and slag piles. The basins collect stormwater runoff and channel it to the on-site wastewater treatment plant.

Two 25,000-gallon ignition fuel oil ASTs and one 100,000-gallon ignition fuel oil AST are housed within a secondary containment structure located directly north of South Area Basin No. 3. The oil is used for boiler ignition procedures.

A gravel contractor's parking lot is located between the south area retention basins and the former SO₂ scrubber house. The former SO₂ scrubber system was dismantled in the mid 1970s and the building was raised. The foundations of the former buildings remain in-place.

Two lined ponds, formerly used in conjunction with the scrubber system, are located in the southwest corner of the subject property. The ponds and the area directly west of the ponds support vegetation that is indicative of wetland areas.

Three concrete ash ponds are located directly north of the former scrubber ponds. South Ash Pond No. 1 has a capacity of 3.88 million gallons, and South Ash Ponds 2 & 3 have capacities of 3.55 million gallons each. The ponds receive sluice water overflows from Units 1 and 2 retention basins and from Units 3 and 4 hydroveyors (bottom ash transport system).

A sluice water pumping building and retention basin are located directly north of South Ash Pond No. 1. The building houses pumps which recycle settled sluice water back into the system. The retention basin holds sluice water prior to it being pumped back into the system.

The North Ash Pond, with a capacity of 3.88 million gallons, is located directly north of the sluice water pumping building. According to Mr. Dammer, the concrete pond is used to store sluice water on a standby basis.

A railcar dumper building is located directly north of the North Ash Pond. The building contains a railcar dumper that mechanically flips railcars 180° to unload their coal into a subsurface hopper.

A sewage treatment plant is located northwest of the car dumper building. The plant treats sanitary sewage generated from the plant. The effluent from the plant is discharged into the Chicago Sanitary & Ship Canal.

A wastewater treatment plant is located directly east of the sewage treatment plant. The plant contains a chemical storage building and two clarifier ASTs. All process wastewater generated from the plant is treated prior to being discharged into the Chicago Sanitary & Ship Canal.

A lined, stand-by pond, two 1.5 million gallon water ASTs, and the North Area Runoff Basin are all located directly north of the wastewater treatment plant. The stand-by pond is used as a back-up storage area for runoff from the coal pile. The North Area Runoff Basin receives stormwater runoff from the north end of the plant and from the coal pile.

The coal pile is located east of the North Area Runoff Basin. The coal storage area has the capacity to store up to 1,000,000 tons of coal.

The barge unloading area is located along the banks of the Chicago Sanitary & Ship Canal in the northeast corner of the subject property. Up to 24 barges can be docked in the unloading area at any one time. The barge unloading crane has the capacity to unload 1,200 tons of coal per hour. Additionally, a barge loading telescopic chute is located at the mid-point of the conveyor system along the banks of the canal. The crane loads barges with coal for Com Ed's Fisk and Crawford stations.

A tractor shed is located directly south of the coal pile. The shed is used to store parts and lubricating oils for tractor maintenance.

The equipment building is located directly west of the tractor shed. The building is used to maintain coal handling and yard equipment. An oil storage room is located off the southwest corner of the building.

Two 12,500-gallon ignition fuel oil ASTs and one 15,000-gallon diesel fuel AST are housed within a secondary containment structure located southwest of the equipment storage building. The ignition fuel oil is used for boiler ignition procedures and the diesel fuel is used for coal handling equipment. A fuel pump building is located adjacent to the north of the ASTs. A concrete runoff ditch is located directly east of the AST area. The ditch channels runoff to the North Area Runoff Basin.

The fuel handling office building is located east of the ASTs. The building contains offices for fuel handling personnel, lunch room, and locker rooms for station operations.

The crusher building is located east of the fuel handling office building. Equipment within the crusher house mechanically crushes coal and conveys it to the boiler house.

A chemical mix building is located northeast of the crusher house. The building contains one 7,500-gallon binder AST, one 7,500-gallon dust suppressant AST, and one 3,000-gallon surfactant AST. The chemicals are stored in the tanks and then transferred to a water wagon and sprayed on the coal pile as a dust suppressant.

One potable water and two demineralized make-up water storage tanks are located directly east of the crusher house. Water is pumped from 2 of 3 deep wells located on station property to the potable water storage tank. The third deep well and associated pump is on stand-by. Water from the potable water storage tank is used for station domestic water needs and as a raw water source for the make-up demineralizers.

An emergency diesel generator is housed in a building located directly east of the make-up water ASTs. The building contains an 800-gallon diesel fuel AST for the fire pump.

A subsurface oil/water separator is located west of the main plant building. The separator collects oil and water from the transformer yards and from the Unit 3 turbine oil pit. Oil is skimmed off the surface and stored in a 10,500-gallon concrete sump. Water is channeled to the South Area Runoff Basin No. 4. The basin is lined.

A drum storage area is located south of the oil/water separator area. Five, 55-gallon drums of transformer oil, eleven, 55-gallon drums of waste oil, and approximately two-hundred empty 55-gallon drums (formerly containing oil) were observed stored on the asphalt surface in this area.

A fenced-in hazardous waste storage area is located south of the drum storage area. Approximately eight empty, 55-gallon drums formerly containing hydrazine and nine 55-gallon drums of used transformer oil were observed stored on the asphalt pad in this area.

An approximate 20 foot by 30 foot area of slag and debris dumping was observed south of the hazardous waste storage area.

Three butler buildings are located south of the slag piles. The buildings are used to house various parts and contractor's equipment.

2.3 Topography, Hydrology, and Geology

According to the USGS Romeoville, Illinois Quadrangle 7.5 Minute Series Topographic map, the topographic elevation of the main building is approximately 580 feet above mean sea level.

According to the USDA SCS Soil Survey for Will County, Illinois, the soils on the subject property consist of mostly built-up areas with nearly level, poorly drained soils that have a silty and clayey subsoil; formed in glacial till. The estimated depth to shallow groundwater is between three and five feet below grade surface. The regional groundwater is expected to flow toward the Des

Plaines River, which is located adjacent to the west of the subject property. Bedrock at the site is anticipated to be ranging in depth from 5 to 10 feet below grade.

2.4 Site History

Historical information for the subject site is based on interviews with site personnel, a review of, aerial photographs, tax assessors records, city directories, and a topographic quadrangle map. Sanborn Fire Insurance maps were not available for the subject property area. Building department records were unavailable for review during ENSR's site investigation.

According to Mr. Dammer, the facility began operation in 1955 with two boilers. A third boiler was added in 1957 and a fourth boiler was added in 1963.

Aerial photographs dated 1997, 1993 and 1964 showed the subject property occupied by a coal-fired electrical generating plant. No evidence of landfilling was observed in the photographs.

Assessment records were available for 1996 and 1997 only. No significant historical property information was contained within the records.

City directories dated 1997, 1993, 1985, 1980, 1975 and 1973 listed ComEd as occupying the subject property. City directories dated prior to 1973 were not available for review for the subject property.

A USGS Topographic map dated 1962, photorevised 1973 and 1980 showed the subject property as it currently exists.

2.5 Adjacent Site History

Historical information for the subject site vicinity is based on a review of aerial photographs, a topographic quadrangle map, and city directories.

The subject property is bordered to the north by Romeo Road, beyond which is wooded land; to the east is the Chicago Sanitary & Ship Canal; to the south is Material Services Corporation; and to the west is the Des Plaines River. Figure 2-1 is a site location map.

Aerial photographs dated 1997 and 1993 show the adjacent properties as they currently exist. An aerial photograph dated 1963 shows the subject property bordered to the north by wooded land, to the east by the Chicago Sanitary & Ship Canal; to the west by the Des Plaines River; and to the south by an industrial facility.

A USGS Topographic map dated 1962, photorevised 1973 and 1980, showed the adjacent properties as they currently exist.

2.6 Description of Operations

The subject facility is a coal-fired electrical power generating station. Additional operations include wastewater treatment and tractor and other plant maintenance operations. Electrical power is transmitted from the plant to the surrounding metropolitan area through a series of overhead transmission power lines.

Coal is delivered to the station by 115-car unit trains and unloaded using a rotary car dumper located west of the coal yard. The coal is transported to the coal pile by a series of conveyors and stockpiled for the station and for Com Ed's Crawford and Fisk stations.

Condenser cooling water is drawn from and returned to the Chicago Sanitary & Ship Canal at a rate of approximately 666 million gallons per day (MGD). Raw boiler make-up water is obtained from on-site wells. Demineralized water is stored in ASTs. Water treatment chemicals, including ammonia, hydrazine, and phosphate are injected into the boiler make-up water lines to soften the water and inhibit corrosion and scaling. Sodium hypochlorite and/or sodium bromide is used in the condenser cooling and house service water system to control biofouling. Sodium bisulfite is added to these systems prior to final discharge to detoxify the biocides.

The burning of coal produces waste fly ash, bottom ash, and slag. Fly ash is collected in hoppers on the east side of the subject property and sold as construction material by MSI. Bottom ash and slag are collected in a slurry and piped to lined ash settling basins located on the west side of the subject property.

Wastewater from facility operations is treated on-site prior to being discharged into Chicago Sanitary & Ship Canal under the conditions of a NPDES permit. The NPDES permit covers discharges from the property including stormwater runoff, cooling water, and any other process wastewater.

2.7 Utilities

Currently, the station obtains potable water from the three deep wells located on the subject property. Sanitary wastewater is treated at an on-site sewage treatment plant prior to being discharged into the Chicago Sanitary & Ship Canal. Electrical power is provided by the station itself.

3.0 ENVIRONMENTAL DOCUMENT REVIEW

3.1 Introduction

This environmental document review is based upon a review of information provided by ComEd coupled with observations made by Tim Bulthaupt and Jeffrey Menter of ENSR during the site visit, which took place on August 24 and 25, 1998. The information provided by ComEd included documents relative to the various regulatory areas described below. Also, certain computerized U.S. Environmental Protection Agency (USEPA) enforcement databases were screened.

3.2 Air Quality

Although no formal emissions inventory was prepared as part of this Phase I environmental site assessment, a preliminary review of the facility indicates air permits are required for the facility. The Illinois Environmental Protection Agency (IEPA) oversees the state's air permitting compliance programs. The facility is operating under IEPA I.D. No. 197810AAK which was issued on October 25, 1996 and expired on July 28, 1998. According to Ms. Lorinda Lamb of ComEd, the facility has filed an application under the Title V permit program and is currently awaiting its approval.

3.3 Water Resources

The facility is permitted to discharge process wastewater under NPDES Permit No. IL0002208 which was issued July 11, 1995 and expires on April 30, 2000. The permit allows for the discharge of condenser cooling water, house service water, demineralizer regenerant wastes, boiler blowdown and boiler drain, turbine drain water, intake screen backwash, recycle wastewater treatment system blowdown, and sewage treatment plant effluent. All process wastewater is treated on site prior to being discharged into the Chicago Sanitary & Ship Canal.

Stormwater runoff from process areas of the station is treated in the existing wastewater treatment facility. Per the stations NPDES permit, this constitutes Best Available Technology (BAT) for treatment and discharge of storm water runoff, therefore, Will County station is not required to maintain a Storm Water Pollution Prevention Plan (SWPPP).

3.4 Oil and Hazardous Materials Storage and Use

3.4.1 Material Storage and Use

Several types of fuels, oils, and hazardous materials are stored and used on site and include: diesel fuel, gasoline, lubricating oil, sulfuric acid, polyacrylic acid, sodium hypochlorite, sodium hydroxide, liquid nitrogen, hydrogen gas, aqueous hydrazine, ethylene glycol, coal pile binder, coal, slag, and scrap metal. These materials are stored in underground and aboveground tanks, drums, and various other containers located both indoors and outdoors.

The facility has prepared contingency plans, including a Spill Prevention, Control, and Countermeasures Plan (SPCC) to prevent the discharge of oil from the aforementioned containers, and to mitigate any adverse effects from such a spill.

3.4.2 Principal Waste Streams

The facility is currently a small quantity generator. The station generates several waste streams from its operation and maintenance activities, some of which are hazardous wastes. Hazardous wastes are generated on an intermittent or one time basis. The facility IEPA hazardous waste generator number is ILD970905001. Several parts washing basins were observed throughout the subject property. The basins use a non-hazardous high flash point solvent (>140°F) as the degreaser. Waste solvent is disposed by Great Northern Processing of Huntington, Indiana.

Non-hazardous wastes typically generated on site include general refuse, used oil, and oil-contaminated debris such as absorbents and filters. Waste oils and other non-hazardous wastes are disposed/reused off site by one of ComEd's approved vendors. Great Northern Processing, Inc., of Huntington, Indiana disposes waste oil from process machinery on a monthly basis. Asbestos-containing materials are disposed by American Disposal of Morris, Illinois on an as-needed basis. Oil-contaminated debris is disposed by Clean Harbors of Chicago, Illinois on an as-needed basis. General refuse is disposed by Banner/Western Disposal of Joliet, Illinois on a weekly basis. Other non-hazardous wastes are disposed at Forest Lawn Landfill in Three Oaks, Michigan and Sun Ohio in Canton, Ohio.

4.0 ON-SITE CONTAMINATION POTENTIAL

4.1 Introduction

Based on ENSR's inspection and review of various documents/files, there is a potential for on-site contamination at the Will County Generating Station in Romeoville, Illinois. Known and suspect problem areas are discussed below.

4.2 Above and Underground Storage Tanks

4.2.1 Inventory of Underground Tanks

One 1,500-gallon gasoline UST is located on the east side of the subject property, near the south end of the barge loading area. According to Mr. Dammer, the tank was installed in 1987 and is cathodically protected. He indicated the tank was scheduled to be upgraded with spill/overflow protection by December 1998. According to Mr. Paul Murphy, these upgrades have been completed. Additional information regarding this tank was unavailable for review at the time of ENSR's site investigation.

One 10,500-gallon concrete waste oil UST is located on the west side of the subject property. The tank was installed in 1979 and is associated with the oil/water separator. It is unknown whether the tank is current with leak detection requirements. Additional information regarding this tank was unavailable for review at the time of ENSR's site investigation.

4.2.2 Inventory of Aboveground Storage Tanks

The following table provides a list of aboveground storage tanks identified at the Will County Station.

TABLE 4-1
Aboveground Storage Tanks
Will County Station

TANK CONTENTS	TANK LOCATION	ESTIMATED CAPACITY (gallons)
Sulfuric Acid	Grade floor, north end of main building	10,000
Sodium Hydroxide	Grade floor, north end of main building,, directly above sulfuric acid tank	10,000
Sodium Hypochlorite	West side of main building	5,500
Sodium Bromide	West side of main building	5,500
Sodium Bisulfate	South side of main building	10,000
Nitrogen	West side of main building	119,000 lbs

TANK CONTENTS	TANK LOCATION	ESTIMATED CAPACITY (gallons)
Ion exchange resin	First floor, north side of main building	5.5 cubic feet
Binder Tank	Chemical mix building	7,500
Suppressant Tank	Chemical mix building	7,500
Surfactant	Chemical mix building	3,000
Carbon Dioxide	First floor of main building	2 @ 7.5 tons each
Aluminum Sulfate	Chemical control building	10,000
Diesel fuel	South side of main building	2 @ 275 gallons each
Diesel fuel	Fire pump house	800
Diesel fuel	Diesel driven clam shell	2 @ 250
Diesel Fuel	North oil tank farm	15,000
Fuel oil	North oil tank farm	2 @ 12,500 each
Fuel oil	South oil tank farm	2 @ 25,000 each
Fuel oil	South oil tank farm	100,000
Unit 1 turbine oil tank	Turbine room ground floor	5,410
Unit 2 turbine oil tank	Turbine room ground floor	5,410
Unit 3 turbine oil tank	Turbine room ground floor	6,750
Unit 4 turbine oil tank	Turbine room ground floor	7,450
Unit 1 turbine oil storage tank	Turbine room ground floor	8,411
Unit 2 turbine oil storage tank	Turbine room ground floor	8,411
Units 3-4 turbine oil storage tank	Turbine room ground floor	10,000
Center 3-4	Turbine oil room ground floor	10,000
South 3-4 Turbine oil storage tank	Turbine room ground floor	15,000
4A B.F.P. Turbine oil tank	Turbine room	550
4B B.F.P. Turbine oil tank	Turbine room	550
4C B.F.P. Turbine oil tank	Turbine room	550
Unit #1 H.P. & L.P. hydrogen seal oil tanks	Main building	150
Unit #2 H.P. & L.P. hydrogen seal oil tanks	Main building	150
Unit #3 H.P. & L.P. hydrogen seal oil tanks	Main building	150
Unit #4 H.P. & L.P. hydrogen seal oil tanks	Main building	150
Ethylene glycol	North side of hopper building	275
Unknown	Storage garage, south of fly ash silos	275

Many of the ASTs and chemical storage areas were not equipped with secondary containment structures.

4.3 Polychlorinated Biphenyl's (PCBs)

There are numerous liquid-cooled transformers and capacitors on the site. According to Mr. Dave Rubner, ComEd PCB Specialist, the fluid contained within some of the liquid-cooled electrical equipment has been changed with Non-PCB electrolytic fluids. Since the completion of the fluid exchange process, a majority of the equipment was tested for PCB-content, and shown to contain less than 50 ppm PCB. Even though the PCB fluids were removed, small concentrations of PCBs still remained within the transformers and when the non-PCB fluids were introduced into the transformers, the PCBs slowly leached back into the new fluids. The leaching process resulted in PCB contaminated fluid in two transformers including transformer's #6352177 and #E689704B.

Evidence of staining or leaking was observed on or around transformers 1E, 1W, 2W, 2E, 3W and 3E, located on the west side of the main building, and on or around transformers 11, 12, 21, 22, 31, 32, 71, 72 and 73, located on the east side of the main building.

4.4 Asbestos-Containing Materials

ENSR representatives who are State of Illinois Department of Public Health licensed Asbestos Building Inspectors performed a visual suspect asbestos-containing material (ACM) inspection of the main building and outlying structures as part of this investigation, however, bulk sampling was not performed. The types and quantities of suspect materials identified during the meticulous walk-through of each on-site structure at the Will County Station included pipe and pipe fitting insulation, boiler and equipment insulation, tank insulation, pump insulation, vinyl floor tile, suspended ceiling tile and air heater insulation. Although the removal of all ACM is not required at this time, Table 4-2 presents the types and estimated quantities of suspect ACM, as well as estimated removal costs.

TABLE 4-2
Suspect Asbestos-containing Materials
Will County Station

TYPE OF MATERIAL	ESTIMATED QUANTITY	REMOVAL COST ESTIMATES
Pipe & Pipe Fitting Insulation	67,800 Linear Feet	\$1,356,000
Boiler & Equipment Insulation	76,000 Square Feet	\$1,900,000
Tank & Pump Insulation	4,000 Square Feet	\$100,000
Vinyl Floor Tile	6,000 Square Feet	\$30,000
Suspended Ceiling Tile	6,300 Square Feet	\$63,000
Air Heater Insulation	110,000 Square Feet	\$2,500,000

The total suspect ACM removal cost is estimated at approximately \$7,200,000. The cost estimate is based on ACM location and quantity information provided by ComEd, ENSR's visual inspection of accessible areas of the facility, and generally accepted ACM removal unit costs. The cost

estimate does not include project consulting or reinsulation fees. The estimated removal cost provided above is subject to change as a result of the potential variability in material quantities and locations, contractor fees, disposal fees, and project scheduling. Based on the aforementioned variables, the estimated removal cost may fluctuate as much as 50%.

4.5 Areas of Staining

The following areas of staining were observed on the subject property during ENSR's site inspection:

- A maintenance shed is located directly south of the Unit 4 stack. A drainpipe was observed discharging into a 55-gallon drum on the north side of the garage. According to Mr. Dammer, the oil discharge is from a leaking Unit 4 DID fan. An approximate one hundred square foot area of oil staining was observed on the gravel surface beneath the drum.
- A small mobile office trailer was observed in the far southeast corner of the subject property near the cooling water discharge. Three out-of-service transformers were observed stored on the east side of the trailer. Minor oil staining was observed on the ground beneath one the transformers.
- Two 25,000-gallon ignition oil ASTs, and one 100,000-gallon ignition fuel oil AST are housed within a secondary containment structure located directly north of South Area Basin No. 3. An approximate ten square foot area of oil staining was observed on the concrete surface beneath the ASTs.
- A sluice water pump building and retention basin are located directly north of South Ash Pond No. 1. The building houses pumps which recycle settled sluice water back into the system. An approximate 3 square foot area of oil staining was observed on the concrete floor beneath the pumps.
- A wastewater treatment plant is located directly east of the sewage treatment plant. One 55-gallon drum of waste oil, eight 55-gallon drums of new oil, two unlabeled 55-gallon drums, and one 55-gallon drum of lube oil were observed stored in this area. An approximate two foot square area of oil staining was observed on the concrete floor beneath the waste oil drum.
- A tractor shed is located east of the equipment storage building. Twelve 55-gallon drums of new oil and six 55-gallon drums of used oil were observed stored in the shed. An approximate 10 square foot area of staining was observed on the concrete floor beneath the drums.
- The equipment building is located directly south of the coal pile. An oil storage room is located off the southwest corner of the building. Seven 55-gallon drums of new oil and one 55-gallon drum of mineral spirits were observed stored on a drum rack. Additionally,

five 55-gallon drums of new oil were observed stored in the room. An approximate ten square foot area of oil staining was observed on the concrete floor beneath the drums.

- Four 55-gallon drums of used oil were observed stored outside the west side of the equipment building on a concrete pad. An approximate ten square foot area of oil staining was observed on the concrete surface beneath the drums.
- Two 12,500-gallon ignition fuel oil ASTs and one 15,000-gallon diesel fuel AST are housed within a secondary containment structure located southwest of the equipment storage building. Large areas of oil staining were observed within and around the secondary containment structure, on the concrete floor within the pump house, and in the concrete runoff ditch.
- An emergency generator fire pump house is located directly east of the make-up water tanks. An approximate five square foot area of staining was observed on the concrete floor beneath the generator.
- A subsurface oil/water separator is located west of the main plant building. The separator collects oil and water from the transformer yards and from the Unit 3 turbine oil pit. An approximate three square foot area of oil staining was observed on the concrete surface in this area.
- A drum storage area is located south of the oil/water separator area. Five, 55-gallon drums of new transformer oil, eleven 55-gallon drums of waste oil and approximately two-hundred empty 55-gallon drums were observed stored on the asphalt surface in this area. An approximately three square foot area of oil staining was observed on the asphalt surface in this area.
- The new oil storage room is located on the west side of the main building. Approximately one hundred 55-gallon drums of oil were observed stored in this area. Large areas of oil staining were observed on the concrete floor in this area.
- Transformers 1E, 1W, 2W, 2E, 3W and 3E are located on the west side of the main building. Minor oil staining was observed on the gravel surface beneath the transformers.
- Transformers 11, 12, 21, 22, 31, 32, 71, 72 and 73 are located on the east side of the main building. Minor oil staining was observed on the gravel surface beneath the transformers.

4.6 Former Underground Storage Tanks

Based on a review of facility documentation and municipal files a 14,000-gallon sodium hypochlorite tank, originally installed in 1963, was abandoned-in-place and filled in 1980. Additional information regarding this tank was unavailable for review at the time of ENSR's site investigation.

4.7 Spill History

Based on a review of the Com Ed's spills file, the following spills have been reported at the subject property. It is ComEd's policy to remediate spills where feasible.

- On November 25, 1997, approximately 150 gallons of diesel fuel spilled when a mobile tank tipped over. Contaminated soil was excavated. Surface water and/or groundwater were not reported to have been impacted.
- On July 29, 1996, approximately 50 gallons of antifreeze is reported to have been spilled into the station intake forebay.
- On April 11, 1995, approximately 3,000 gallons of sodium bisulfite were spilled. Surface water and/or groundwater were not reported to have been impacted.
- On October 31, 1990, approximately 50 gallons of fluid containing 61 ppm PCB-was spilled. Surface water and/or groundwater were not reported to have been impacted.
- On November 19, 1989, approximately 4 gallons of fluid containing 50-500 ppm PCB-was spilled. Surface water and/or groundwater were not reported to have been impacted.
- On November 13, 1986, approximately 100-150 gallons of PCB oil was reported to have been spilled. Surface water and/or groundwater were not reported to have been impacted.

4.8 Environmental Database Report

ENSR reviewed a variety of federal and state governmental databases using Environmental Data Resources (EDR) of Southport, Connecticut. The following federal and state contamination-related databases were searched for the subject property and the area surrounding the subject property; the various search distances used are also noted:

TABLE 4-3
Databases Searched and Radii

Database Acronym	Description	Search Distance' (miles)
Federal Databases		
NPL ²	Existing and proposed Superfund sites on the National Priorities List	1.0
CERCLIS ²	Abandoned, uncontrolled or inactive hazardous waste sites reported to the U.S. EPA, which have been or are scheduled to be investigated by the U.S. EPA for potential nomination to the NPL.	0.5
RCRIS-TSD ²	Reported sites that treat, store and/or dispose of hazardous waste and subject to the federal RCRA regulations.	0.5
RCRIS-LQG/SQG ²	Reported large-quantity generators and small quantity generators of hazardous waste.	0.25
ERNS ²	Sites reporting spills to the U.S. EPA and/or the U.S. Coast Guard under various federal regulations	target property
FINDS	Facility Index System indicates the presence of a site on another federal database.	target property
PADS	PCB Activity Database System identifies generators, transporters, commercial storers and/or brokers and disposers of PCBs who are required and have notified the EPA of such activities.	target property
RAATS	RCRA Administrative Tracking System contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA.	target property
TRIS	Toxic Chemical Release Inventory System identified facilities who have reported releases of listed toxic chemicals to the air, water, and land in reportable quantities under SARA Title III Section 313.	target property
TSCA	Toxic Substances Control Act identified manufacturers and importers of chemical substances by plant site in 1986. No updates of the list have been made by EPA.	target property
HMIRS	Hazardous Materials Information Reporting System contains hazardous material spill incidents reported to the Federal DOT.	target property
NPL Liens	List of liens placed against real property in order for the EPA to recover remedial action expenditures or when the property owner receives notification of potential liability.	target property

**TABLE 4-3
Databases Searched and Radii**

Database Acronym	Description	Search Distance ¹ (miles)
CORRACTS	Corrective Action Report identifies hazardous waste handlers with RCRA corrective action activity.	1.0
ROD	Records of Decision mandating a permanent remedy for a Superfund Site	1.0
MLTS	Material Licensing Tracking System, maintained by the Nuclear Regulatory Commission, contains a list of sites that possess or use radioactive materials and are subject to NRC licensing.	target property
Delisted NPL	Sites removed from the NPL	target property
Coal Gas	Former manufactured coal gas sites	1.0
Illinois Databases		
SHWS ²	State hazardous waste sites	1.0
UST ²	Sites which have reported underground storage tanks.	0.5
LUST ²	Sites which have reported leaking underground storage tanks.	0.5
SWF/LF ²	List of permitted solid waste disposal facilities	0.5
<p>1 The radial search distances used equal or exceed those recommended by ASTM for assessing the environmental condition of commercial real estate.</p> <p>2 Databases which are required to be searched by ASTM.</p>		

4.8.1 Subject Property

According to the EDR database report, the subject property is listed on the ERNS database. The facility likely appeared on the ERNS database as a result of one of their reported spills. However, since additional information regarding final disposition of the spills was not provided to ENSR, the exact determination of why the facility is listed on the ERNS database could not be made. Additional information regarding the facility was not contained within the EDR report.

4.8.2 Surrounding Land Uses

According to the EDR database report, two sites were identified within the specified search radius and are summarized in Table 4-4.

TABLE 4-4
EDR Database Summary
Will County Station

Site	Database	Distance (miles)	Direction	Location Relative to Inferred Hydraulic Gradient at Site
251 N. Route 53 Bolingbrook, Illinois	UST	1/8-1/4	Northwest	Up gradient
Material Service Yard Corporation yard 61	RCRIS-SQG, FINDS	Adjacent	South	Parallel gradient

Based on their distance and/or hydrogeologic gradient, none of the above-listed sites are likely to have impacted the subject property.

5.0 SUMMARY OF FINDINGS

ENSR performed a Phase I Environmental Assessment in conformance with the scope and limitations of the ASTM Practice E 1527-97 of ComEd's Will County Generating Station, located at 529 E. Romeo Road, Romeoville, Illinois. Any exceptions to, or deletions from this practice are described in this report. This practice has revealed the following evidence of recognized environmental conditions in connection with the property:

- Staining: Several areas of staining were observed throughout the subject property (see Section 4.5 for a detailed listing of stained areas). Staining was primarily observed around drums, ASTs, and transformers.
- Suspect ACM: Suspect asbestos-containing pipe insulation, tank insulation, boiler insulation, hopper insulation, air heater insulation, ceiling and floor tile were observed throughout the site buildings.
- PCBs: Two electrical transformers (#6352177 and #E68904B) are classified as having leach back potential after completion of the retrofill program conducted in the 1980s.
- Former USTs: A 14,000-gallon sodium hypochlorite tank, originally installed in 1963, was abandoned in place and filled in 1980. Since additional information regarding the tank and its abandonment was unavailable for review, it is unknown if its former contents may have impacted the subject property.
- Current USTs: One 1,500-gallon gasoline UST is located on the east side of the subject property near the south end of the barge loading area. According to Mr. Dammer, the tank was installed in 1987 and is cathodically protected. Since additional information regarding this tank was unavailable for review, it is unknown if the tank is up-to-date with all current UST requirements.

One 10,500-gallon concrete waste oil sump is located on the west side of the subject property. The sump was installed in 1979 and is associated with the oil/water separator. Since additional information regarding integrity of the sump was unavailable for review, it is unknown if it has impacted the subject property.

- Spill History: Six reported spills have occurred on the subject property (see section 4.7 for a detailed listing of spills).
- Temporary Ash and Slag Storage: Two disposal areas were observed on the subject property. Large piles of bottom ash and slag were observed stored on vacant land in the southeast corner of the subject property. The bottom ash and slag are stored here

temporarily for dewatering and processing. Additionally, an approximate 20 foot by 30 foot area of slag and debris was observed south of the hazardous waste storage area. This area is used as a temporary staging area prior to final disposal. It is unknown whether bottom ash or slag storage and management practices in these areas has had an adverse impact on soil and/or groundwater quality.

- Switchyard: The switchyard was not inspected as a part of this environmental assessment. Additionally, since the switchyard is assumed to have been operational since the plant was constructed in 1955, it is unknown if some equipment has leaked fluid over that time period which may have impacted the subject property.

6.0 REFERENCES

6.1 Persons Interviewed or Contacted

Mr. Dan Dammer, Compliance Specialist, ComEd Will County Generating Station, 529 E. Romeo Road, Romeoville, Illinois. (815) 886-1010.

Ms. Lorinda Lamb, ComEd Company, One First National Plaza, 10 South Dearborn, 35 FNW, Chicago, Illinois. (312) 394-4438.

Mr. Dave Rubner, ComEd PCB Specialist, One First National Plaza, 10 South Dearborn, 35 FNW, Chicago, Illinois. (312) 394-4461.

6.2 Documents and Reports Reviewed

Aerial Photographs of subject property and surrounding properties dated 1997, 1993 and 1963 reviewed at the Will County Historical Society, Joliet, Illinois.

EDR Radius Map with Geocode, Will County Station, 529 E. Romeo Road, Romeoville, Illinois, dated August 18, 1998.

City directories dated 1997, 1993, 1985, 1980, 1975 and 1973, reviewed at the Joliet Public Library, Joliet, Illinois.

U.S.G.S. 7.5-minute Topographical Quadrangle Map, Romeoville, Illinois, dated 1962, photorevised 1973 and 1980.

Certificate of Survey Map, ComEd Will County Station, dated 1996, provided by ComEd.

SPCC Plan, ComEd Will County Station, dated March 23, 1992, provided by ComEd.

Industrial Waste Generation and Disposal Reports for 1998, ComEd Will County, provided by ComEd.

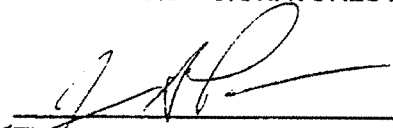
Tier II Inventory Forms for 1997, dated February 27, 1998, ComEd Will County station, provided by ComEd.

NPDES Permit No. IL0002208 ComEd Will County station, provided by ComEd.

Spill Log Review, 1986-1998, ComEd Will County station, provided by ComEd.

ComEd document review relating to Hazardous Waste, Acid Rain Permits, Wetlands, Air Operating Permits, NPDES Permits, Tier II Reports, and Stormwater, performed at One First National Plaza, 10 South Dearborn, 35 FNW, Chicago, Illinois.

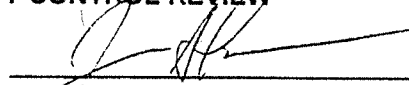
7.0 SIGNATURES AND QUALITY CONTROL REVIEW

BY: 
For Timothy E. Bulthaup, M.S., CHMM

TITLE: Project Specialist

DATE: 10/2/98

QUALITY CONTROL REVIEW

BY: 
For Aaron B. Gesin

TITLE: Program Manager

DATE: 10/2/98

SIERRA CLUB, ET AL. V. MIDWEST GENERATION, LLC PCB 13-15

RESPONSE TO MOTION FOR PARTIAL SUMMARY JUDGMENT

EXHIBIT 16

**REMOVAL REPORTS OF THE SLAG FROM WILL
COUNTY STATION**

Electronic Filing - Received, Clerk's Office : 07/19/2016

MM Ticket Detail Report - Detail

Criteria: 03/31/2015 12:00 AM to 03/31/2015 11:59 PM

Business Unit Name: Laraway RDF - S04121 (USA)

Customer Name: NRG ENERGY INC WILL CO FORMERLY MW GEN 111926IL (NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION)

Ticket	Ticket Out	Time	Customer	Vehicle	Material	Profile	Rate Unit	Rate Qty	Yards	Tons
SAUERMAN POND UNIT 1 AND UNIT 2 SLAG MATERIAL REMOVED										
619039	3/31/2015	6:48:50 AM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	0	Declass Soil-Tons	111926IL	TON	15.63	15	15.63
619040	3/31/2015	6:50:38 AM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	103	Declass Soil-Tons	111926IL	TON	17.69	15	17.69
619044	3/31/2015	7:00:04 AM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	8	Declass Soil-Tons	111926IL	TON	18.24	15	18.24
619048	3/31/2015	7:06:13 AM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	154	Declass Soil-Tons	111926IL	TON	17.55	15	17.55
619049	3/31/2015	7:06:30 AM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	485	Declass Soil-Tons	111926IL	TON	17.41	15	17.41
619052	3/31/2015	7:11:21 AM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	45	Declass Soil-Tons	111926IL	TON	19.02	20	19.02
619060	3/31/2015	7:21:31 AM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	35	Declass Soil-Tons	111926IL	TON	17.91	15	17.91
619064	3/31/2015	7:35:08 AM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	124	Declass Soil-Tons	111926IL	TON	14.45	15	14.45
619066	3/31/2015	7:37:56 AM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	180	Declass Soil-Tons	111926IL	TON	17.15	15	17.15
619070	3/31/2015	7:43:00 AM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	294	Declass Soil-Tons	111926IL	TON	15.31	15	15.31
619085	3/31/2015	7:55:15 AM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	147	Declass Soil-Tons	111926IL	TON	19.94	15	19.94
619090	3/31/2015	7:59:39 AM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	73	Declass Soil-Tons	111926IL	TON	15.65	15	15.65
619096	3/31/2015	8:05:03 AM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	326	Declass Soil-Tons	111926IL	TON	16.04	15	16.04
619105	3/31/2015	8:31:53 AM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	65	Declass Soil-Tons	111926IL	TON	13.99	15	13.99
619109	3/31/2015	8:18:36 AM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	23	Declass Soil-Tons	111926IL	TON	16.77	0	16.77
619127	3/31/2015	8:31:17 AM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	142	Declass Soil-Tons	111926IL	TON	16.11	15	16.11
619131	3/31/2015	8:34:14 AM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	112	Declass Soil-Tons	111926IL	TON	19.3	15	19.3

Electronic Filing - Received, Clerk's Office : 07/19/2016

MM Ticket Detail Report - Detail

Criteria: 03/31/2015 12:00 AM to 03/31/2015 11:59 PM

Business Unit Name: Laraway RDF - S04121 (USA)

Customer Name: NRG ENERGY INC WILL CO FORMERLY MW GEN 111926IL (NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION)

Ticket	Ticket Out	Time	Customer	Vehicle	Material	Profile	Rate Unit	Rate Qty	Yards	Tons
619137	3/31/2015	8:51:33 AM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	102	Declass Soil-Tons	111926IL	TON	15.82	15	15.82
619156	3/31/2015	8:50:41 AM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	85	Declass Soil-Tons	111926IL	TON	16.72	15	16.72
619164	3/31/2015	8:58:13 AM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	103	Declass Soil-Tons	111926IL	TON	17.47	15	17.47
619167	3/31/2015	8:59:16 AM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	0	Declass Soil-Tons	111926IL	TON	16.16	15	16.16
619170	3/31/2015	9:01:19 AM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	86	Declass Soil-Tons	111926IL	TON	15.2	15	15.2
619172	3/31/2015	9:02:26 AM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	154	Declass Soil-Tons	111926IL	TON	18	15	18
619176	3/31/2015	9:05:56 AM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	485	Declass Soil-Tons	111926IL	TON	16.2	15	16.2
619185	3/31/2015	9:12:40 AM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	8	Declass Soil-Tons	111926IL	TON	15.25	15	15.25
619192	3/31/2015	9:18:21 AM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	45	Declass Soil-Tons	111926IL	TON	16.14	20	16.14
619193	3/31/2015	9:19:05 AM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	248	Declass Soil-Tons	111926IL	TON	14.8	15	14.8
619194	3/31/2015	9:19:33 AM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	35	Declass Soil-Tons	111926IL	TON	14.77	15	14.77
619199	3/31/2015	9:25:41 AM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	124	Declass Soil-Tons	111926IL	TON	12.83	15	12.83
619203	3/31/2015	9:32:30 AM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	180	Declass Soil-Tons	111926IL	TON	18.15	15	18.15
619210	3/31/2015	9:38:26 AM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	294	Declass Soil-Tons	111926IL	TON	14.8	15	14.8
619213	3/31/2015	9:39:59 AM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	147	Declass Soil-Tons	111926IL	TON	16.17	15	16.17
619220	3/31/2015	9:44:15 AM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	73	Declass Soil-Tons	111926IL	TON	14.17	15	14.17
619229	3/31/2015	9:51:30 AM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	326	Declass Soil-Tons	111926IL	TON	12.48	15	12.48
619234	3/31/2015	9:54:14 AM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	65	Declass Soil-Tons	111926IL	TON	15.02	15	15.02

Electronic Filing - Received, Clerk's Office : 07/19/2016

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Business Unit Name: Laraway RDF - S04121 (USA)

Customer Name: NRG ENERGY INC WILL CO FORMERLY MW GEN 111926IL (NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION)

Ticket	Ticket Out	Time	Customer	Vehicle	Material	Profile	Rate Unit	Rate Qty	Yards	Tons
619239	3/31/2015	9:58:21 AM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	23	Declass Soil-Tons	111926IL	TON	15.23	0	15.23
619247	3/31/2015	10:04:30 AM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	142	Declass Soil-Tons	111926IL	TON	15.27	15	15.27
619251	3/31/2015	10:06:43 AM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	112	Declass Soil-Tons	111926IL	TON	16.5	15	16.5
619269	3/31/2015	10:17:58 AM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	102	Declass Soil-Tons	111926IL	TON	14.77	15	14.77
619277	3/31/2015	10:23:02 AM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	154	Declass Soil-Tons	111926IL	TON	16.42	15	16.42
619278	3/31/2015	10:23:10 AM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	103	Declass Soil-Tons	111926IL	TON	18.98	15	18.98
619287	3/31/2015	10:28:29 AM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	0	Declass Soil-Tons	111926IL	TON	14	15	14
619288	3/31/2015	10:29:29 AM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	85	Declass Soil-Tons	111926IL	TON	14	15	14
619299	3/31/2015	10:35:27 AM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	485	Declass Soil-Tons	111926IL	TON	14.91	15	14.91
619309	3/31/2015	10:42:18 AM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	8	Declass Soil-Tons	111926IL	TON	15.05	15	15.05
619314	3/31/2015	10:44:58 AM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	45	Declass Soil-Tons	111926IL	TON	15.25	20	15.25
619317	3/31/2015	10:46:49 AM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	15	Declass Soil-Tons	111926IL	TON	23.74	15	23.74
619328	3/31/2015	10:53:47 AM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	35	Declass Soil-Tons	111926IL	TON	16.27	15	16.27
619337	3/31/2015	10:58:41 AM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	124	Declass Soil-Tons	111926IL	TON	14.7	15	14.7
619345	3/31/2015	11:05:29 AM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	248	Declass Soil-Tons	111926IL	TON	16.24	15	16.24
619354	3/31/2015	11:10:17 AM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	180	Declass Soil-Tons	111926IL	TON	15.04	15	15.04
619360	3/31/2015	11:14:28 AM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	294	Declass Soil-Tons	111926IL	TON	14.47	15	14.47
619368	3/31/2015	11:23:31 AM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	73	Declass Soil-Tons	111926IL	TON	15.21	15	15.21

Electronic Filing - Received, Clerk's Office : 07/19/2016

MM Ticket Detail Report - Detail

Criteria: 03/31/2015 12:00 AM to 03/31/2015 11:59 PM

Business Unit Name: Laraway RDF - S04121 (USA)

Customer Name: NRG ENERGY INC WILL CO FORMERLY MW GEN 111926IL (NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION)

Ticket	Ticket Out	Time	Customer	Vehicle	Material	Profile	Rate Unit	Rate Qty	Yards	Tons
619372	3/31/2015	11:25:42 AM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	147	Declass Soil-Tons	111926IL	TON	16.42	15	16.42
619384	3/31/2015	11:33:42 AM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	326	Declass Soil-Tons	111926IL	TON	13.39	15	13.39
619391	3/31/2015	11:42:08 AM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	65	Declass Soil-Tons	111926IL	TON	13.68	15	13.68
619392	3/31/2015	11:42:24 AM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	23	Declass Soil-Tons	111926IL	TON	14.77	0	14.77
619400	3/31/2015	11:52:20 AM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	112	Declass Soil-Tons	111926IL	TON	17.64	15	17.64
619405	3/31/2015	11:54:19 AM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	142	Declass Soil-Tons	111926IL	TON	13.99	15	13.99
619406	3/31/2015	11:55:30 AM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	103	Declass Soil-Tons	111926IL	TON	16.39	15	16.39
619422	3/31/2015	12:09:36 PM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	154	Declass Soil-Tons	111926IL	TON	13.73	15	13.73
619427	3/31/2015	12:13:50 PM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	0	Declass Soil-Tons	111926IL	TON	13.21	15	13.21
619428	3/31/2015	12:18:20 PM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	102	Declass Soil-Tons	111926IL	TON	13.21	15	13.21
619436	3/31/2015	12:29:35 PM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	85	Declass Soil-Tons	111926IL	TON	18.65	15	18.65
64									1019.44	
REMOVAL OF SOUTH CONCRETE PAD REMOVAL BEGINS										
619478	3/31/2015	1:06:31 PM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	45	Declass Soil-Tons	111926IL	TON	17	20	17
619480	3/31/2015	1:09:21 PM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	485	Declass Soil-Tons	111926IL	TON	17.83	15	17.83
619481	3/31/2015	1:10:01 PM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	8	Declass Soil-Tons	111926IL	TON	13.31	15	13.31
619483	3/31/2015	1:11:42 PM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	35	Declass Soil-Tons	111926IL	TON	19.95	15	19.95
619493	3/31/2015	1:19:31 PM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	124	Declass Soil-Tons	111926IL	TON	15.84	15	15.84
619503	3/31/2015	1:26:23 PM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	73	Declass Soil-Tons	111926IL	TON	16.83	15	16.83

Electronic Filing - Received, Clerk's Office : 07/19/2016

MM Ticket Detail Report - Detail

Criteria: 03/31/2015 12:00 AM to 03/31/2015 11:59 PM

Business Unit Name: Laraway RDF - S04121 (USA)

Customer Name: NRG ENERGY INC WILL CO FORMERLY MW GEN 111926IL (NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION)

Ticket	Ticket Out	Time	Customer	Vehicle	Material	Profile	Rate Unit	Rate Qty	Yards	Tons
619506	3/31/2015	1:27:50 PM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	180	Declass Soil-Tons	111926IL	TON	17.56	15	17.56
619514	3/31/2015	1:34:18 PM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	248	Declass Soil-Tons	111926IL	TON	17.56	15	17.56
619516	3/31/2015	1:36:15 PM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	147	Declass Soil-Tons	111926IL	TON	17.47	15	17.47
619526	3/31/2015	1:50:52 PM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	294	Declass Soil-Tons	111926IL	TON	16.94	15	16.94
619529	3/31/2015	1:53:21 PM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	0	Declass Soil-Tons	111926IL	TON	19.23	15	19.23
619537	3/31/2015	1:57:52 PM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	326	Declass Soil-Tons	111926IL	TON	18.61	15	18.61
619540	3/31/2015	1:59:35 PM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	112	Declass Soil-Tons	111926IL	TON	18.66	15	18.66
619542	3/31/2015	2:00:29 PM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	103	Declass Soil-Tons	111926IL	TON	17.93	15	17.93
619544	3/31/2015	2:01:33 PM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	23	Declass Soil-Tons	111926IL	TON	19.52	0	19.52
619546	3/31/2015	2:02:31 PM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	65	Declass Soil-Tons	111926IL	TON	18.27	15	18.27
619548	3/31/2015	2:03:37 PM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	85	Declass Soil-Tons	111926IL	TON	18.76	15	18.76
619582	3/31/2015	2:25:36 PM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	485	Declass Soil-Tons	111926IL	TON	20.42	15	20.42
619599	3/31/2015	2:41:42 PM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	8	Declass Soil-Tons	111926IL	TON	20.54	15	20.54
619603	3/31/2015	2:45:22 PM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	35	Declass Soil-Tons	111926IL	TON	18.04	15	18.04
619611	3/31/2015	2:49:32 PM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	73	Declass Soil-Tons	111926IL	TON	16.92	15	16.92
619617	3/31/2015	2:55:03 PM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	147	Declass Soil-Tons	111926IL	TON	17.05	15	17.05
619618	3/31/2015	2:56:10 PM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	124	Declass Soil-Tons	111926IL	TON	17.23	15	17.23
619630	3/31/2015	3:09:14 PM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	294	Declass Soil-Tons	111926IL	TON	16.74	15	16.74

Electronic Filing - Received, Clerk's Office : 07/19/2016

MM Ticket Detail Report - Detail

Criteria: 03/31/2015 12:00 AM to 03/31/2015 11:59 PM

Business Unit Name: Laraway RDF - S04121 (USA)

Customer Name: NRG ENERGY INC WILL CO FORMERLY MW GEN 111926IL (NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION)

Ticket	Ticket Out	Time	Customer	Vehicle	Material	Profile	Rate Unit	Rate Qty	Yards	Tons
619632	3/31/2015	3:10:37 PM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	248	Declass Soil-Tons	111926IL	TON	20.23	15	20.23
619633	3/31/2015	3:12:26 PM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	0	Declass Soil-Tons	111926IL	TON	16.42	15	16.42
619634	3/31/2015	3:18:01 PM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	103	Declass Soil-Tons	111926IL	TON	17.95	15	17.95
619635	3/31/2015	3:18:52 PM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	326	Declass Soil-Tons	111926IL	TON	16.69	15	16.69
619638	3/31/2015	3:25:23 PM	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	23	Declass Soil-Tons	111926IL	TON	17.88	0	17.88
29										517.38

Electronic Filing - Received, Clerk's Office : 07/19/2016

Customer Summary Report

Criteria: 04/01/2015 12:00 AM to 04/01/2015 11:59 PM

Business Unit Name: Laraway RDF - S04121 (USA)

Customer Name: NRG ENERGY INC WILL CO FORMERLY MW GEN 111926IL (NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION)

Ticket Date	Ticket ID	Cust Code	MAS Unique ID	Customer	Generator	Manifest	Profile	Truck	Material	Material Description	Origin	Rate Unit	Rate Qty	Yards	Tons
4/1/2015	619667	0002719	136508593005	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294076	111926IL	124	Declass Soil-Tons	Declassified Soil	WILL	TON	16.95	15	16.95
4/1/2015	619671	0002719	136508593005	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294069	111926IL	8	Declass Soil-Tons	Declassified Soil	WILL	TON	15.71	15	15.71
4/1/2015	619672	0002719	136508593005	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294075	111926IL	294	Declass Soil-Tons	Declassified Soil	WILL	TON	16.96	15	16.96
4/1/2015	619673	0002719	136508593005	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	297074	111926IL	103	Declass Soil-Tons	Declassified Soil	WILL	TON	17.28	15	17.28
4/1/2015	619674	0002719	136508593005	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294073	111926IL	426	Declass Soil-Tons	Declassified Soil	WILL	TON	16.6	15	16.6
4/1/2015	619723	0002719	136508593005	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294076	111926IL	124	Declass Soil-Tons	Declassified Soil	WILL	TON	14.62	15	14.62
4/1/2015	619738	0002719	136508593005	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294074	111926IL	103	Declass Soil-Tons	Declassified Soil	WILL	TON	19.05	15	19.05
4/1/2015	619748	0002719	136508593005	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294070	111926IL	288	Declass Soil-Tons	Declassified Soil	WILL	TON	19.78	15	19.78
4/1/2015	619753	0002719	136508593005	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294069	111926IL	8	Declass Soil-Tons	Declassified Soil	WILL	TON	14.72	15	14.72
4/1/2015	619764	0002719	136508593005	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294075	111926IL	294	Declass Soil-Tons	Declassified Soil	WILL	TON	15.66	15	15.66
4/1/2015	619771	0002719	136508593005	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294073	111926IL	426	Declass Soil-Tons	Declassified Soil	WILL	TON	15.43	15	15.43
4/1/2015	619832	0002719	136508593005	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294076	111926IL	124	Declass Soil-Tons	Declassified Soil	WILL	TON	16.79	15	16.79
4/1/2015	619839	0002719	136508593005	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294074	111926IL	103	Declass Soil-Tons	Declassified Soil	WILL	TON	18.81	15	18.81
4/1/2015	619845	0002719	136508593005	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294070	111926IL	288	Declass Soil-Tons	Declassified Soil	WILL	TON	19.7	15	19.7
4/1/2015	619850	0002719	136508593005	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294069	111926IL	8	Declass Soil-Tons	Declassified Soil	WILL	TON	15.52	15	15.52
4/1/2015	619862	0002719	136508593005	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294075	111926IL	294	Declass Soil-Tons	Declassified Soil	WILL	TON	14.44	15	14.44
4/1/2015	619868	0002719	136508593005	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294073	111926IL	426	Declass Soil-Tons	Declassified Soil	WILL	TON	17.56	15	17.56
4/1/2015	619939	0002719	136508593005	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294076	111926IL	124	Declass Soil-Tons	Declassified Soil	WILL	TON	15.42	15	15.42
4/1/2015	619943	0002719	136508593005	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294074	111926IL	103	Declass Soil-Tons	Declassified Soil	WILL	TON	17.25	15	17.25
4/1/2015	619944	0002719	136508593005	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294070	111926IL	288	Declass Soil-Tons	Declassified Soil	WILL	TON	20.1	15	20.1
4/1/2015	619947	0002719	136508593005	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294069	111926IL	8	Declass Soil-Tons	Declassified Soil	WILL	TON	15.97	15	15.97
4/1/2015	619950	0002719	136508593005	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294075	111926IL	294	Declass Soil-Tons	Declassified Soil	WILL	TON	15.76	15	15.76
4/1/2015	619960	0002719	136508593005	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294073	111926IL	426	Declass Soil-Tons	Declassified Soil	WILL	TON	17.98	15	17.98
4/1/2015	620020	0002719	136508593005	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294076	111926IL	124	Declass Soil-Tons	Declassified Soil	WILL	TON	16.54	15	16.54
4/1/2015	620029	0002719	136508593005	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294074	111926IL	103	Declass Soil-Tons	Declassified Soil	WILL	TON	18.37	15	18.37
4/1/2015	620032	0002719	136508593005	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294070	111926IL	288	Declass Soil-Tons	Declassified Soil	WILL	TON	20.11	15	20.11
4/1/2015	620036	0002719	136508593005	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294069	111926IL	8	Declass Soil-Tons	Declassified Soil	WILL	TON	17.48	15	17.48

Electronic Filing - Received, Clerk's Office : 07/19/2016

Customer Summary Report

Criteria: 04/01/2015 12:00 AM to 04/01/2015 11:59 PM

Business Unit Name: Laraway RDF - S04121 (USA)

Customer Name: NRG ENERGY INC WILL CO FORMERLY MW GEN 111926IL (NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION)

Ticket Date	Ticket ID	Cust Code	MAS Unique ID	Customer	Generator	Manifest	Profile	Truck	Material	Material Description	Origin	Rate Unit	Rate Qty	Yards	Tons
4/1/2015	620047	0002719	136508593005	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294075	111926IL	294	Declass Soil-Tons	Declassified Soil	WILL	TON	15.48	15	15.48
4/1/2015	620049	0002719	136508593005	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294073	111926IL	426	Declass Soil-Tons	Declassified Soil	WILL	TON	17.55	15	17.55
4/1/2015	620117	0002719	136508593005	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294074	111926IL	103	Declass Soil-Tons	Declassified Soil	WILL	TON	18.26	15	18.26
4/1/2015	620118	0002719	136508593005	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294070	111926IL	288	Declass Soil-Tons	Declassified Soil	WILL	TON	19.7	15	19.7
4/1/2015	620121	0002719	136508593005	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294069	111926IL	8	Declass Soil-Tons	Declassified Soil	WILL	TON	16.37	15	16.37
4/1/2015	620124	0002719	136508593005	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294073	111926IL	426	Declass Soil-Tons	Declassified Soil	WILL	TON	16.57	15	16.57
4/1/2015	620135	0002719	136508593005	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294075	111926IL	294	Declass Soil-Tons	Declassified Soil	WILL	TON	15.17	15	15.17
4/1/2015	620200	0002719	136508593005	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294074	111926IL	103	Declass Soil-Tons	Declassified Soil	WILL	TON	21.38	15	21.38
4/1/2015	620202	0002719	136508593005	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294069	111926IL	8	Declass Soil-Tons	Declassified Soil	WILL	TON	20.5	15	20.5
4/1/2015	620211	0002719	136508593005	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294073	111926IL	426	Declass Soil-Tons	Declassified Soil	WILL	TON	18.47	15	18.47
4/1/2015	620218	0002719	136508593005	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294070	111926IL	288	Declass Soil-Tons	Declassified Soil	WILL	TON	20.46	15	20.46
Material Total		38											660.47	570	660.47
Customer Total		38											660.47	570	660.47
Ticket Totals		38											660.47	570	660.47

Electronic Filing - Received, Clerk's Office : 07/19/2016

Customer Summary Report

Criteria: 03/30/2015 12:00 AM to 03/30/2015 11:59 PM

Business Unit Name: Laraway RDF - S04121 (USA)

User: dbrier

Date: Mar 31 2015, 9:20:44 AM - Central Standard Time

Operation Type: All

Customer Name: All

Ticket Type: All

Customer Type: All

PMT Category: All

Profile: 111926IL

Ticket Date	Ticket ID	Customer	Generator	Manifest	Profile	Truck	Material	Rate	Rate Unit	Tons	Material Revenue	Surcharge Revenue	Total
3/30/2015	618367	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294025	111926IL	124	Declass Soil-Tons	\$24.00	TON	13.81	\$331.44	\$175.00	\$506.44
3/30/2015	618370	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294026	111926IL	294	Declass Soil-Tons	\$24.00	TON	14.28	\$342.72	\$175.00	\$517.72
3/30/2015	618372	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294027	111926IL	35	Declass Soil-Tons	\$24.00	TON	12.8	\$307.20	\$175.00	\$482.20
3/30/2015	618376	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294028	111926IL	326	Declass Soil-Tons	\$24.00	TON	11.29	\$270.96	\$175.00	\$445.96
3/30/2015	618391	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294031	111926IL	1323	Declass Soil-Tons	\$24.00	TON	14.69	\$352.56	\$175.00	\$527.56
3/30/2015	618398	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294030	111926IL	1310	Declass Soil-Tons	\$24.00	TON	16.59	\$398.16	\$175.00	\$573.16
3/30/2015	618456	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294025	111926IL	124	Declass Soil-Tons	\$24.00	TON	14.41	\$345.84	\$175.00	\$520.84
3/30/2015	618477	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294027	111926IL	35	Declass Soil-Tons	\$24.00	TON	15.88	\$381.12	\$175.00	\$556.12
3/30/2015	618478	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294026	111926IL	294	Declass Soil-Tons	\$24.00	TON	14.96	\$359.04	\$175.00	\$534.04
3/30/2015	618489	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294028	111926IL	326	Declass Soil-Tons	\$24.00	TON	13.5	\$324.00	\$175.00	\$499.00
3/30/2015	618528	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294031	111926IL	1323	Declass Soil-Tons	\$24.00	TON	17	\$408.00	\$175.00	\$583.00
3/30/2015	618539	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294030	111926IL	1310	Declass Soil-Tons	\$24.00	TON	16.7	\$400.80	\$175.00	\$575.80
3/30/2015	618591	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294025	111926IL	124	Declass Soil-Tons	\$24.00	TON	13.6	\$326.40	\$175.00	\$501.40
3/30/2015	618618	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294027	111926IL	35	Declass Soil-Tons	\$24.00	TON	13.99	\$335.76	\$175.00	\$510.76
3/30/2015	618636	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294026	111926IL	294	Declass Soil-Tons	\$24.00	TON	13.66	\$327.84	\$175.00	\$502.84
3/30/2015	618637	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294028	111926IL	326	Declass Soil-Tons	\$24.00	TON	12.67	\$304.08	\$175.00	\$479.08
3/30/2015	618697	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294031	111926IL	1323	Declass Soil-Tons	\$24.00	TON	17.87	\$428.88	\$175.00	\$603.88
3/30/2015	618712	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294030	111926IL	1310	Declass Soil-Tons	\$24.00	TON	17.26	\$414.24	\$175.00	\$589.24
3/30/2015	618777	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294025	111926IL	124	Declass Soil-Tons	\$24.00	TON	14.06	\$337.44	\$175.00	\$512.44
3/30/2015	618789	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294027	111926IL	35	Declass Soil-Tons	\$24.00	TON	14.73	\$353.52	\$175.00	\$528.52
3/30/2015	618798	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294026	111926IL	294	Declass Soil-Tons	\$24.00	TON	13.95	\$334.80	\$175.00	\$509.80

Electronic Filing - Received, Clerk's Office : 07/19/2016

Customer Summary Report

Criteria: 03/30/2015 12:00 AM to 03/30/2015 11:59 PM

Business Unit Name: Laraway RDF - S04121 (USA)

User: dbrier

Date: Mar 31 2015, 9:20:44 AM - Central Standard Time

Operation Type: All

Customer Name: All

Ticket Type: All

Customer Type: All

PMT Category: All

Profile: 111926IL

Ticket Date	Ticket ID	Customer	Generator	Manifest	Profile	Truck	Material	Rate	Rate Unit	Tons	Material Revenue	Surcharge Revenue	Total
3/30/2015	618807	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294028	111926IL	326	Declass Soil-Tons	\$24.00	TON	13.27	\$318.48	\$175.00	\$493.48
3/30/2015	618818	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294032	111926IL	430	Declass Soil-Tons	\$24.00	TON	15.4	\$369.60	\$175.00	\$544.60
3/30/2015	618831	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294029	111926IL	16	Declass Soil-Tons	\$24.00	TON	13.98	\$335.52	\$175.00	\$510.52
3/30/2015	618834	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294033	111926IL	15	Declass Soil-Tons	\$24.00	TON	15.26	\$366.24	\$175.00	\$541.24
3/30/2015	618859	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294035	111926IL	103	Declass Soil-Tons	\$24.00	TON	18.13	\$435.12	\$175.00	\$610.12
3/30/2015	618865	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294034	111926IL	17	Declass Soil-Tons	\$24.00	TON	14.84	\$356.16	\$175.00	\$531.16
3/30/2015	618867	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294036	111926IL	73	Declass Soil-Tons	\$24.00	TON	14.13	\$339.12	\$175.00	\$514.12
3/30/2015	618877	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294031	111926IL	1323	Declass Soil-Tons	\$24.00	TON	16.16	\$387.84	\$175.00	\$562.84
3/30/2015	618887	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294038	111926IL	154	Declass Soil-Tons	\$24.00	TON	16.16	\$387.84	\$175.00	\$562.84
3/30/2015	618896	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294030	111926IL	1310	Declass Soil-Tons	\$24.00	TON	16.2	\$388.80	\$175.00	\$563.80
3/30/2015	618929	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294041	111926IL	45	Declass Soil-Tons	\$24.00	TON	17.07	\$409.68	\$175.00	\$584.68
3/30/2015	618934	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294047	111926IL	915	Declass Soil-Tons	\$24.00	TON	14.53	\$348.72	\$175.00	\$523.72
3/30/2015	618945	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294048	111926IL	703	Declass Soil-Tons	\$24.00	TON	14.74	\$353.76	\$175.00	\$528.76
3/30/2015	618953	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294040	111926IL	288	Declass Soil-Tons	\$24.00	TON	17.71	\$425.04	\$175.00	\$600.04
3/30/2015	618963	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294037	111926IL	702-15ALUMINUM	Declass Soil-Tons	\$24.00	TON	16.09	\$386.16	\$175.00	\$561.16
3/30/2015	618964	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294042	111926IL	914-ALUMINUM	Declass Soil-Tons	\$24.00	TON	16.13	\$387.12	\$175.00	\$562.12
3/30/2015	618973	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294025	111926IL	124	Declass Soil-Tons	\$24.00	TON	12.88	\$309.12	\$175.00	\$484.12
3/30/2015	618979	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294039	111926IL	485	Declass Soil-Tons	\$24.00	TON	16.03	\$384.72	\$175.00	\$559.72
3/30/2015	618983	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294027	111926IL	35	Declass Soil-Tons	\$24.00	TON	14.57	\$349.68	\$175.00	\$524.68
3/30/2015	618988	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294026	111926IL	294	Declass Soil-Tons	\$24.00	TON	14.88	\$357.12	\$175.00	\$532.12
3/30/2015	618991	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294028	111926IL	326	Declass Soil-Tons	\$24.00	TON	13.6	\$326.40	\$175.00	\$501.40

Electronic Filing - Received, Clerk's Office : 07/19/2016

Customer Summary Report

Criteria: 03/30/2015 12:00 AM to 03/30/2015 11:59 PM

Business Unit Name: Laraway RDF - S04121 (USA)

User: dbrier

Date: Mar 31 2015, 9:20:44 AM - Central Standard Time

Operation Type: All

Customer Name: All

Ticket Type: All

Customer Type: All

PMT Category: All

Profile: 111926IL

Ticket Date	Ticket ID	Customer	Generator	Manifest	Profile	Truck	Material	Rate	Rate Unit	Tons	Material Revenue	Surcharge Revenue	Total
3/30/2015	618997	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294043	111926IL	175	Declass Soil-Tons	\$24.00	TON	18.77	\$450.48	\$175.00	\$625.48
3/30/2015	619000	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294035	111926IL	103	Declass Soil-Tons	\$24.00	TON	18.5	\$444.00	\$175.00	\$619.00
3/30/2015	619001	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294036	111926IL	73	Declass Soil-Tons	\$24.00	TON	14.31	\$343.44	\$175.00	\$518.44
3/30/2015	619007	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294046	111926IL	8	Declass Soil-Tons	\$24.00	TON	16.89	\$405.36	\$175.00	\$580.36
3/30/2015	619012	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294045	111926IL	247	Declass Soil-Tons	\$24.00	TON	13.05	\$313.20	\$175.00	\$488.20
3/30/2015	619020	NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	117-MIDWEST GENERATION	294040	111926IL	288	Declass Soil-Tons	\$24.00	TON	18.47	\$443.28	\$175.00	\$618.28
Material Total	48									729.45	\$17,506.80	\$8,400.00	\$25,906.80
Customer Total	48									729.45	\$17,506.80	\$8,400.00	\$25,906.80
Ticket Totals	48									729.45	\$17,506.80	\$8,400.00	\$25,906.80

Customer Summary Report

Criteria: 03/30/2015 12:00 AM to 03/30/2015 11:59 PM

Business Unit Name: Laraway RDF - S04121 (USA)

User: dbrier

Date: Mar 31 2015, 9:20:44 AM - Central Standard Time

Operation Type: All

Customer Name: All

Ticket Type: All

Customer Type: All

PMT Category: All

Profile: 111926IL

Internal Customer	Loads	Total Ticket Amount

Customer Summary Report

Criteria: 03/30/2015 12:00 AM to 03/30/2015 11:59 PM

Business Unit Name: Laraway RDF - S04121 (USA)

User: dbrier

Date: Mar 31 2015, 9:20:44 AM - Central Standard Time

Operation Type: All

Customer Name: All

Ticket Type: All

Customer Type: All

PMT Category: All

Profile: 111926IL

External Customer	Loads	Total Ticket Amount
NRG ENERGY INC WILL CO FORMERLY MIDWEST GENERATION	48	\$25,906.80

***SIERRA CLUB, ET AL. V. MIDWEST GENERATION, LLC* PCB 13-15
RESPONSE TO MOTION FOR PARTIAL SUMMARY JUDGMENT**

EXHIBIT 17

ENSR PHASE I OF THE JOLIET 29, 1998

Commonwealth Edison Company

Chicago, Illinois



Phase I Environmental Site
Assessment of
Commonwealth Edison
Joliet #29 Generating Station
1800 Channahon Road
Joliet, Illinois.

ENSR Consulting - Engineering - Remediation

October 1998

Document Number 1801-023-400

Commonwealth Edison Company

Chicago, Illinois

Phase I Environmental Site
Assessment of
Commonwealth Edison
Joliet #29 Generating Station
1800 Channahon Road
Joliet, Illinois.

ENSR Consulting - Engineering - Remediation

October 1998

Document Number 1801-023-400

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1.0 INTRODUCTION

1.1 Objectives and Scope of Work

ENSR was retained by Commonwealth Edison to perform a Phase I environmental site assessment of Commonwealth Edison's Joliet #29 Generating Station facility located at 1800 Channahon Road in Joliet, Illinois.

The purpose of this Phase I ESA was to assess the environmental status of the subject site with regard to "recognized environmental conditions," which are defined by the ASTM (see E 1527-97) as, "the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property." According to the ASTM, "the term is not intended to include *de minimis* conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies."

The ESA was conducted in general accordance with the Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process established by the ASTM (ASTM Designation E.1527-97).

1.2 Study Limitations

This report describes the results of ENSR's initial due diligence investigation to identify the presence of recognized environmental conditions affecting the subject facility and/or property. In the conduct of this due diligence investigation, ENSR has attempted to independently assess the presence of such problems within the limits of the established scope of work, as described in ENSR's July 31, 1998 proposal.

As with any due diligence evaluation, there is a certain degree of dependence upon oral information provided by facility or site representatives which is not readily verifiable through visual inspection or supported by any available written documentation. ENSR shall not be held responsible for conditions or consequences arising from relevant facts that were misconstrued, concealed, withheld, or not fully disclosed by facility or site representatives at the time this investigation was performed.

This report and all field data and notes were gathered and/or prepared by ENSR in accordance with the agreed upon scope of work and generally accepted engineering and scientific practice in effect at the time of ENSR's investigation of the site.

This report, including all supporting field data and notes (collectively referred to hereinafter as "information"), was prepared or collected by ENSR for the benefit of its Client, Commonwealth Edison. ENSR's Client may release the information to other third parties, which may use and rely upon the information to the same extent as ENSR's Client. However, any use of or reliance upon the information by a party other than specifically named above shall be solely at the risk of such third party and without legal recourse against ENSR, its parent or its subsidiaries and affiliates, or their respective employees, officers or directors, regardless of whether the action in which recovery of damages is sought is based upon contract, tort (including the sole, concurrent or other negligence and strict liability of ENSR), statute or otherwise. This information shall not be used or relied upon by a party that does not agree to be bound by the above statement.

1.3 Report Organization

ENSR reviewed a substantial volume of information regarding the ComEd facility during the course of this environmental due diligence investigation. This report represents our best efforts to synthesize the most salient information collected and reviewed. The report contains the following sections:

- *Chapter 2: Site Location and Description*, provides an overview of the subject property, including a description of the site history and a discussion of the various activities currently taking place.
- *Chapter 3: Environmental Document Review*, provides a description of ComEd's documents reviewed at each facility and at ComEd's corporate office. The document review included only materials that pertained to site contamination and not documents regarding environmental regulatory compliance.
- *Chapter 4: On-Site Contamination*, evaluates the subject property for the presence of a hazardous material or petroleum hydrocarbon contamination problem due to past or present activities taking place on the site. This analysis also considers land uses in the immediate vicinity that may adversely affect the subject property through off-site migration of contaminants from known releases.
- *Chapter 5: Summary of Findings*, provides our summary regarding recognized environmental conditions.
- *Chapter 6: References*, identifies the various sources of information used in the preparation of this report, including persons interviewed, and documents and files evaluated.

-
- *Chapter 7: Signatures and Quality Control Review*, identifies the report author and the individual responsible for conducting senior review.

2.0 SITE LOCATION AND DESCRIPTION

2.1 Site Location

Commonwealth Edison operates a coal-fired electric power generating and distribution facility at 1800 Channahon Road in Joliet, Illinois. The facility has the capability to use alternative fuel sources including fuel oil, natural gas, and waste oils.

Channahon Road borders the subject property to the north and the Des Plaines River borders the property on the south. To the west is a Caterpillar Equipment, Inc. facility and to the east is vacant land beyond which is the Brandon Road Lock and Dam on the Des Plaines River. Access to the subject property is from Channahon Road at Larkin Avenue. Figure 2-1 is a site location map.

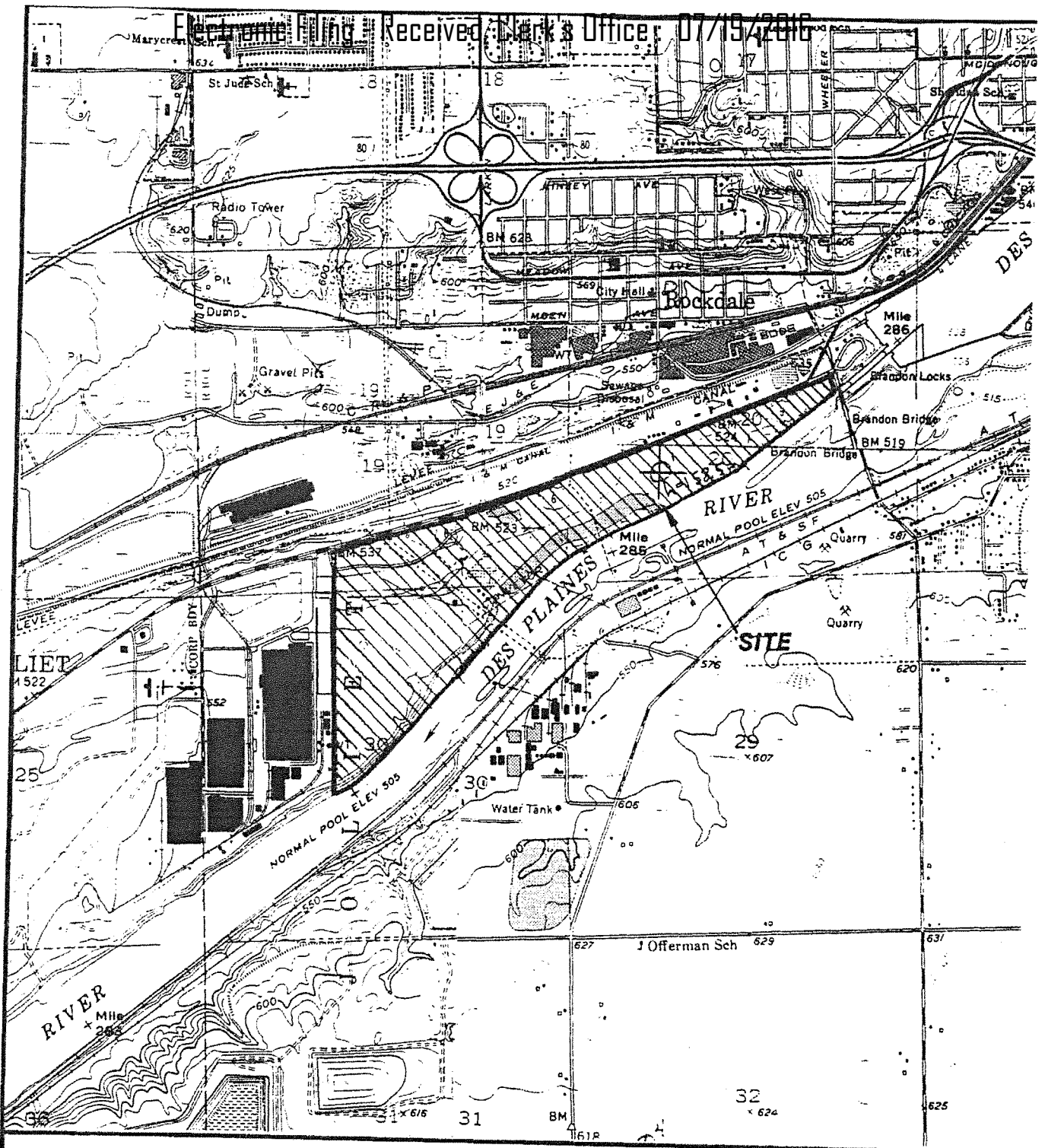
2.2 Description of Property and Facility Layout

The subject property encompasses approximately 271 acres and is occupied by the main generating building near the center of the property, and several other ancillary buildings surrounding the main building. The other buildings are used for offices, equipment and material storage, and sewage treatment facilities. Other structures on site include a conveyor for coal transfer, silos for fly ash storage, and various above ground storage tanks. Figure 2-2 is a site plan for the facility.

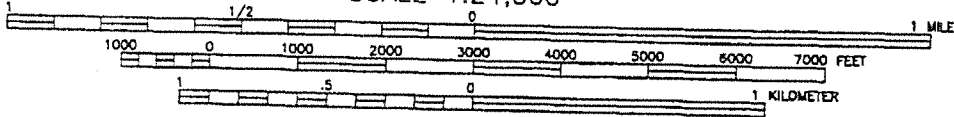
As mentioned in Section 2.1, Channahon Road borders the triangular-shaped subject property to the north. North of Channahon Road is open land and commercial and industrial facilities. To the south, the subject property is bordered by the Des Plaines River beyond which is another ComEd generating station (Joliet #9). The subject property is bordered to the east by Brandon Road and the Brandon Road Lock and Dam on the Des Plaines River. Caterpillar, Inc., a heavy equipment manufacturing facility, is immediately west of the subject property.

The main structure on the subject property is a ten-story building that houses two electric generating units each consisting of two boilers and twin turbines. The two generating units were installed in 1965 to 1966. Attached to the southeast corner of the main building is a three-story structure that contains the administrative offices for the facility.


On the south side of the main building are the two main transformers, the cooling water intake crib house, and the turbine oil/water separator that is located in a concrete-lined pit. At the southwest corner of the building are the make-up water storage tanks and the water treatment chemical storage tanks. West of the water tanks are the coal pile runoff collection basin and the main coal



SCALE 1:24,000



Contour interval 10 feet


 U.S.G.S.
 ELWOOD, CHANNAHON,
 PLAINFIELD & JOLIET, IL

SITE LOCATION MAP

JOLIET GENERATING STATION NO. 29
 1800 CHANNAHON ROAD
 JOLIET, ILLINOIS

COMMONWEALTH EDISON COMPANY

September 1998 File No: 6916-023-400

Dwg No: JOLIET29SL

FIGURE 2-1

ENSR

storage pile. An abandoned rail switchtrack extends onto the property from the northwest and continues east across the property immediately north of the main building. Between the switchtrack and the coal pile is the main equipment storage building and a 21,000-gallon diesel fuel aboveground storage tank (AST). Northwest of the main building are the sewage treatment building, the coal handling building, the valve house, the fuel oil unloading building, and beyond the buildings is an abandoned 950,000-gallon fuel oil AST.

On the north side of the main building are the induced draft fan units and the two main chimneys. Beyond the fan units are the central storage building and the main power switchyard. Note that for the purpose of this report, the switchyard is not considered part of the subject property. Rather, it is considered an adjacent site. Equipment and materials used on site are unloaded and stored at the storage building.

Asphalt-paved employee and visitor parking areas are located east of the main building. A small training building is located on the east side of the main building across the parking area. Further east are the ash-handling ponds, the fly ash silos, an abandoned wastewater treatment facility, and the roof and yard runoff basin.

2.3 Topography, Hydrology, and Geology

The subject property is relatively flat with a slight slope to the south. The topographic elevation is approximately 520 feet above mean sea level, according to the USGS Channahon, Illinois Quadrangle 7.5-Minute Series topographic map.

According to the USDA SCS Soil Survey for Will County, Illinois, the soils on the subject property consist mostly of silty loam. The inferred depth to groundwater is between 15 feet and 60 feet below grade surface (bgs). The regional groundwater is expected to flow toward the Des Plaines River adjacent to the south side of the subject property.

2.4 Site History

Historical information for the subject site is based on a review of building department records, tax assessors records, zoning and planning files, aerial photographs, topographic quadrangle maps, city directories, ComEd files, and interviews from site personnel and local government officials. Sanborn Fire Insurance maps were not available for the subject property vicinity. Based upon the lack of available standard historical reference sources, ENSR was unable to track the history of the subject property prior to 1965.

According to ComEd, the site was used for coal ash disposal by the Joliet # 9 station prior to the construction of Joliet # 29 in 1964-1965. Coal ash was primarily disposed in a landfill on the eastern portion of the site. A second abandoned ash disposal landfill lies on the southwest portion of the site between the coal pile and the Caterpillar, Inc. site. A topographic map dated 1954 and

photorevised in 1973 depicts the change in the property usage from undeveloped to developed with the generating station. No other records of previous land usage were identified during the historical information search.

An aerial photograph dated 1990 shows the generating station in its current configuration. According to building department records, six additional structures were constructed on the property from 1975 to 1992. Building department records were not very specific regarding the building usage or construction dates. Building department records also did not contain any information regarding USTs at the site. The fuel unloading building was originally constructed in 1975 but burned down in 1980. The building was re-built in 1983 using most of the original floor. A single-story steel-frame building was constructed in 1986. This building does not match the size of any buildings on ComEd's facility maps. A steel-framed office and employee locker room building was constructed in 1992. Also erected in 1992 was a small steel storage shed. The wastewater treatment plant on the west side of the property was constructed in 1978 in a pre-fab metal building.

2.5 Adjacent Site History

Historical information for the subject site vicinity is based on a review of zoning records, aerial photographs, a topographic quadrangle map, city directories, and interviews from site personnel and local government officials. Sanborn Fire Insurance maps were not available for the subject property vicinity.

Channahon Road borders the subject property to the north, beyond which are open lands and commercial and industrial facilities. The 1990 aerial photograph shows the abutting properties to the north as undeveloped. A topographic map dated 1962 shows these abutting properties as mostly undeveloped. The topographic map was revised in 1973 and shows the abutting facilities in their present configuration. City directories dated 1947, 1953, 1955, 1960, 1965, 1969, 1974, 1979, 1984, 1989, and 1995 do not have a listing for these abutting properties.

Brandon Road and the Brandon Locks on the Des Plaines River border the subject property to the east. The 1990 aerial photograph shows the adjacent property to the east as vacant undeveloped land. The topographic maps were revised in 1973 and show the adjacent property in its present configuration.

The Des Plaines River defines the southern boundary of the property, beyond which is the ComEd Joliet # 9 Generating Station. ComEd records indicate the generators at Joliet # 9 were installed beginning in 1917.

Currently, the Caterpillar, Inc. manufacturing facility borders the subject property to the west. The 1990 aerial photograph shows the abutting properties to the west in approximately their present

configuration. The Channahon quadrangle topographic map dated 1954 and photorevised in 1973 shows the abutting facilities in their present configuration.

2.6 Description of Operations

The subject property is a coal-fired electric power generating station. Supporting operations include water treatment, wastewater treatment, equipment maintenance and repair, and coal-handling equipment maintenance and repair. Electrical power is transmitted to the area grid via overhead power transmission lines.

The generating station receives coal from the Joliet # 9 generating station, located to the south across the river, and stores the coal in a pile located to the west of the main building. The coal pile has a storage capacity of 1,000,000 tons. The coal is then crushed and fed into the boiler via conveyors located west of the main building. Steam from the boilers is used to drive a pair of turbines for each generating unit. Electricity generated by the turbines is then distributed to the adjacent switchyard.

Condenser cooling-water is drawn from the Des Plaines River at a rate of approximately 1,073 million gallons per day (MGD). Boiler make-up water is obtained from on-site water wells. Water treatment chemicals including ammonia, hydrazine, and phosphate are added to the boiler make-up water to inhibit corrosion and scaling. Sodium hypochlorite and/or sodium bromide is used in the condenser cooling and house service water system to control biofouling. Sodium bisulfite is added to these systems prior to final discharge to detoxify the biocides.

Coal burning produces waste fly ash, bottom ash, and economizer ash. Bottom ash and economizer ash from the boilers is mixed with water to form slurry that is pumped to one of two geo-textile fabric lined ash-handling ponds for dewatering. The water then flows to a geotextile-fabric lined secondary ash-handling pond for clarification. Clarified water from the ash ponds is recycled for slurry make-up water. The primary flow path for the slurry is via a pipe across the river to an abandoned quarry located east of the Joliet # 9 station. The Joliet # 9 station currently uses this quarry for ash and slag disposal. Fly ash is transferred to two storage silos located east of the main building. The fly ash is eventually sold as construction material.

Sanitary wastewater is treated in an on-site sewage treatment plant located west of the main building. The treatment system consists of primary separation, a rotating biological contactor (RBC), and clarification. Treated wastewater is discharged to the Des Plaines River under the conditions of an NPDES permit. Sewage treatment plant sludge is land-applied to a two-acre site on the Joliet # 9 property in accordance with an IEPA Water Pollution Control Permit. The NPDES permit also covers discharges of condenser cooling water, demineralizer regenerant wastes, boiler blowdown water, storm water runoff, intake screen backwash, and ash pond effluents.

Plant drains, coal pile runoff, and west plant and roof area runoff are directed to the west basin for treatment. The effluent from the west basin is discharged to the local ash pond system prior to discharge. East roof and yard runoff is directed to the east basin that historically has rarely discharged. Other facilities of note include an abandoned wastewater treatment plant to the east near the ash-handling ponds which was used to treat non-chemical metal-cleaning wastes, and at the east end of the property, an inactive ash landfill once used to dispose of ash from the Joliet # 9 generating station. The facility stores large quantities of the following materials: turbine oil, sulfuric acid, sodium hypochlorite, lubricating oil, liquid nitrogen, ion exchange resin, ethylene glycol, diesel fuel sodium hydroxide, sodium bromide, sodium bisulfate, hydrazine, gasoline, fly ash, carbon dioxide, and aluminum sulfate.

2.7 Utilities

Currently, the Joliet generating station obtains potable and process water from on-site water wells. The Des Plaines River supplies cooling water. According to facility personnel and building department records, the facility obtains potable and process water from wells located on the subject property.

The Joliet # 29 generating station treats sanitary wastewater on site in a wastewater treatment facility consisting of primary separation, a rotating biological contactor (RBC), and clarification. Treated wastewater is discharged to the Des Plaines River.

Natural gas is provided to the subject property by Northern Illinois Gas Company and is used as a supplemental fuel source for the boilers.

3.0 ENVIRONMENTAL DOCUMENT REVIEW

3.1 Introduction

This environmental document review is based upon information provided by ComEd coupled with observations made by Brian O'Neil and James Paulson of ENSR during the site walk through which took place on August 25-26, 1998. The information provided by ComEd included Community Right-To-Know and other documents relative to the various regulatory areas described below. Also, certain state and federal enforcement databases were screened by Environmental Data Resources, Inc. (EDR).

3.2 Air Quality

Although no formal emissions inventory was prepared as part of this Phase I assessment, a preliminary review of the facility indicates air permits are required for the facility. The Illinois Environmental Protection Agency (IEPA) oversees the state's air permitting compliance programs. The facility currently has four operating permits from the IEPA. The air permits cover the operation of four boilers with electrostatic precipitators, turbine oil tanks, coal ash silos, fuel handling (coal) with a radial boom stacker and conveyor belt, ash handling, a fuel dispensing facility, diesel "peaker" units, and a 2.0 mmBtu/hr natural gas-fired boiler. According to Ms. Lorinda Lamb, the facility has applied for a Title V operating permit and is awaiting regulatory approval.

3.3 Water Resources

The facility is permitted to discharge wastewater and stormwater from eight outfalls in accordance with the conditions of NPDES Permit No. IL0064254. Permitted wastewater streams include condenser cooling and house service water, demineralizer regenerant wastes, sewage treatment plant effluent, boiler blowdown, plant drains, ash pond blowdown, and storm water runoff to the Des Plaines River. Storm water runoff from the main plant area, coal pile, and other areas on the west and north side of the property is treated in the facilities' wastewater treatment plant.

For storm water runoff not collected in the station's on-site wastewater treatment system, a Storm Water Pollution Prevention Plan (SWPPP) has been prepared as a condition of the NPDES permit. The SWPPP describes best management practices in place at the facility to prevent the release of harmful materials into the waters of the state.

The facility also operates under IEPA Water Pollution Control Permit number 1997-SC-4800 for the land application of 1.06 dry tons/year of aerobically digested sludge to a 2-acre tract of land on the Joliet # 9 property. The sludge is generated in the on-site sewage treatment plant.

A wetland investigation performed in September 1993 by Harza Engineering identified two wetland areas on the site totaling 11 acres. The wetland areas were described as a narrow strip along the western edge of the station boundary and the banks of the Des Plaines River.

3.4 Oil and Hazardous Material Storage and Use

3.4.1 Material Storage and Use

Several types of fuels, oils, and hazardous materials are stored and used on site. These materials are stored in underground and aboveground tanks, drums, and various other containers located both indoors and outdoors.

The facility has prepared contingency plans, including a Spill Prevention, Control, and Countermeasures Plan (SPCC) to prevent the discharge of oil from the aforementioned containers, and to mitigate any adverse effects from such a spill.

3.4.2 Principal Waste Streams

The facility generates several waste streams from its operation and maintenance activities. Some of the waste streams may be considered hazardous waste and are generated on an intermittent basis. According to the 1995 Annual Hazardous Waste Report, the Joliet # 29 Station is a small quantity generator. The facility's generator ID number is ILD 000803650. Hazardous wastes generated at the facility were laboratory wastes, disposed at the Laidlaw facility in Pecatonica, Illinois, and a monoethylamine/water mixture, a D001 (ignitable) hazardous waste, disposed at LWD in Calvert City, Kentucky.

Non-hazardous special wastes and solid waste are also generated at the facility. Non-hazardous waste streams generated typically include general refuse, used oils, used oil filters, oil-soaked adsorbents, slag, fly ash, and boiler bottom ash. Non-hazardous special wastes are stored in various types of containers including dumpsters, drums, bins, silos, and basins. Com Ed has a permit to burn waste turbine and lubricating oils, boiler wash, resins, and antifreeze in the boilers. Non-hazardous special wastes were disposed at SD Meyers in Tallmadge, Ohio, Great Northern in Huntington, Indiana, Envotech in Belleville, Michigan, and ENSR Operations in Columbus, Ohio.

4.0 ON-SITE CONTAMINATION POTENTIAL

4.1 Introduction

Based on ENSR's review of the facility there is a potential for on-site contamination at ComEd's Joliet # 29 Station in Joliet, Illinois. The following sections describe the specific areas identified as having the potential for contributing to on-site contamination.

4.2 Above and Under Ground Storage Tanks (ASTs and USTs)

4.2.1 Inventory of Underground Tanks

According to the EDR database search, there are currently no registered underground storage tanks (USTs) located on the subject property. During the ENSR site visit fill pipes and one fuel pump were observed at the vehicle-fueling island adjacent to the roof and yard runoff basin. According to the SPCC Plan, there is one 1,500-gallon gasoline UST associated with the fueling island. The tank is approximately 12-years old and is equipped with fill protection and automatic leak detection systems. According to Mr. Paul Murphy, this tank was registered with the Office of the State Fire Marshal (OSFM) on March 11, 1988.

According to Mr. Murphy, there is also an oil/water separator on site that was inadvertently registered as an UST. This separator is to be delisted.

There is also a 3,000-gallon emergency spill diesel fuel UST that has never been used. This tank was originally registered with the OSFM but has been delisted.

4.2.2 Inventory of Aboveground Storage Tanks

Table 4-1 provides a list of aboveground storage tanks identified at the Joliet # 29 Station.

TABLE 4-1
Aboveground Storage Tanks
Joliet # 29 Station

Tank type	Tank Location	Est. Capacity (gal)
Turbine Oil Receiving Tank	Unit 7 & 8 Main Building	17,000
Clean Turbine Oil Tank	Unit 7 & 8 Main Building	17,000
Turbine Oil	Unit 7 Main Building	10,000
Turbine Oil	Unit 8 Main Building	10,000
Boiler Feed Pump Oil Tank	Boiler 71 Main Building	750
Boiler Feed Pump Oil Tank	Boiler 72 Main Building	750

TABLE 4-1
Aboveground Storage Tanks
Joliet # 29 Station

Tank type	Tank Location	Est. Capacity (gal)
Boiler Feed Pump Oil Tank	Boiler 81 Main Building	750
Boiler Feed Pump Oil Tank	Boiler 82 Main Building	750
Fuel Oil Tank (Retired)	Northwest of Main Building	950,000
Waste Oil Tank	East of Roof & Yard Runoff Basin	7,500
Diesel Oil Tank-Unit 7	Unit 7 Main Building	500
Diesel Oil Tank-Unit 8	Unit 8 Main Building	2 @ 250
Diesel Oil Tank	Equipment Storage Building	21,000
Diesel Oil Tank (Retired)	Diesel Oil Unloading Building	3,000
Gasoline Tank	East of Roof & Yard Runoff Basin	500
Diesel Fuel Tank (Fire Pump)	Discharge Channel	560
Sulfuric Acid Tank	West Side of Main Building	5,000
Well Water	Southwest Corner of Main Building	500,000
Demineralized Water	Southwest Corner of Main Building	2 @ 500,000
Sodium Hypochlorite Tank	Next to Unit 7 Main Transformer	7,000

The 950,000-gallon fuel oil storage tank is no longer used; it was closed in 1993. The 3,000-gallon diesel oil tank at the unloading building has also not been used since the fuel oil tank was closed.

4.3 Polychlorinated Biphenyls (PCBs)

Numerous oil-filled electrical equipment was observed on the subject property. According to Mr. Dave Rubner, ComEd PCB Specialist, a fluid exchange process to remove PCB-containing dielectric fluid from transformers at all of the ComEd stations was conducted during the 1980s. Since the completion of the fluid exchange process, all transformers at the Joliet # 29 Station are believed to be PCB free (i.e. below 50 ppm). Table 4-2 lists the Joliet # 29 transformers that ComEd has identified as having the potential for leachback to levels in excess of 50 ppm. ComEd has a procedure in place to re-test the fluid every two years for these transformers.

Table 4-2
Transformers Having Potential for PCB Leach-back
Joliet # 29 Station

Serial Number	Original Fluid	Gallons	KVA	ID #/Location
E688593D	Askeral	265	840	81
E688593C	Askarel	265	750	71
E688593B	Askarel	265	840	82
E688591D	Askarel	515	840	86

Table 4-2
Transformers Having Potential for PCB Leach-back
Joliet # 29 Station

E688592A	Askarel	265	750	CH7
E693014	Askarel	140	300	CH8
E688591A	Askarel	515	1500	75
E688592B	Askarel	265	750	CH6
E693013	Askarel	205	500	CH9

ENSR observed evidence of leakage or spillage near the fill pipes of many transformers on the site, particularly those around the main building. The stains varied in size from 5 square feet to 25 square feet.

Although no permitting requirements currently apply to the use of equipment containing or potentially containing PCB coolants, equipment containing more than 50 ppm PCBs must be marked with the appropriate warning labels (40 CFR 761.45, PCB).

4.4 Asbestos-Containing Material (ACM)

ENSR representatives who are State of Illinois Department of Public Health licensed Asbestos Building Inspectors performed a visual suspect asbestos-containing material (ACM) inspection of the main building and outlying structures as part of this investigation, however, bulk sampling was not performed. The suspect materials identified at the station included pipe and pipe fitting insulation, boiler and equipment insulation, and roof insulation materials. According to Mr. Dan Maul and Mr. Jeff Wakefield, a significant portion of ACM within the main building has been removed and replaced with non-ACM material. Mr. Maul estimated that approximately 25% of the pipe and pipe fitting insulation is still ACM. Although the removal of all ACM is not required at this time, Table 4-3 presents the types and estimated quantities of suspected ACM and estimated removal costs.

Table 4-3
Asbestos-Containing Material
Joliet # 29 Station

Type of Material	Estimated Quantity	Estimated Removal Cost
Pipe & Pipe Fitting Insulation	15,000 Lineal Feet	\$ 300,000
Boiler & Equipment Insulation	20,000 Square Feet	\$ 500,000
Roof Insulation	84,000 Square Feet	\$ 2,100,000

The total suspect ACM removal cost is estimated at \$ 2,900,000. The cost estimate is based on ACM location and quantity information provided by ComEd, ENSR's visual inspection of

accessible areas of the facility, and generally accepted ACM removal unit costs. The cost estimate does not include project consulting or reinsulation fees. The estimated removal cost provided above is subject to change and as a result of the potential variability in material quantities and location, contractor fees, disposal fees, and project scheduling may fluctuate as much as 50%.

4.5 Areas of Surface Staining

The ENSR site inspection was conducted on August 25-26, 1998. In general, housekeeping conditions at the subject facility were good with individual areas, particularly on the west side, requiring more attention than others. The following areas of surface staining were identified during the environmental investigation of the property:

- Dark oily stains were observed on the ground around some of the transformers. One stain approximately 3' by 10' was adjacent to a new concrete containment for the auxiliary transformer by the crib house. A 4' by 4' stain was observed adjacent to the transformers east of the main building.
- Two dark oily stains were observed on the ground surface near the oil/water separator adjacent to the cooling water crib. The stains were approximately 5' by 5'.
- Surface staining was also evident on the base of several of the large transformers, particularly adjacent to the induced draft fan units. Stains were approximately 2' by 8'.

4.6 Ash and Coal Pile Runoff Basins

Plant drains, coal pile runoff, and west plant and roof area runoff are directed to the west basin for treatment. The effluent from the west basin is discharged to the local ash pond system prior to discharge. East roof and yard runoff is directed to the east basin that historically has rarely discharged. Other facilities of note include an abandoned wastewater treatment plant to the east near the ash-handling ponds which was used to treat non-chemical metal-cleaning wastes, and at the east end of the property, an inactive ash landfill once used to dispose of ash from the Joliet # 9 generating station. Both the west and east runoff ponds are covered under the facility's NPDES permit. The NPDES permit allows the ponds to discharge to the Des Plaines River.

A series of three ash settling ponds are located northeast of the main building. A slurry of bottom ash and slag from the boilers is discharged to the one of the first two ponds. The third pond receives effluent from ponds 1 & 2 for secondary clarification. Supernatant from the third pond is typically recycled for slurry make-up. These ponds are also covered under the NPDES permit for discharge to the river. An optional flow path for the ash slurry is via a pipe across the river to the settling quarry used by ComEd's Joliet # 9 station.

4.7 Spill History

According to ComEd's spill logs, a 165-gallon hydraulic oil spill was reported to the Illinois Emergency Management Agency (IEMA) on July 29, 1996. The spill resulted from a loose pipe flange. None of the oil was discharged to any waterways and the spill was cleaned up immediately using adsorbent pads. A similar spill of 250 gallons of lubricating oil was reported to IEMA on August 21, 1995 when a pipe coupling broke. This spill was also cleaned up with adsorbent pads and no oil escaped to any waterways. These spills occurred beneath the induced-draft fans associated with the electrostatic precipitators. Surface soils may have been impacted by the spills.

4.8 Adjacent Property

At the east side of the subject property is an abandoned ash disposal landfill. The landfill was used for the disposal of waste ash from the Joliet # 9 Station located to the south across the river. The area has been inactive for approximately 30 years and is covered with topsoil and vegetation. The type of ash deposited in this area is from the burning of high-sulfur content coal and is suspected to be highly acidic. It is unknown whether leachate from the ash has had an adverse impact on soil and/or groundwater quality.

4.9 Environmental Database Review

ENSR reviewed a variety of federal and state governmental databases using Environmental Data Resources (EDR) of Southport, Connecticut. Table 4-4 describes the federal and state contamination-related databases that were searched for the area surrounding the subject property; the various search distances used are also noted.

TABLE 4-4
Databases Searched and Radii

Database Acronym	Description	Search Distance ¹ (miles)
Federal Databases		
NPL ²	Existing and proposed Superfund sites on the National Priorities List	1.0
CERCLIS ²	Abandoned, uncontrolled or inactive hazardous waste sites reported to the U.S. EPA, which have been or are scheduled to be investigated by the U.S. EPA for potential nomination to the NPL.	0.5
RCRIS-TSD ²	Reported sites that treat, store and/or dispose of hazardous waste and subject to the federal RCRA regulations.	0.5

**TABLE 4-4
Databases Searched and Radii**

Database Acronym	Description	Search Distance (miles)
RCRIS-LQG/SQG ²	Reported large-quantity generators and small quantity generators of hazardous waste.	0.25
ERNS ²	Sites reporting spills to the U.S. EPA and/or the U.S. Coast Guard under various federal regulations	target property
FINDS	Facility Index System indicates the presence of a site on another federal database.	target property
PADS	PCB Activity Database System identifies generators, transporters, commercial storers and/or brokers and disposers of PCBs who are required and have notified the EPA of such activities.	target property
RAATS	RCRA Administrative Tracking System contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA.	target property
TRIS	Toxic Chemical Release Inventory System identified facilities who have reported releases of listed toxic chemicals to the air, water, and land in reportable quantities under SARA Title III Section 313.	target property
TSCA	Toxic Substances Control Act identified manufacturers and importers of chemical substances by plant site in 1986. No updates of the list have been made by EPA.	target property
HMIRS	Hazardous Materials Information Reporting System contains hazardous material spill incidents reported to the Federal DOT.	target property
NPL Liens	List of liens placed against real property in order for the EPA to recover remedial action expenditures or when the property owner receives notification of potential liability.	target property
CORRACTS	Corrective Action Report identifies hazardous waste handlers with RCRA corrective action activity.	1.0
ROD	Records of Decision mandating a permanent remedy for a Superfund Site	1.0
MLTS	Material Licensing Tracking System, maintained by the Nuclear Regulatory Commission, contains a list of sites that possess or use radioactive materials and are subject to NRC licensing.	target property
Delisted NPL	Sites removed from the NPL	target property
Coal Gas	Former manufactured coal gas sites	1.0
Illinois Databases		

TABLE 4-4
Databases Searched and Radii

Database Acronym	Description	Search Distance ¹ (miles)
SWHS ²	State hazardous waste sites	1.0
UST ²	Sites which have reported underground storage tanks.	0.5
LUST ²	Sites which have reported leaking underground storage tanks.	0.5
SWF/LF ²	List of permitted solid waste disposal facilities	0.5
¹ The radial search distances used equal or exceed those recommended by ASTM for assessing the environmental condition of commercial real estate. ² Databases which are required to be searched by ASTM.		

4.9.1 Subject Property

The subject property was listed on the ERNS and FINDS databases. The federal FINDS database only indicates the facility's presence on other databases. The ERNS database indicates that the facility had a release of oil or hazardous substances on the subject property. The incident(s) in the ERNS database likely relates to the previously mentioned spills (See Section 4.5).

4.9.2 Surrounding Land Uses

According to the EDR database report, only one site was identified within the specified search radii, the Caterpillar, Inc. facility. The Caterpillar, Inc. site appears on the following databases; PADS, FINDS, RCRIS-LQG, TRIS, RCRIS-TSD, CORRACTS, AND CERC-NFRAP. Several other sites were listed as "orphans" on the EDR report due to poor or inadequate address information. The Joliet # 9 station was listed in this category. One other site on the orphan list, Schuller International Company, a LUST site, could be near the Joliet # 29 station. The address for the site was only given as Rt. 6, Channahon Road. No other information was available on the Schuller site.

The inferred groundwater flow direction in the subject property vicinity is toward the Des Plaines River, which is immediately south of the subject property. Based on distance, inferred hydraulic gradient, and/or regulatory status, the Caterpillar, Inc. facility probably has not impacted the subject property.

5.0 SUMMARY OF FINDINGS

ENSR performed a Phase I Environmental Assessment in conformance with the scope and limitations of the ASTM practice E-1527-97 at Commonwealth Edison's Joliet # 29 Station located at 1800 Channahon Road in Joliet, Illinois. Any exception to or deletions from this practice are described in this report. This practice has revealed evidence of the following recognized environmental conditions associated with the subject property:

- Underground Storage Tanks: One 1,500-gallon UST was identified as associated with a fueling island east of the main building. The tank is approximately 12 years old and is equipped with fill protection and automatic leak detection. No information was provided on any leak testing.
- Areas of Stained Surface Soil: Several areas of surface staining were observed on interior concrete and on exterior gravel and soil covered areas. Many of the aboveground storage tanks, transformers, and chemical storage areas were not equipped with secondary containment structures and oil stains were observed adjacent to these areas. Stains were typically 15 to 30 square feet.
- PCB-Containing Electrical Equipment: Facility records and information from facility personnel indicates that PCB contaminated fluids have historically been used in the electrical equipment on site. Although these fluids were replaced, residual PCBs potentially remain within the equipment and may still be in any fluids that are removed from the equipment. Stained pads and soils were evident around some of the transformers.
- On-Site Wastewater Treatment: Building and assessment records indicate the generating station has occupied the subject property since 1965. There is an abandoned wastewater treatment facility adjacent to the ash handling ponds. This facility treated gas-side wash waters that are now treated in the ash ponds. Most of the storm water runoff from the property including coal pile runoff is treated in west runoff basin that discharges to the local ash field ponds.
- Asbestos-Containing Material (ACM): Asbestos-containing material is known to exist on site in pipe and pipe fitting insulation and potentially some ACM remains in the boiler. The main building roof insulation may also be ACM. ENSR estimates that there is approximately 15,000 lineal feet of pipe and pipe fitting insulation, 20,000 square feet of boiler and equipment insulation, and 84,000 square feet of roof insulation that is ACM.

-
- Ash Landfills: At the east end of the subject property is an inactive ash disposal landfill. The landfill was used for the disposal of waste ash from the Joliet # 9 Station located to the south across the river. The area has been inactive for approximately 30 years and is covered with topsoil and vegetation. A smaller inactive ash landfill is located on the southwest corner of the station property.
 - Adjacent Property: A 345 kV switchyard lies north of the subject property. Oil-filled liquid-cooled electrical equipment is present in the switchyard. Also, an area of dead vegetation was evident in the southwest corner of the switchyard. It is unknown if activities in the switchyard may have had an impact on the subject property.

6.0 REFERENCES

6.1 Persons Interviewed or Contacted

Ms. Elsie Briette, Environmental Compliance Specialist, Commonwealth Edison, 1800 Channahon Road, Joliet, Illinois, 815-741-9000 x2289.

Mr. Dan Maul, Construction Specialist, Commonwealth Edison, 1800 Channahon Road, Joliet, Illinois, 815-741-9000 x2413.

Mr. Jeff Wakefield, Safety Specialist, Commonwealth Edison, 1800 Channahon Road, Joliet, Illinois, 815-741-9000 x2286.

6.2 Documents and Reports Reviewed

City of Joliet Building Department Records, Joliet, Illinois.

City of Joliet Assessment Department Records, Joliet, Illinois.

Aerial Photographs of subject property and surrounding properties dated 1990 reviewed and acquired from Chicago Historical Society, Chicago, Illinois.

Harza Engineering Company, Wetland Investigations Joliet # 29 Power Station Report, prepared for Commonwealth Edison Company, dated September 1993.

EDR Radius Map with Geocheck®, Commonwealth Edison, 1899 Channahon Road, Joliet, Illinois, dated August 18, 1998.

U.S.G.S. 7.5-minute Topographical Quadrangle Map, Plainfield, Joliet, Elwood, and Channahon Illinois quadrangles dated 1954 to 1962, Photorevised 1973.

Commonwealth Edison 1995 Hazardous Waste Annual Report.

Commonwealth Edison Letter to IEPA dated September 29, 1992 regarding Individual Storm Water Permit Application.

Commonwealth Edison NPDES Permit No. IL0064254 dated November 15, 1995.

Commonwealth Edison NPDES Permit No. IL0064254 Storm Water Pollution Prevention Plan dated January 30, 1994.

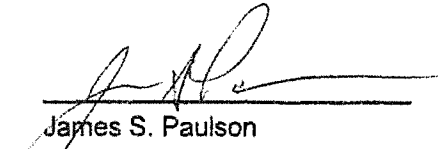
Commonwealth Edison IEPA Water Pollution Control Permit 1997-SC-4800 issued November 20, 1997.

Commonwealth Edison 1997 SARA Title III Tier II Inventory Form.

Commonwealth Edison Annual RCRA Hazardous Waste & Non-Hazardous Special Waste Reports for 1995 dated February 29, 1996.

Commonwealth Edison Joliet # 29 SPCC Plan.

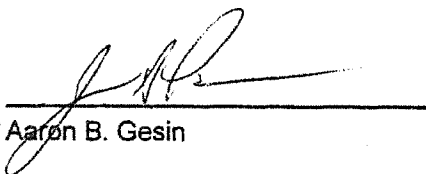
7.0 SIGNATURES AND QUALITY CONTROL REVIEW

BY: 
James S. Paulson

TITLE: Project Engineer

DATE: 10/2/98

QUALITY CONTROL REVIEW BY:

BY: 
Fol Aaron B. Gesin

TITLE: Program Manager

DATE: 10/2/98

***SIERRA CLUB, ET AL. V. MIDWEST GENERATION, LLC* PCB 13-15
RESPONSE TO MOTION FOR PARTIAL SUMMARY JUDGMENT**

EXHIBIT 18

ENSR PHASE I OF THE POWERTON STATION, 1998

Commonwealth Edison Company

Chicago, Illinois



Phase I Environmental
Site Assessment of the
ComEd Powerton
Generating Station
Manito Road
Pekin, Illinois.

ENSR Consulting – Engineering – Remediation

October 1998

Document Number 1801-023-500

Commonwealth Edison Company

Chicago, Illinois

Phase I Environmental
Site Assessment of the
ComEd Powerton
Generating Station
Manito Road
Pekin, Illinois.

ENSR Consulting – Engineering – Remediation

October 1998

Document Number 1801-023-500

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1.0 INTRODUCTION

1.1 Objectives and Scope of Work

ENSR was retained by Commonwealth Edison (ComEd) to perform a Phase I environmental site assessment of the Powerton Generating Station facility located on Manito Road in Pekin, Illinois.

The purpose of this Phase I ESA was to assess the environmental status of the subject site with regard to "recognized environmental conditions," which are defined by the ASTM (see E 1527-97) as, "the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property." According to the ASTM, "the term is not intended to include *de minimis* conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies."

The ESA was conducted in accordance with the Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process established by the ASTM (ASTM Designation E.1527-97).

1.2 Study Limitations

This report describes the results of ENSR's initial due diligence investigation to identify the presence of recognized environmental conditions affecting the subject facility and/or property. In the conduct of this due diligence investigation, ENSR has attempted to independently assess the presence of such problems within the limits of the established scope of work, as described in ENSR's July 31, 1998 proposal.

As with any due diligence evaluation, there is a certain degree of dependence upon oral information provided by facility or site representatives which is not readily verifiable through visual inspection or supported by any available written documentation. ENSR shall not be held responsible for conditions or consequences arising from relevant facts that were misconstrued, concealed, withheld, or not fully disclosed by facility or site representatives at the time this investigation was performed.

This report and all field data and notes were gathered and/or prepared by ENSR in accordance with the agreed upon scope of work and generally accepted engineering and scientific practice in effect at the time of ENSR's investigation of the site.

This report, including all supporting field data and notes (collectively referred to hereinafter as "information"), was prepared or collected by ENSR for the benefit of its Client, ComEd. ENSR's Client may release the information to other third parties, whom may use and rely upon the information to the same extent as ENSR's Client. However, any use of or reliance upon the information by a party other than specifically named above shall be solely at the risk of such third party and without legal recourse against ENSR, its parent or its subsidiaries and affiliates, or their respective employees, officers or directors, regardless of whether the action in which recovery of damages is sought is based upon contract, tort (including the sole, concurrent or other negligence and strict liability of ENSR), statute or otherwise. This information shall not be used or relied upon by a party that does not agree to be bound by the above statement.

1.3 Report Organization

ENSR reviewed a substantial volume of information regarding the ComEd facility during the course of this environmental due diligence investigation. This report represents our best efforts to synthesize the most salient information collected and reviewed. The report contains the following sections:

- *Chapter 2: Site Location and Description*, provides an overview of the subject property, including a description of the site history and a discussion of the various activities currently taking place.
- *Chapter 3: Environmental Document Review*, provides a description of ComEd's documents reviewed at each facility and at ComEd's corporate office. The document review included only materials that pertained to site contamination and not documents regarding environmental regulatory compliance.
- *Chapter 4: On-Site Contamination*, evaluates the subject property for the presence of a hazardous material or petroleum hydrocarbon contamination problem due to past or present activities taking place on the site. This analysis also considers land uses in the immediate vicinity that may adversely affect the subject property through off-site migration of contaminants from known releases.
- *Chapter 5: Summary of Findings*, provides our summary of findings regarding recognized environmental conditions.
- *Chapter 6: References*, identifies the various sources of information used in the preparation of this report, including persons interviewed, and documents and files evaluated.

2.0 SITE LOCATION AND DESCRIPTION

2.1 Site Location

ComEd's Powerton Station operates as a coal-fired, electric power generating facility located on Manito Road in Pekin, Illinois. The subject property is located on the north side of Manito Road, approximately one mile west of the intersection of Manito Road and Illinois Route 29.

The subject property is bordered to the north by the Illinois River, beyond which is wooded land; to the east is Chicago & Illinois Midland railroad tracks, beyond which is wooded land and Classico Cabinetry; to the south is Manito Road, beyond which is wooded land; and to the west is wooded land. The ComEd switchyard is located to the far west of the main generating building and was not included as a part of this environmental assessment. Figure 2-1 is a site location map.

2.2 Description of Property and Facility Layout

The subject property encompasses approximately 1,710 acres of land and is occupied by the main generating building, several ancillary buildings and structures, and a 1,440-acre cooling lake. Figure 2-2 is a site plan for the facility.

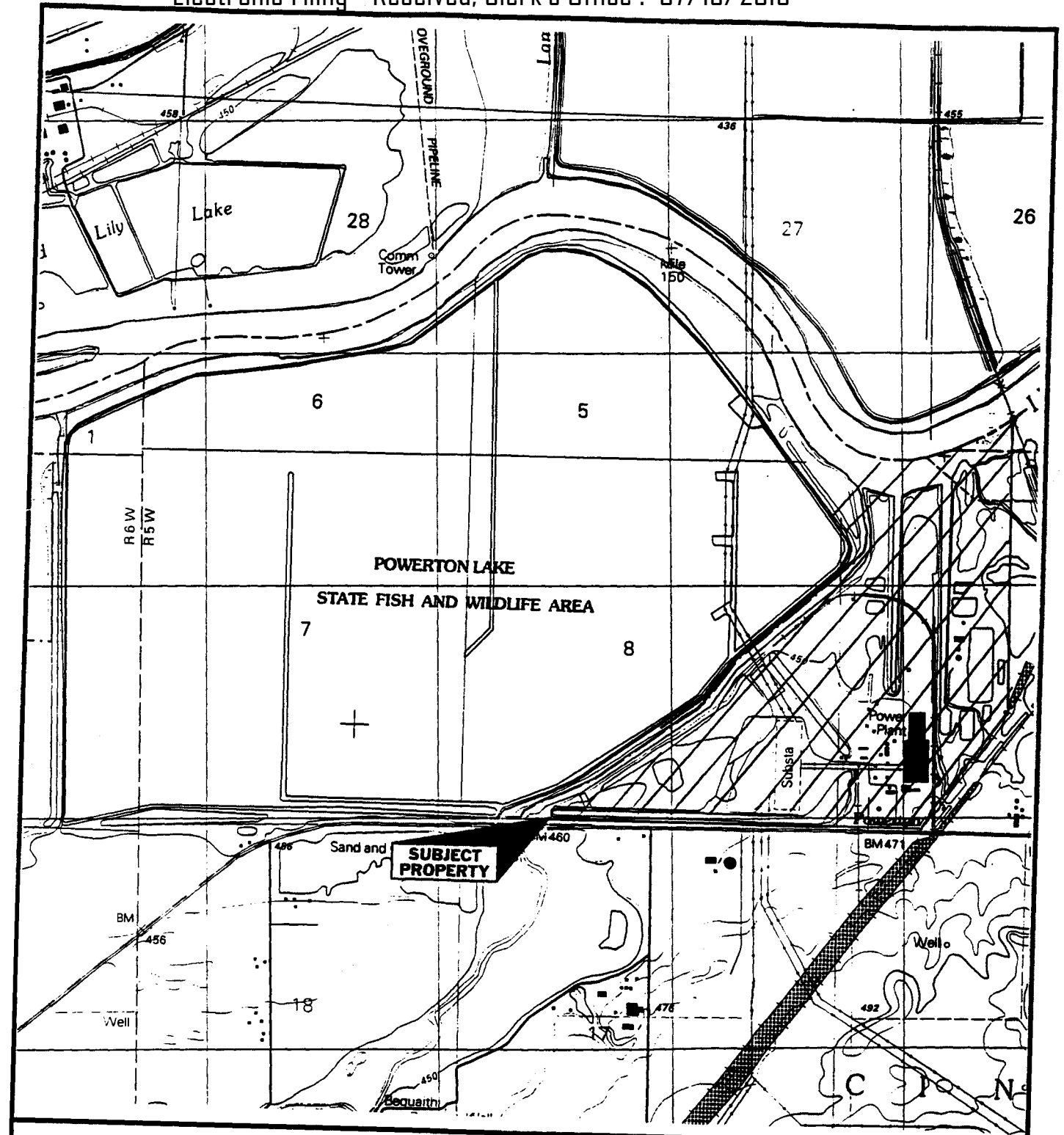
The main generating building, located on the southeastern portion of the subject property, contains the boiler room, turbine room, and administrative offices.

Two units are operational (Units 5 and 6). Four units have been retired (Units 1-4) are located in a separate building situated directly north of the main generating building. Units 1-4 and associated equipment were retired in the early 1970s.

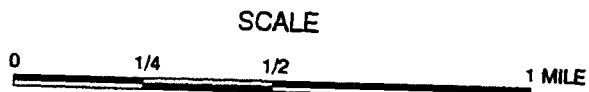
The supplemental demineralizer house is located west of the main generating building. The demineralizer house contains a series of cation and anion storage tanks which demineralize process water prior to it being pumped into the system. A 521,703-gallon demineralized water aboveground storage tank (AST) is located directly north of the building.

The oil storage building is located west of the supplemental demineralizer house. Approximately one hundred fifty, 55-gallon drums of various oils and lubricants were observed stored in the area.

A waste oil shed is located southeast of the new oil building. Approximately thirty, 55-gallon drums of used oil were observed stored in the area. A concrete trough inside the shed reportedly leads to an underground storage tank (UST), according to ComEd.



SOURCE: USGS 7½ Minute Topographic Quadrangle, Pekin, Illinois, dated 1996



ENSR
ENSR Consulting and Engineering

FIGURE 1
SITE LOCATION MAP
ComEd - Powerton Station
Manito Road
Pekin, Illinois

DRAWN: TEB	DATE: September 22, 1998	PROJECT NO.: 1801-023-500	REV: 1
FILE NO.:	CHECKED: TEB		

Dwg No: 07-16

LEGEND:

- PROPERTY BOUNDARY
- ⊕ MW-1 MONITORING WELL
- B-4 SOIL BORING
- ⊕ S-1 OBSERVATION SUMP
- - - BASIN BOUNDARY
- - - FENCE
- ++++ RAILROAD TRACK
- AREAS OF STAINING

Note:
• All dimensions and locations are approximate.

Source:
• ENSR field observations.

POWERTON GENERATING STATION
MANITO ROAD
PEKIN, ILLINOIS

COMMONWEALTH EDISON

September 1998

File No: 1801-023-500

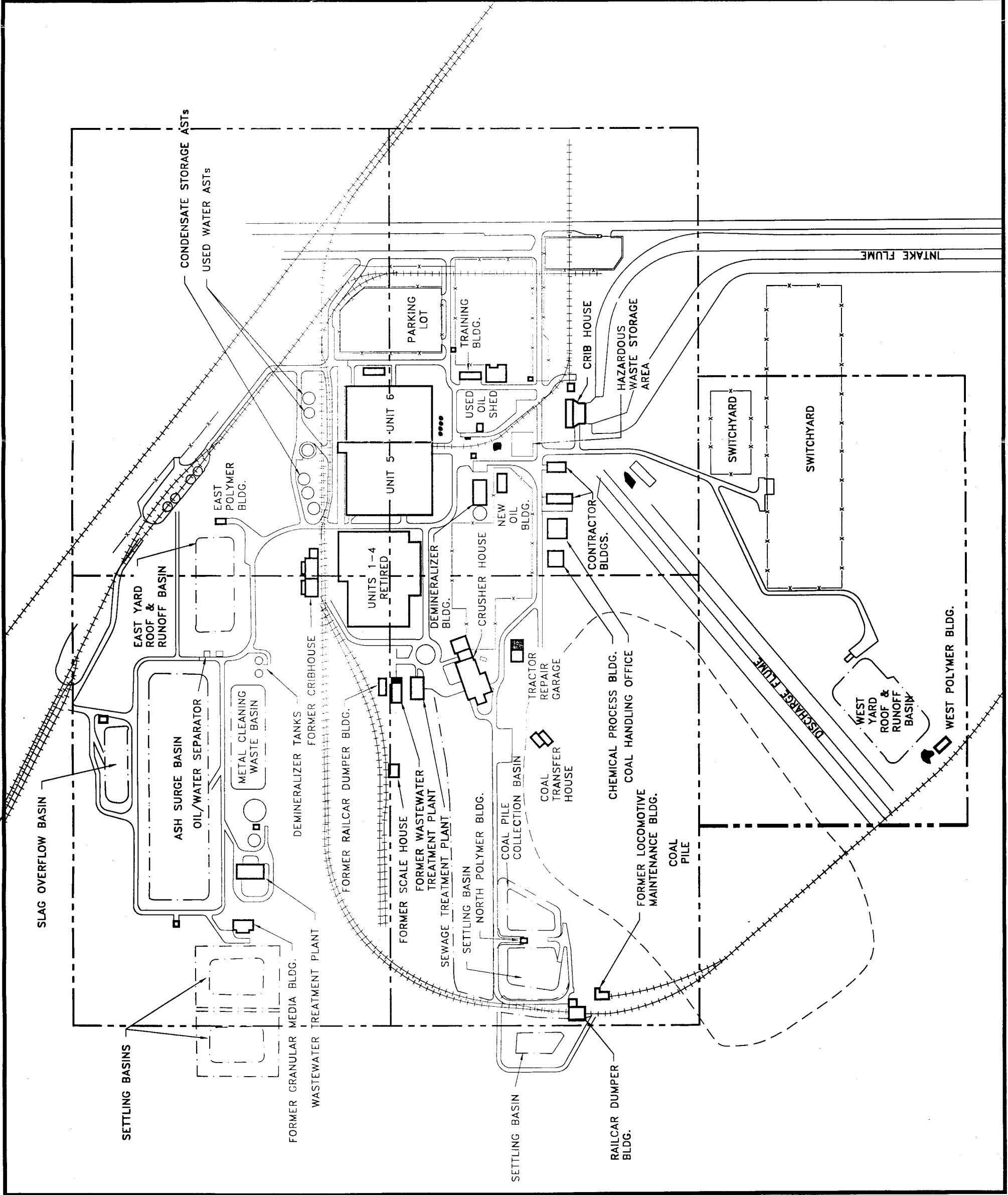
SITE PLAN



FIGURE 2

ENSR

NOT TO SCALE



An approximately 200 square foot, fenced-in hazardous waste storage area is located west of the waste oil shed. The area is divided into two storage areas; one for solvents and one for PCB contaminated oils. Two 55-gallon drums of waste solvent were observed stored in this area. No PCB storage was observed during ENSR's site inspection.

Contractor's mobile offices, storage sheds and shipping containers are located south of the waste oil storage shed area.

The cribhouse is located west of the contractor's office area. The cribhouse sits on the eastern terminal end of the intake flume from Powerton Lake. The building contains strainers which screen intake cooling water from the intake flume prior to being pumped into the plant. A 550-gallon diesel fuel AST is located on the north side of the building and a 550-gallon diesel fuel AST is located on the south side of the building. The tanks are used to store diesel fuel for the emergency fire pumps. A plastic 5,600-gallon polyacrylic acid tank is located on the south side of the cribhouse. The tank holds polyacrylic acid that is fed into the water system. Three 55-gallon drums of motor oil were observed stored in the building.

A former pump house building is located directly south of the cribhouse. An empty, abandoned 15,000-gallon sulfuric acid AST is located on the south side of the pump building. The tank was formerly used to hold sulfuric acid that was fed into the water system.

The west yard lift station is located northwest of the cribhouse. The station collects stormwater runoff from the west half of the property, and process water from floor drains located in the west half of the main generating building. Oil is skimmed off the top of the water and disposed by Safety Kleen on an as-needed basis. The water is then pumped into a concrete canal and channeled to the West Yard and Roof Runoff Basin.

Two long storage buildings are located northeast of the west yard lift station. The buildings are used to store contractor's equipment and materials.

The coal handling office building is located north of the storage buildings.

The west yard and roof runoff basin is located on the far western portion of the main subject property near the railroad track extension for the car dumper. The basin collects stormwater runoff from the west half of the plant and process wastewater from the west half of the plant.

The west polymer building is located south of the West Yard and Roof Runoff Basin. The building is used to store a dry cationic polymer (CP-7) which is added as a flocculent to the water settling basin.

The west yard oil/water separator is located north of the west yard basin. A 2,100-gallon waste oil AST, and an approximate 10,000-gallon water storage AST comprise the separator. Oil from the West Yard and Roof Runoff Basin is skimmed off and stored in the 2,100-gallon AST.

The chemical process building is located north of the coal handling office. The building contains one 7,500-gallon binder AST, one 7,500-gallon suppressant AST, and one 3,000-gallon surfactant AST. The chemicals are stored in the tanks and then transferred to a water wagon and sprayed on the coal pile as a dust suppressant.

The tractor repair garage is located northeast of the chemical process building. The garage is used to repair coal tractors and facility vehicles. A 20,000-gallon diesel AST is located on the west side of the garage. An oil storage room is located off the east side of the building. Approximately thirty, 55-gallon drums of various oils and lubricants were observed stored in this area.

The crusher house is located northeast of the tractor repair garage. Equipment within the crusher house mechanically crushes coal and conveys it to the boiler house. An out-of-service surfactant AST is located on the east side of the crusher house. The tank was formerly used to store dust suppressant for coal dust.

The coal transfer house is located west of the crusher house. The building houses equipment which transfers coal from the coal pile conveyor system to the crusher house conveyor system.

The coal pile is located directly west of the crusher house. The active coal pile has a capacity to store 32,000 tons of coal, and the inactive coal pile has the capacity to store 1,400,000 tons of coal.

An unlined coal pile collection basin is located in the northeastern portion of the coal pile. The basin collects stormwater runoff from the coal pile and channels it to one of two settling basins located north of the coal pile collection basin. The primary (south) basin is lined and the secondary (north) basin is unlined.

The north polymer building is located between the south settling basin and coal pile collection basin. The building is used to store a dry cationic polymer (CP-7) which is added as a flocculent to the water in the settling basin.

A railcar dumper building is located between the north and south settling basins. The building contains a railcar dumper that mechanically rotates railcars 180° to unload their coal into a subsurface hopper. Two empty, obsolete dust suppressant ASTs are located on the north side of the building. Two propane ASTs are located west of the building and an empty calcium chlorite AST is located on the south side of the building.

A former oil/water separator building is located north of the railcar dumper building. The building formerly housed an oil/water separator used in conjunction with coal pile runoff. According to Mr. Mark Kelly, Chemistry Staff Supervisor, the system has been disconnected for several years.

A locomotive repair building is located west of the railcar dumper building. The building was formerly used to repair locomotives and is now primarily used for parts and material storage.

The conveyor drive house is located west of the south settling basin. The building houses the coal conveyor drive system.

A former slag and dumping area is located directly east of the coal pile collection basin. The area is presently overgrown with vegetation.

The former coal pile storage area is located in an area north of the former slag and dumping area. The area is presently overgrown with vegetation.

The sewage treatment plant is located east of the crusher building. The plant treats sanitary sewerage generated from the plant. The effluent from the plant is discharged to a canal that discharges into the Illinois River.

The former wastewater treatment building and former railcar dumper building are located south of the sewage treatment plant. The buildings were utilized in association with Units 1-4 when they were active. The buildings were in a severely dilapidated condition at the time of ENSR's site inspection.

The former water intake channel is situated in a north/south direction and runs from the former cribhouse building, located east of the former generating building, to the Illinois River, located approximately ½-mile to the north. The former cribhouse was in a severely dilapidated condition at the time of ENSR's site inspection.

The former granular media filter building is located east of the former water intake channel on the east side of the property. The building housed several sand filter tanks to filter water prior to it being discharged into the Illinois River. The filtration system is no longer used.

Two settling basins are located north of the former granular media filter building. The lined basin located immediately north of the building is used to hold ash sluice water prior to it being discharged to the Illinois River. The unlined basin located north of the service water basin is no longer used in the wastewater treatment process. According to Mr. Kelly, dredged material from intake flume has been placed in this basin in the past.

The wastewater treatment building is located south of the granular media filter building. This building is used as a mechanical maintenance building and contains controls and pumps associated with wastewater treatment. Two diatomaceous earth silos, which are no longer used, and one lime storage silo are located on the north side of the building.

A lined metal cleaning waste equalization basin is located south of the wastewater treatment plant. An anionic polymer (AP-11) is added to the water clarifier prior to water being channeled to the ash basin. The polymer acts as a flocculent to help settle out metals. Lime is also added for pH adjustment.

The ash basin building is located south of the metal cleaning waste equalization basin. An out-of-service 10,000-gallon sulfuric acid AST is located on the north side of the building and two 20,000-gallon regenerated waste rinse water ASTs are located west of the building. The tanks store regenerated waste rinse water that is discharged into the ash surge basin.

The east yard oil/water separator is located east of the demineralization ASTs. A 2,100-gallon waste oil AST and an approximate 10,000-gallon water storage AST comprise the separator. Oil from the East Yard and Roof Runoff Basin is skimmed off and stored in the 2,100-gallon AST.

The East Yard and Roof Runoff Basin is located south of the east yard oil/water separator. The basin collects stormwater and process water from the east half of the plant and from the demineralization tanks.

The east yard polymer building is located between the east yard basin and the dewatering bins. The building is used to store a dry cationic polymer (CP-7) which is added as a flocculent to the water in the settling basin.

A synthetically lined ash surge basin is located east of the wastewater treatment plant. The basin collects regenerated waste rinse water and other east yard process wastewater. A lined slag overflow basin is located east of the ash basin. The basin was dry at the time of ENSR's site inspection and is used store fly ash and slag.

Three 500,000-gallon condensate ASTs are located east of the main generating building. The tanks store condensate water from the demineralization process.

A former scrubber system is located east of the condensate storage tanks. The scrubber system was abandoned in the late 1970s.

Four dewatering bins are located east of the former scrubber system. Bottom ash is placed in the silos and allowed to drain prior to it being transported off site by railcar.

A well water AST and a boiler cleaning waste AST are located near the southeast corner of the main generating building.

2.3 Topography, Hydrology, and Geology

According to the USGS Pekin, Illinois Quadrangle 7.5-Minute Series Topographic map, the topographic elevation of the main building is approximately 580 feet above mean sea level.

According to the USDA SCS Soil Survey for Tazwell County, Illinois, the soils on the subject property consist of mostly built-up areas and deep, nearly level, poorly drained soils that have a silty and clayey subsoil; formed in glacial till. The estimated depth to shallow groundwater is between three and five feet below grade surface. The regional groundwater is expected to flow toward the Illinois River that is located adjacent to the west of the subject property. Bedrock at the site is anticipated to be ranging in depth from 5 to 10 feet below grade.

2.4 Site History

Historical information for the subject site is based on interviews with site personnel, a review of, aerial photographs, tax assessors records, current and historic plat maps, and a topographic quadrangle map. Sanborn Fire Insurance maps and city directories were not available for the subject property area. Building permits were unavailable for review during ENSR's site investigation.

According to Mr. John Henderson, Compliance Specialist, the facility began operation in the late 1920s with Units 1-4. Those units were retired in the early 1970s, and an entirely new generating station (Units 5 and 6), and several outbuildings were constructed in the early 1970s adjacent to the original station. Mr. Henderson indicated that Unit 5 came on-line in 1971 and Unit 6 came on-line in 1973.

Aerial photographs dated 1993, 1988, 1976 showed the subject property occupied by a coal-fired electrical generating plant. Aerial photographs dated 1969, 1957, and 1939 showed the subject property occupied by the original electrical generating plant (Units 1-4). No evidence of landfilling was observed in the photographs reviewed for this assessment.

Assessment records indicated that several buildings were originally constructed on site in 1928 and 1930, which were associated with the original generating plant (Units 1-4). Several buildings were subsequently built in the early 1970s, which are associated with the current generating plant (Units 5-6).

A 1993 plat showed the subject property owned by ComEd. A plat map dated 1873 showed the subject property as farmland owned by C.R. Cummings and J.C. Waldo.

A USGS Topographic map dated 1960, photorevised 1967 and 1979 showed the subject property as it currently exists.

2.5 Adjacent Site History

Historical information for the subject site vicinity is based on a review of aerial photographs, current and historic plat maps, and a topographic quadrangle map.

The subject property is bordered to the north by the Illinois River, beyond which is wooded land. To the east is the Chicago & Illinois Midland Railroad, beyond which is wooded land and Classico Cabinetry; to the south is Manito Road, beyond which is wooded land; and to the west is wooded land.

Aerial photographs dated 1993 and 1988 showed the adjacent properties as they currently exist. Aerial photographs dated 1976, 1969, 1957 1939 showed the adjacent properties as they currently exist, with the exception of the Classico Cabinets building which was not shown in the photographs.

A plat map dated 1993 listed the adjacent properties as they currently exist. An 1873 plat map listed the adjacent properties as farmland.

A USGS Topographic map dated 1960, photorevised 1967 and 1979, showed the adjacent properties as they currently exist.

2.6 Description of Operations

The subject facility is operated as a coal-fired electrical power generating station. Additional operations include wastewater treatment, tractor and other plant maintenance operations. Electrical power is transmitted from the plant to the Chicago metropolitan area through a series of overhead transmission power lines.

The generating station receives coal by railcar. Coal is transferred from the railcar in the railcar dumper building. The coal is fed into a hopper and then conveyed either to the coal pile or to the crusher house. After crushing, the coal is conveyed directly into the plant boilers.

The facility's water sources are obtained from two resources. Well water is used to supply potable water, boiler feed water, and demineralizer water. Lake water is used to supply condenser cooling water, fire protection water, and heat exchanger water.

Condenser cooling water is drawn from and returned to Powerton Lake at a rate of approximately 497 million gallons per day (MGD). Raw boiler make-up water is obtained from on-site deep wells. Demineralized water is stored in on-site ASTs. Water treatment chemicals, including ammonia, hydrazine, and phosphates are added into the boiler make-up water to soften the water and inhibit corrosion and scaling. No chemicals are added to condenser cooling water.

The burning of coal produces waste fly ash, bottom ash, and economizer slag. Fly ash is collected in the precipitators and transported to storage silos. Bottom ash and economizer slag are collected in a slurry and piped to dewatering bins located in the northeast corner of the subject property. After dewatering, bottom ash is transported off site by railcar.

Wastewater from facility operations is treated on-site prior to being discharged into the Illinois River under the conditions of a NPDES permit. The NPDES permit covers discharges from the property including storm water runoff, cooling water, and any other process wastewater.

2.7 Utilities

Currently, the Powerton generating station obtains potable water from five deep wells that are located on the subject property. Sanitary wastewater is treated at an on-site sewage treatment plant prior to being discharged into the Illinois River. Most electrical power is provided by the station itself. A 138 KV feeder from CILCO provides power to coal handling.

3.0 ENVIRONMENTAL DOCUMENT REVIEW

3.1 Introduction

This environmental document review is based upon a review of information provided by ComEd coupled with observations made by Tim Bulthaup and Jeffrey Menter of ENSR during the site visit, which took place on August 27 and 28, 1998. The information provided by ComEd included documents relative to the various regulatory areas described below. Also, certain computerized U.S. Environmental Protection Agency (USEPA) enforcement databases were screened.

3.2 Air Quality

Although no formal emissions inventory was prepared as part of this Phase I environmental site assessment, a preliminary review of the facility indicates air permits are required for the facility. The Illinois Environmental Protection Agency (IEPA) oversees the state's air permitting compliance programs. ENSR's review of air permits for the Powerton generating station indicated the station was currently operating under existing permits. According to Ms. Lorinda Lamb of ComEd, the facility has filed an application under the Title V permit program, and is currently awaiting its approval.

3.3 Water Resources

The facility is permitted to discharge process wastewater under NPDES Permit No. IL0002232 which was issued on January 27, 1995 and expires on January 1, 2000. The permit allows for the discharge of ash treatment system effluent; metal cleaning waste treatment system effluent; cooling pond emergency overflow; coal pile runoff treatment system effluent; west yard runoff treatment system effluent; east yard runoff treatment system effluent; RBC sewage treatment plant effluent; and condensate storage tank overflow.

Stormwater runoff from process areas of the station is treated in the existing wastewater treatment facility. Per the stations NPDES permit, this constitutes Best Available Technology (BAT) for treatment and discharge of storm water runoff, therefore, Will County station is not required to maintain a Storm Water Pollution Prevention Plan (SWPPP).

3.4 Oil and Hazardous Materials Storage and Use

3.4.1 Material Storage and Use

Several types of fuels, oils, and hazardous materials are stored and used on site and include: diesel fuel, gasoline, lubricating oil, sulfuric acid, polyacrylic acid, sodium hypochlorite, sodium hydroxide, liquid nitrogen, hydrogen gas, aqueous hydrazine, ethylene glycol, coal pile binder, coal, slag, and scrap metal. These materials are stored in underground and aboveground tanks, drums, and various other containers located both indoors and outdoors.

The facility has prepared contingency plans, including a Spill Prevention, Control, and Countermeasures Plan (SPCC) to prevent the discharge of oil from the aforementioned containers, and to mitigate any adverse effects from such a spill.

3.4.2 Principal Waste Streams

Waste oil is placed on the coal pile and burned in the station boilers per the facility's air operating permit. According to ComEd records, the facility has been a small quantity generator for at least the past three years. The facility's generator ID number is ILD 1798010002.

Several parts washing basins are located throughout the facility. The basins use a high flash point (> 140 °) non-hazardous solvent as a degreaser. No staining was observed beneath the basins. This solvent is disposed by Great Northern Processing of East Huntington, IN. General refuse is disposed in a local landfill operated by Waste Management, Inc. of Chicago, IL. Fly ash is disposed in a landfill operated by the Freeman Coal Company, Canton, IL. Bottom ash is sold commercially to Reed Mineral of Kansas City, MO.

4.0 ON-SITE CONTAMINATION POTENTIAL

4.1 Introduction

Based on ENSR's inspection and review of various documents/files, there is a potential for on-site contamination at the Powerton generating station in Pekin, Illinois. Known and suspect problem areas are discussed below.

4.2 Above and Underground Storage Tanks

4.2.1 Inventory of Underground Tanks

One 1,500-gallon gasoline UST is located on the east side of the demineralizer building. According to the facility's Notification for Underground storage Tanks, the tank is current with leak detection and corrosion protection requirements.

One 2,000-gallon waste oil UST is located on the west side of the waste oil storage shed. The tank is scheduled to be removed in November 1998.

Two 1,000-gallon diesel USTs are located on the west side of the main generating building. The Unit 5 UST is scheduled to be removed in November 1998. The Unit 6 UST is scheduled to be abandoned-in-place in November 1998.

4.2.2 Inventory of Aboveground Storage Tanks

The following table provides a list of aboveground storage tanks identified at the Powerton station.

TABLE 4-1
Aboveground Storage Tanks
Powerton Station

TANK TYPE	TANK LOCATION	ESTIMATED CAPACITY (gallons)
Sulfuric Acid	Demineralizer Building	10,000
Sulfuric Acid	East side of main generating plant	15,000
Sodium Hydroxide	East side of main generating plant	12,000
Sodium Hydroxide	Demineralizer building	10,000
Sodium Hypochlorite	Unit 5 and Unit 6 turbine rooms	18,000
Polyacrylic Acid	South side of crib house	5,600

TANK TYPE	TANK LOCATION	ESTIMATED CAPACITY (gallons)
Liquid Nitrogen	South of hazardous waste storage area	3,089
Binder Tank	Chemical process building	7,500
Suppressant Tank	Chemical process building	7,500
Surfactant	Chemical process building	3,000
Carbon Dioxide	Unit 5 and Unit 6 boiler rooms	2 @ 20,000 lbs.
Carbon Dioxide	West yard west of contractor's mobile office area	100,000 lbs.
Aluminum Sulfate	Wastewater treatment plant	10,000
Hydrogen Gas	Near liquid hydrogen tank in west yard	130,000 ft ³
Calcium Hydroxide	North side of wastewater treatment plant	90,000 lbs.
Calcium chlorite	South side of railcar dumper building	11,940
Aluminum Hydroxide	Unit 5 turbine room	6,000
Diesel fuel	West side of tractor repair garage	20,000
Dirty turbine oil tank	Units 5	12,000
Clean turbine oil tank	Units 5	12,000
Turbine oil reservoir	Unit 5	10,000
Turbine oil reservoir	Unit 6	10,000
EHC system oil storage tank	Unit 5	650
EHC system oil storage tank	Unit 6	650
East yard waste oil tank	East yard	7,500
East yard oil separator tank	East yard	2,100
West yard waste oil tank	West yard	7,500
West yard oil separator tank	West yard	2,100
Turbine room waste oil tank	Unit 5 & 6	7,500
Unit 5 diesel generator fuel oil tank	Unit 5	1,000
Unit 6 diesel generator fuel oil tank	Unit 6	1,000
Unit 5 emergency fire pump fuel storage tank	North side of crib house	550
Unit 6 emergency fire pump fuel storage tank	South side of crib house	550
Unit 5 oil storage room tanks	Unit 5 oil storage room	12 @ 62 each
Coal pile waste oil tank		500
Oil separator tank	Unit 5 345 kV switchyard	16,778
Condenser Pit oil separator tank	Unit 5	20,651
Oil separator tank 2	Ash handling area	21,789
Condenser Pit oil separator tank	Unit 6	20,651
Oil separator tank	Unit 6 345 kV switchyard	16,778

TANK TYPE	TANK LOCATION	ESTIMATED CAPACITY (gallons)
Turbine oil reservoir	Unit 1	3,500
Turbine oil reservoir	Unit 2	3,500
Turbine oil reservoir	Unit 3	4,500
Turbine oil reservoir	Unit 4	4,500
Generator reactor	Old generating building	424
Dirty oil tank	Units 1-4	4,000
Altered oil tank	Units 1-4	6,000
New turbine oil tank	Units 1-4	11,000
Demineralized Water	West side of main generating building	521,703
Demineralized Water	Outside northeast corner of main generating building	3 @ 500,000
Well Water	Outside southeast corner of main generating building	500,000
Wastewater tank	Outside southeast corner of main generating building	335,000

4.3 Polychlorinated Biphenyl's (PCBs)

There are numerous liquid-cooled transformers and capacitors on the site. According to Mr. Dave Rubner, ComEd PCB Specialist, the fluid contained within many of the liquid-cooled electrical equipment has been changed with Non-PCB electrolytic fluids. Since the completion of the fluid exchange process, a majority of the equipment was tested for PCB-content, and shown to contain less than 50 ppm PCB. Even though the PCB fluids were removed, small concentrations of PCBs still remained within the transformers. When the non-PCB fluids were introduced into the transformers, the PCBs slowly leached back into the new fluids. The leaching process resulted in PCB contaminated fluid. The following table lists the known PCB-containing equipment. This equipment is scheduled to be retrofilled in the spring 1999 station overhaul.

**Table 4-2
PCB Electrical Equipment
Powerton Station**

EQUIPMENT	PCB CONCENTRATION (ppm)
Top of 51 precipitator, I.D. # 5114	854
Top of 52 precipitator, I.D. # 5231	775
Top of 61 precipitator, I.D. # 6124	740
Top of 61 precipitator, I.D. # 6125	927
Top of 61 precipitator, I.D. # 6131	9120
Top of 61 precipitator, I.D. # 6145	571
Top of 61 aux precipitator, I.D. # 6124A	839
Top of 61 aux precipitator, I.D. # 6143A	810
Top of 62 precipitator, I.D. # 6214	1011
Top of 62 precipitator, I.D. # 6215	757
Top of 62 precipitator, I.D. # 6224	833
Top of 62 precipitator, I.D. # 6225	820
Top of 62 precipitator, I.D. # 6231	6780
Top of 62 precipitator, I.D. # 6234	815
Top of 62 precipitator, I.D. # 6235	1026
Top of 62 precipitator, I.D. # 6244	7180
Top of 62 precipitator, I.D. # 6245	651

Evidence of minor staining or leaking was observed on or around many of the pad-mounted electrical transformers.

4.4 Asbestos-Containing Materials

ENSR representatives who are State of Illinois Department of Public Health licensed Asbestos Building Inspectors performed a visual suspect asbestos-containing material (ACM) inspection of the main building and outlying structures as part of this investigation, however, bulk sampling was not performed. The types and quantities of suspect materials identified during the meticulous walk-through of each on-site structure at the Powerton Station included pipe and pipe fitting insulation, boiler and equipment insulation, tank insulation, vinyl floor tile, suspended ceiling tile, duct insulation and cement pilings. Although the removal of all ACM is not required at this time, Table 4-3 presents the types and estimated quantities of suspect ACM, as well as estimated removal costs for Unit 5. Unit 6 is reported to be ACM free.

TABLE 4-3
Suspect Asbestos-containing Materials
Powerton Station

TYPE OF MATERIAL	ESTIMATED QUANTITY	REMOVAL COST ESTIMATES
Pipe & Pipe Fitting Insulation	111,700 Linear Feet	\$2,270,000
Boiler & Equipment Insulation	100,000 Square Feet	\$2,500,000
Tank & Pump Insulation	5,500 Square Feet	\$137,500
Vinyl Floor Tile	7,200 Square Feet	\$36,000
Suspended Ceiling Tile	5,200 Square Feet	\$52,000
Duct Insulation	25 Square Feet	\$625
Cement pilings	1,500 Square Feet	\$15,000

The total suspect ACM removal cost is estimated at approximately \$5,000,000. The cost estimate is based on ACM location and quantity information provided by ComEd, ENSR's visual inspection of accessible areas of the facility, and generally accepted ACM removal unit costs. The cost estimate does not include project consulting or reinsulation fees. The estimated removal cost provided above is subject to change as a result of the potential variability in material quantities and locations, contractor fees, disposal fees, and project scheduling. Based on the aforementioned variables, the estimated removal cost may fluctuate as much as 50%.

According to a demolition consulting company, the whole area of the Units 1-4 building is contaminated with friable asbestos, the majority of which, is concentrated in the boiler room. Floor deposition has been attributed to the building being exposed to the elements via portions of missing roof. Estimates to remove and dispose of this material range from \$1.5 to 2.5 million.

4.5 Areas of Staining

The following areas of staining were observed on the subject property during ENSR's site inspection:

- The new oil storage building is located southwest of the demineralizer building. Approximately one hundred fifty, 55-gallon drums of various oils and lubricants were observed stored in the area. Staining was observed on the concrete floor beneath the drums.
- A waste oil shed is located southeast of the new oil building. Approximately thirty, 55-gallon drums of used oil were observed stored in the area. An approximate ten square foot area of staining was observed on the concrete pad beneath the drums.

- The west yard lift station is located northwest of the cribhouse. The station collects stormwater runoff from the west yard, and process water from floor drains located in the west half of the main generating building. Staining was observed within the concrete basin, and an approximate eight square foot area of staining was observed on the unpaved ground surface along the north side of the lift station.
- The west yard oil/water separator is located north of the west polymer building. A 2,100-gallon waste oil AST and an approximate 10,000-gallon water storage AST make up the system. Oil from the west yard and roof runoff basin is skimmed off and stored in the 2,100-gallon AST. Minor staining was observed within the concrete secondary containment basin housing the waste oil storage tank.
- The tractor repair garage is located northeast of the chemical process building. The garage is used to repair coal tractors and facility vehicles. A 20,000-gallon diesel AST is located on the west side of the garage. An oil storage room is located off the east side of the building. Approximately thirty, 55-gallon drums of various oils and lubricants were observed stored in this area. An approximate ten square foot area of staining was observed on the concrete floor beneath the drums.
- A waste oil room is located in the southwest corner of the former wastewater treatment building, which contained three 55-gallon drums of oil. An approximate ten square foot area of staining was observed on the concrete floor beneath the drums.
- The east yard oil/water separator is located east of the demineralization ASTs. A 2,100-gallon waste oil AST and an approximate 10,000-gallon water storage AST make up the system. Oil from the east yard and roof runoff basin is skimmed off and stored in the 2,100-gallon AST. Minor staining was observed within the concrete secondary containment basin housing the waste oil storage tank.
- Minor oil staining was observed on the gravel surface beneath several transformers in the west transformer yard.

4.6 Former Aboveground and Underground Storage Tanks

Based on a review of facility documentation and municipal files, the following former storage tanks were listed as being located at the subject property:

- A 500,000-gallon ignition fuel oil AST was removed from the south side of the subject property in the fall of 1997.
- A 20,000-gallon diesel fuel UST was removed December 15, 1992 from the west side of the former locomotive maintenance building. ComEd records indicate that no incident number was assigned resulting from any release.
- Additionally, four boiler ignition USTs have been retired-in-place; and one 400-gallon gas UST and one 500-gallon solvent UST have been removed. ComEd records indicate that no incident number was assigned resulting from any release.

4.7 Spill History

Based on a review of Com Ed's spills file, the following spills have been reported at the subject property:

- On January 4, 1990, under IEMA No. 90-0038, an estimated 40 gallons of gasoline was reported spilled on to the ground east of the cribhouse. The log entry indicates the area of contamination was excavated and properly disposed.
- On August 16, 1990, under IEMA No. 90-2354, an estimated 50-60 gallons was reported spilled as an accumulation of small spills on to the ground from unloading of the 400,000-gallon main ignition oil AST. Log entries indicate the area of contamination was excavated and properly disposed.
- On June 24, 1991, under IEMA No. 91-17332, an estimated 25-50 gallons of fuel oil was reported entering the station through the canal from the Illinois River to the cooling pond. This spill was from a barge located in the river. The log entry indicates that booms were placed to collect the oil. The station subsequently performed the cleanup.
- On April 14, 1994, under IEMA No, 94-0795, an estimated 18,000 gallons of non-PCB mineral oil was released from a cracked transformer onto a rock area which drained the spill area and permitted recovery at the shut-down lift station. Containment and recovery questions were asked by USEPA on April 14, 1998 via phone and an agency representative said he could "closeout report".

4.8 Environmental Database Report

ENSR reviewed a variety of federal and state governmental databases using Environmental Data Resources (EDR) of Southport, Connecticut. The following federal and state

contamination-related databases were searched for the subject property and the area surrounding the subject property; the various search distances used are also noted:

TABLE 4-4
Databases Searched and Radii

Database Acronym	Description	Search Distance ¹ (miles)
Federal Databases		
NPL ²	Existing and proposed Superfund sites on the National Priorities List	1.0
CERCLIS ²	Abandoned, uncontrolled or inactive hazardous waste sites reported to the U.S. EPA, which have been or are scheduled to be investigated by the U.S. EPA for potential nomination to the NPL.	0.5
RCRIS-TSD ²	Reported sites that treat, store and/or dispose of hazardous waste and subject to the federal RCRA regulations.	0.5
RCRIS-LQG/SQG ²	Reported large-quantity generators and small quantity generators of hazardous waste.	0.25
ERNS ²	Sites reporting spills to the U.S. EPA and/or the U.S. Coast Guard under various federal regulations	target property
FINDS	Facility Index System indicates the presence of a site on another federal database.	target property
PADS	PCB Activity Database System identifies generators, transporters, commercial storers and/or brokers and disposers of PCBs who are required and have notified the EPA of such activities.	target property
RAATS	RCRA Administrative Tracking System contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA.	target property
TRIS	Toxic Chemical Release Inventory System identified facilities who have reported releases of listed toxic chemicals to the air, water, and land in reportable quantities under SARA Title III Section 313.	target property
TSCA	Toxic Substances Control Act identified manufacturers and importers of chemical substances by plant site in 1986. No updates of the list have been made by EPA.	target property
HMIRS	Hazardous Materials Information Reporting System contains hazardous material spill incidents reported to the Federal DOT.	target property

**TABLE 4-4
Databases Searched and Radii**

Database Acronym	Description	Search Distance ¹ (miles)
NPL Liens	List of liens placed against real property in order for the EPA to recover remedial action expenditures or when the property owner receives notification of potential liability.	target property
CORRACTS	Corrective Action Report identifies hazardous waste handlers with RCRA corrective action activity.	1.0
ROD	Records of Decision mandating a permanent remedy for a Superfund Site	1.0
MLTS	Material Licensing Tracking System, maintained by the Nuclear Regulatory Commission, contains a list of sites that possess or use radioactive materials and are subject to NRC licensing.	target property
Delisted NPL	Sites removed from the NPL	target property
Coal Gas	Former manufactured coal gas sites	1.0
Illinois Databases		
SHWS ²	State hazardous waste sites	1.0
UST ²	Sites which have reported underground storage tanks.	0.5
LUST ²	Sites which have reported leaking underground storage tanks.	0.5
SWF/LF ²	List of permitted solid waste disposal facilities	0.5
<p>1 The radial search distances used equal or exceed those recommended by ASTM for assessing the environmental condition of commercial real estate.</p> <p>2 Databases which are required to be searched by ASTM.</p>		

4.8.1 Subject Property

According to the EDR database report, the subject property is listed on the UST, FINDS, RCRIS-LQG and ERNS databases. The facility likely appeared on the ERNS database as a result of one of their reported spills. However, since additional information regarding final disposition of the spills was not provided to ENSR, the exact determination of why the facility is listed on the ERNS database could not be made. Additional information regarding the facility was not contained within the EDR report.

4.8.2 Surrounding Land Uses

According to the EDR database report, no sites were identified within the specified search radius.

5.0 SUMMARY OF FINDINGS

ENSR performed a Phase I Environmental Assessment in conformance with the scope and limitations of the ASTM Practice E 1527-97 of ComEd's Powerton Generating Station, located on Manito Road in Pekin, Illinois. Any exceptions to, or deletions from this practice are described in this report. This practice has revealed the following evidence of recognized environmental conditions in connection with the property:

- Staining: Several areas of staining were observed throughout the subject property (see Section 4.5 for a detailed listing of stained areas). Staining was primarily observed around drums, ASTs, and transformers.
- Suspect ACM: Suspect asbestos-containing pipe insulation, tank insulation, boiler insulation (Units 1-4), duct insulation, cement pilings, ceiling tile and floor tile were observed throughout the site buildings. Unit 6 is reported to be ACM free.
- PCBs: Seventeen electrical transformers are known to contain PCBs. According to Mr. Rubner, these transformers contain fluid that is greater than 500 ppm PCB. These are scheduled to be retrofilled during the spring 1999 station overhaul.
- Former USTs: A total of eight USTs have been either removed or retired-in-place. According to ComEd records, there were no apparent releases associated with these tanks.

Current USTs: There are four USTs currently located on the subject property. One of the tanks meets 1998 requirements, two of the tanks are scheduled to be removed in November, 1998, and one tank is scheduled to be abandoned-in-place in November 1998. ComEd records indicate no apparent leaks are associated with these tanks.

- Spill History: Four reported spills have occurred on the subject property (see section 4.7 for a detailed listing of spills).
- Dumping: Two areas of dumping were observed on the subject property. A former slag and dumping area is located directly east of the coal pile collection basin. The area is presently overgrown with vegetation. The former coal pile storage area is located north of the former slag and dumping area. The area is presently overgrown with vegetation. It is unknown whether slag and/or coal management practices in these areas have had an adverse impact on soil and/or groundwater quality.

- Unlined Basins: Two unlined wastewater basins are located on the subject property. A lined coal pile collection basin is located in the far northern portion of the coal pile. The basin collects stormwater runoff from the coal pile and channels it to one of two settling basins located north of the coal pile collection basin. The primary (south) basin is lined and the secondary (north) basin is unlined. Two settling basins are located north of the former granular media filter building. The lined basin located immediately north of the building is used to hold process water prior to it being discharged to the Illinois River. The unlined basin located north of the service water basin is no longer used in the wastewater treatment process. According to Mr. Kelly, dredged material from intake flume has been placed in this basin in the past. It is presently unknown if past disposal operations have impacted the areas surrounding these basins.
- Switchyards: Three switchyards are located on the subject property. The 345kV switchyard has been certified to be PCB free. One 138 kV switchyard contains feed lines from CILCO and the other 138 kV switchyard has been abandoned and the equipment has been removed. Additionally, the two 138 kV switchyards are assumed to have been operational since the plant was constructed in the late 1920s, it is unknown whether or not some equipment has leaked fluid over that time period which may have impacted the subject property.

6.0 REFERENCES

6.1 Persons Interviewed or Contacted

Mr. John Henderson, Compliance Specialist, ComEd Powerton Generating Station, Manito Road, Pekin, Illinois. (309) 477-5289.

Mr. Mark Kelly, Chemistry Lab Supervisor, ComEd Powerton Generating Station, Manito Road, Pekin, Illinois. (309) 477-5289.

Ms. Lorinda Lamb, ComEd Company, One First National Plaza, 10 South Dearborn, 35 FNW, Chicago, Illinois. (312) 394-4438.

Mr. Dave Rubner, ComEd PCB Specialist, One First National Plaza, 10 South Dearborn, 35 FNW, Chicago, Illinois. (312) 394-4461.

6.2 Documents and Reports Reviewed

Aerial Photographs of subject property and surrounding properties dated 1998, 1976, 1969, 1957, and 1939 reviewed at the Tazwell County Natural Resource Conservation Service, Pekin, Illinois.

EDR Radius Map with Geotrack, Powerton Station, Manito Road, Pekin, Illinois, dated August 18, 1998.

U.S.G.S. 7.5-minute Topographical Quadrangle Map, Pekin, Illinois, dated 1966, photorevised 1967 and 1979.

Plat maps for Tazwell County, dated 1993 and 1873, reviewed at the Pekin Public Library, Pekin, Illinois.

Certificate of Survey Map, ComEd Powerton Station, dated 1996, provided by ComEd.

SPCC Plan, ComEd Powerton Station, dated November 11, 1996, provided by ComEd.

Industrial Waste Generation and Disposal Reports for 1998, ComEd Powerton station, provided by ComEd.

Tier II Inventory Forms for 1997, dated February 27, 1998, ComEd Powerton station, provided by ComEd.

NPDES Permit No. IL0002232 ComEd Powerton station, provided by ComEd.

Spill Log Review, 1986-1998, ComEd Powerton station, provided by ComEd.

ComEd document review relating to Hazardous Waste, Acid Rain Permits, Wetlands, Air Operating Permits, NPDES Permits, Tier II Reports, and Storm water, performed at One First National Plaza, 10 South Dearborn, 35 FNW, Chicago, Illinois.

7.0 SIGNATURES AND QUALITY CONTROL REVIEW

BY: *Timothy E. Bulthaup*
Timothy E. Bulthaup, M.S., CHMM

TITLE: Project Specialist

DATE: 10/5/98

QUALITY CONTROL REVIEW

BY: *Aaron B. Gesis*
Aaron B. Gesis

TITLE: Program Manager

DATE: 10/5/98



AL, Florence
(205) 767-1210
AK, Anchorage
(907) 561-5700
AK, Fairbanks
(907) 452-5700
CA, Alameda
(510) 748-6700
CA, Camarillo
(805) 388-3775
CA, Glendale
(818) 546-2090
CA, Irvine
(714) 752-0403
CA, Sacramento
(916) 362-7100
CO, Denver
(303) 446-8420
CO, Ft. Collins
(970) 493-8878
Ft. Collins Tox Lab
(970) 416-0916
CT, Stamford
(203) 323-6620
FL, Tallahassee
(850) 906-0505
GA, Norcross
(770) 209-7167
IL, Westmont
(630) 887-1700
LA, Lafayette
(318) 234-9130
ME, Portland
(207) 829-0929

MD, Columbia
(410) 884-9280
MA, Acton
(978) 635-9500
MA, Northborough
(508) 393-8558
MA, Buzzards Bay
(508) 888-3900
MA, Woods Hole
(508) 457-7900
MN, Minneapolis
(612) 924-0117
MO, St. Louis
(314) 428-8880
MO, St. Louis
Environmental
Training Center
(314) 428-7020
NJ, Piscataway
(732) 457-0500
NC, Raleigh
(919) 571-0669
OH, Cincinnati
(513) 677-8583
PA, Langhorne
(215) 757-4900
PA, Pittsburgh
(412) 261-2910
PR, Rio Piedras
(787) 753-9509
SC, Columbia
(803) 216-0003
TX, Dallas
(972) 960-6855

TX, Houston
(713) 520-9900
TX, San Antonio
(210) 590-8393
WA, Seattle
(425) 881-7700

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SIERRA CLUB, ET AL. V. MIDWEST GENERATION, LLC PCB 13-15

RESPONSE TO MOTION FOR PARTIAL SUMMARY JUDGMENT

EXHIBIT 19

**MWG LETTER OF RESPONSE TO THE
WAUKEGAN VIOLATION NOTICE**

Jennifer T. Nijman
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Susan M. Franzetti
sf@nijmanfranzetti.com

July 27, 2012

VIA OVERNIGHT MAIL

Illinois EPA
Division of Public Water Supplies
Attn: Andrea Rhodes, CAS #19
P.O. Box 19276
Springfield, IL 62794-9276

Re: Violation Notice: Midwest Generation, LLC, Waukegan Generating Station
Identification No.: 6281
Violation Notice No.: W-2012-00056

Dear Ms. Rhodes:

In response to the above-referenced June 11, 2012 Violation Notice (“VN”), received on June 13, 2012, this written response is timely submitted on behalf of the Midwest Generation, LLC (MWG), Waukegan Generating Station (“Waukegan”). MWG also requests a meeting with the Illinois Environmental Protection Agency (“Illinois EPA” or the “Agency”) to discuss the VN and information provided in this response.

MWG regrets that the Illinois EPA decided to issue the VN because MWG has tried to work cooperatively with the Agency concerning the hydrogeologic assessment of the coal ash ponds at Waukegan even though it had significant concerns and objections to how the VN has proceeded in this matter.¹ Nevertheless, MWG complied with the Agency’s request that it conduct a hydrogeologic assessment of the area around the coal ash ponds and followed its requirements and comments for how the hydrogeologic assessment should be conducted, even though it was under no legal obligation to do so.² At no time however did MWG agree that the

¹ See, e.g., MWG (B. Constantelos) letter to Illinois EPA (A. Keller) dated July 15, 2009. MWG is also working cooperatively with the USEPA with regards to the Coal Combustion Residuals Proposed Rules, EPA-HQ-RCRA-2009-0640, and is trying to coordinate the responses and requirements of both Agencies. USEPA first issued the proposed rules on June 21, 2010, and requested additional comments and information on Oct. 12, 2011. The additional information comment period closed on November 14, 2011, and MWG is now waiting for the USEPA to issue the final rule.

² MWG continues to reserve its objection that the Illinois EPA did not have the legal authority to require the hydrological assessments of the ash ponds under Sections 4 or 12 of the Illinois Environmental Protection Act (the “Act”) or the Groundwater Quality Regulations, 35 Ill. Adm. Code Part 620.

scope and nature of the hydrological assessment the Agency required it to perform would provide any basis for concluding that the ash ponds were impacting groundwater. The alleged violations in the VN are based solely on the results of the hydrogeologic assessment MWG performed at the Agency's request. The results of the hydrogeologic assessment do not show that the coal ash ponds at the Waukegan Station are impacting the groundwater and do not provide the necessary evidence to support the alleged violations contained in the VN.

Well prior to the issuance of this VN, MWG met with the Agency to discuss the groundwater monitoring results and to discuss cooperatively how to proceed based on those results, including what additional actions, if any, the Agency believed were necessary. The Agency told MWG that it had not yet decided how to proceed. The next development was the issuance of the VN. The VN itself provides no information concerning the basis for the Agency's apparent conclusion that the ash impoundments are the cause of the alleged groundwater impacts, other than the conclusory statement that "[o]perations at ash impoundments [sic] have resulted in violations of the Groundwater Quality Standards." The VN also provides no information concerning the nature or type of corrective action which the Agency may deem acceptable to address the alleged violations. The Agency is not pursuing this matter in a way that allows MWG to prepare an effective response or a Compliance Commitment Agreement.

This letter provides a detailed response to each of the alleged violations in Attachment A of the VN to the extent possible given the lack of information provided in the VN. It also advances MWG's general objection to the legal sufficiency of the notice of the alleged violations contained in the VN. MWG maintains that the Illinois EPA cannot prove the alleged violations in the VN, and does not, by submitting this response, make any admissions of fact or law, or waive any of its defenses to those alleged violations.

I. General Objection to the Legal Sufficiency of the Violation Notice

The VN does not comply with the requirements of Section 31 of the Act. Section 31(a)(1)(B) of the Act requires the Illinois EPA to provide a detailed explanation of the violations alleged. 415 ILCS 5/31(a)(1)(B). Under the Act, MWG is entitled to notice of the specific violation charged against it and notice of the specific conduct constituting the violation.³ The VN fails to provide adequate notice to MWG of either the alleged violations or the activities which the Agency believes are necessary to address them. The VN states that "[o]perations at ash impoundments have resulted in violations of the Groundwater Quality Standards...." (Violation Notice, Attachment A, page 1, 1st paragraph) No further description of the alleged "ash impoundments" is provided in the VN. Two ash impoundments exist at the Waukegan Station. It is impossible to identify from the contents of the VN what operations or activities at the Waukegan Station the Agency is claiming are the cause of the alleged violations, including

³ *Citizens Utilities Co., v. IPCB*, 9 Ill.App.3d 158, 164, 289 N.E.2d 642, 648 (2nd Dist., 1972) (a person is entitled to notice of the specific violation charged against it and notice of the specific conduct constituting the violation). See also, *City of Pekin v. Environmental Protection Agency*, 47 Ill.App.3d 187, 192, 361 N.E.2d 889, 893 (3rd Dist., 1977).

whether it is the Agency's position that each of the Station's ash ponds, or only one of them, have caused the alleged violations. Absent an accurate or complete description of the activities or operations that the Agency is alleging caused the violations, it is also not possible to identify what action might be necessary to resolve them. Attachment A to the VN states: "Included with each type of violation is an explanation of the activities that the Illinois EPA believes may resolve the violation." However, no such explanation is provided in the VN. In sum, the VN fails to comply with the legal requirement that it include a detailed explanation of the violations alleged, does not inform MWG of the specific conduct constituting the alleged violations and provides no notice of what is necessary to resolve the alleged violations. The Section 31 process is based on fundamental principles of due process. MWG should not have to speculate about what activities it allegedly engaged in that caused the violations and how to address them to resolve the alleged violations. In the absence of this material, statutorily-required information, the Agency also has effectively denied MWG's statutory right to formulate an acceptable Compliance Commitment Agreement to submit for the Agency's approval.

The VN is also deficient regarding its explanation of what laws MWG has allegedly violated. The VN solely alleges that MWG violated "Section 12" of the Act. 415 ILCS 5/12. It does not provide any further specification as to which of the provisions of Section 12 MWG has allegedly violated.

Sec. 12 of the Act has nine subsections, consecutively numbered (a) through (i). Each of these subsections describes a different and distinct water pollution prohibition. 415 ILCS 5/12(a)-(i). However, the VN issued to MWG does not identify which of the nine subsections the Agency is alleging MWG violated. Based on the contents of Section 12 of the Act, the Agency is taking the position that MWG violated each and every one of the provisions of Section 12. Based on the relevant facts, it is unlikely that this is the intent of the VN. Therefore, the VN's general reference to Section 12 of the Act, without any other explanation, is not a "detailed explanation of the violations." This is yet another example of how the VN fails to provide MWG with adequate notice as a matter of law and thereby violates MWG's due process rights.⁴

By failing to provide a detailed explanation of the violations and any explanation of the activities that the Illinois EPA believes may resolve the violations, the Illinois EPA has effectively denied MWG the opportunity to properly and thoroughly respond to the alleged violations and to make an acceptable offer to resolve them. The VN's deficiencies conflict with the intent and purpose of Section 31 of the Act, which is to avoid unnecessary litigation. Therefore, MWG respectfully requests that Illinois EPA rescind the VN and suspend any further enforcement action unless and until it has taken the necessary actions to correct and cure the legal deficiencies in the notice of the alleged violations by following the statutory requirements under Section 31(a)(1)(B) of the Act. 415 ILCS 5/31(a)(1)(B).

⁴ See, e.g., *Grigoleit Co. v. IEPA*, PCB 89-184, slip op at p. 11 (November 29, 1990) (Failure to notify permit applicant of alleged violations and provide an opportunity to provide information in response was a violation of applicant's due process rights).

II. Response to Alleged Violations in the VN

Subject to and without waiving its objections to the legal sufficiency of the VN, MWG nevertheless has attempted to discern the legal basis for the alleged violations and to prepare this response in defense to those allegations based on various assumptions. MWG reserves the right to supplement this response, including by submitting a separate response should the Agency provide the legally required notice under Section 31 of the Act.

The VN alleges that the “[o]perations at ash impoundments” at MWG’s Waukegan Station have resulted in violations of certain of the Groundwater Quality Standards at the respective monitoring wells identified in the VN. (Violation Notice at Attachment A) MWG believes the Agency’s use of the term “ash impoundments” is intended to refer to the structures, which the Waukegan Station commonly refers to as “ash ponds;” that is how they will be referred to here. The Agency further alleges that the alleged violations of the groundwater quality standards in 35 Ill. Admin. Code Part 620, also constitute violations of Section 12 of the Act and the underlying groundwater regulations in 35 Ill. Admin. Code Part 620. It is undisputable that the Agency has the burden to prove these alleged violations both in proceedings before the Illinois Pollution Control Board (“Board”) and in the courts.⁵ However, the groundwater monitoring data on which the Agency primarily, if not solely relies, to assert these violations is not sufficient, legally or technically, to prove that any “ash impoundment” is the source of the alleged groundwater impacts. Further, based on the existing condition of the ash ponds, it is not likely that they are the source of the alleged impacts.

To support its defense to the alleged violations, MWG has set forth below a description of: (1) the condition and use of the ash ponds at Waukegan; (2) the hydrogeologic assessment performed at the Waukegan Station; (3) the site hydrology; and (4) why the analytical data from the monitoring wells does not establish that the ash ponds are the source of the alleged exceedances of the groundwater standards.⁶ In addition, for certain of the alleged exceedances, additional information not considered by the Agency shows that it is either more likely, or at least as likely, that the source of the alleged exceedance is something other than the ash ponds. In either case, the Agency cannot sustain its burden to prove the alleged violations.

⁵ Section 31(e) of the Act provides in relevant part: “In hearings before the Board under this Title, the burden shall be on the Agency...to show either that the respondent has caused or threatened to cause... water pollution or that the respondent has violated or threatens to violate any provision of this Act or any rule or regulation of the Board or permit or term or condition thereof.” 415 ILCS 5/31(e); *Citizens Utilities v. IPCB*, 9 Ill. App. 3d 158, 164, 289 N.E.2d 642, 646 (1972) (the Agency has the burden of proof in enforcement actions).

⁶ In preparing this response, MWG closely reviewed the groundwater monitoring reports previously submitted to the Agency for the monitoring wells which are identified in the VN. In the course of this review, some data transcription errors were found in the previously submitted data tables included in the groundwater monitoring reports. Copies of the corrected data tables are enclosed. The tables are annotated to identify the nature of the corrections made to the previously submitted reports. Many of the values for monitoring wells MW-1 through MW-5 for the October 25, 2010 sampling event were inadvertently transposed. Where revised values show either that an alleged exceedance did not exist or that a new exceedance not previously identified was reported, this response expressly identifies such revisions.

A. The Condition of the Ash Ponds

For several reasons, the construction and operation of the Waukegan ash ponds makes it unlikely that they are the cause of the alleged violations. The current construction and use of the ash ponds minimizes the potential for leakage from the ash ponds to groundwater.

First, the Waukegan ash ponds are not a disposal site. The ash that enters the ponds is routinely removed. This operating condition limits the amount of ash accumulated over time which serves to minimize the potential for the release of ash constituents to the groundwater.

Second, unlike many other ash ponds in Illinois, the two ash ponds at Waukegan are not simply earthen ponds with no protection against the migration of constituents into the land or groundwater. Each of the Waukegan ash ponds is lined to prevent releases to groundwater. MWG constructed both ponds in 2002 with a high-density polyethylene ("HDPE") liner, replacing a previously existing HDPE liner, overlain by a 12-inch sand cushion layer and a 6-inch limestone warning layer. Both HDPE liners have a permeability of approximately 10^{-13} cm/sec. Notably, this is a greater degree of permeability than is required in the Illinois Pollution Control Board ("Board") Regulations for constructing a new solid waste landfill where, unlike the ash ponds, waste materials are to be disposed of on a permanent basis. *See* 35 IAC 811.306(d). The liners in the Waukegan ash ponds exceed the level of permeability which the Illinois regulations expressly recognize is sufficient to prevent the release of constituents from landfills to the environment. Hence, the facts regarding the liners for these ash ponds also support the conclusion that the ash ponds are not the source of the exceedances of groundwater standards alleged in the VN.

The VN contains no facts concerning the condition of the Waukegan ash ponds that would indicate it is allowing ash constituents to escape from the ponds. For example, the Agency does not contend that there are any breaches in the integrity of the liners that are allowing ash constituents to be released to the groundwater. The Agency similarly does not claim that the liners are inadequate to prevent the migration of constituents. In the absence of such evidence, it is certainly far more likely than not that the existing ash ponds at the Waukegan Station is not the source of the groundwater impacts alleged in the VN.

B. Hydrogeologic Assessment and Site Hydrology

The VN appears to be based on the flawed premise that the hydrogeologic assessment which the Agency directed MWG to perform in the vicinity of the ash ponds would be sufficient to identify the ash ponds as the source of any elevated levels of constituents in the groundwater. This is simply not the case. The results of the hydrogeologic assessment at best give rise to more questions about the source of the alleged groundwater impacts, and do not prove that the existing ash ponds are the source of those impacts.

The results of the hydrogeologic assessment show a relatively uniform groundwater flow system. Groundwater flows from west to east, consistent with the expected flow direction due to

the proximity to Lake Michigan to the east. Based upon this groundwater flow direction, groundwater well MW-5 is an upgradient well, and groundwater wells MW-1 through MW-4 are downgradient wells.

A comparison of the monitoring results from the upgradient (MW-5) and downgradient (MW-1 – MW-4) wells does not support the Agency's contention that the ash ponds are the source of the alleged groundwater impacts. The distribution and observation of parameter concentrations is not consistent with the ash ponds being the source of the impacts identified in the VN. In fact, the more defensible conclusion is that the ponds are not the source of these impacts.

The highest concentrations and greatest number of exceedances of the groundwater standards were detected in the upgradient well, MW-5. Four parameters, iron, sulfate, total dissolved solids ("TDS"), and chloride exceeded the Class I groundwater standards only in this well. None of these parameters were observed above the groundwater standards in any of the downgradient wells. If the ash ponds were the source of these exceedances, then the upgradient well would not regularly have groundwater exceedances of the Class I groundwater standards; and the downgradient wells likely would. The absence of any exceedances of these constituents in the downgradient wells is strong evidence that the ash ponds are not the source of the groundwater impacts for these parameters at well MW-5.

Moreover, there were more exceedances of the boron Class 1 groundwater standard in MW-5 than in the downgradient wells.⁷ Boron is generally considered a primary indicator compound of ash impacts to groundwater. The concentration range of boron in upgradient well MW-5 is substantially greater than the range of boron detections in all the downgradient monitoring wells combined. The boron concentration range in well MW-5 is 12 mg/l to 44 mg/l. The combined range of boron detections in all downgradient wells combined is 1.5 mg/l to 2.8 mg/l. The data does not support the conclusion that the ash ponds are the cause of the alleged groundwater impacts.

The distribution of sulfate detections from upgradient to downgradient groundwater monitoring wells also does not support the allegation that the ash ponds are the cause of the alleged groundwater impacts. Elevated sulfate concentration, when coupled with elevated boron concentration, is an indicator of potential coal ash impacts to groundwater. A review of the sulfate data provides the same trend as explained above for boron. The range of sulfate detections in upgradient well MW-5 is from 780 mg/l to 1,100 mg/l. The range of sulfate detections in all combined downgradient monitoring wells is 97 mg/l to 390 mg/l. All of the upgradient detections exceed the Class I groundwater standard for sulfate. None of the downgradient detections of sulfate exceed the Class I groundwater standard. Again, the data does not support the conclusion that the ash ponds are the cause of the alleged groundwater impacts.

⁷ The corrected, enclosed table shows there is an additional boron exceedance reported for well locations MW-2 and MW-5.

For the remaining parameters identified in the VN, the data also shows that the levels detected in the upgradient and downgradient wells are not consistent with the conclusion that the ash ponds are the source of these impacts. First, all but one of the manganese exceedances was observed in the upgradient well, MW-5. The only downgradient exceedance of manganese occurred in only one sampling event (*i.e.*, Monitoring Well MW-4, 9/13/11) and has not been replicated since.⁸ Also, there was only one exceedance of antimony at MW-2 in the initial sampling event, which has not been replicated since.⁹ A single, isolated exceedance that is not reproducible over subsequent, consecutive quarters of sampling is not representative of actual groundwater quality conditions, and hence, is insufficient to prove the alleged violation.

There were several exceedances of arsenic noted at downgradient monitoring well location MW-1. The alleged exceedances for arsenic are more likely the result of chemical conditions in the groundwater at Waukegan. A review of the oxidation-reduction (ORP) field parameter data for the wells indicates that at monitoring well location MW-1, there is consistently a low dissolved oxygen (DO) level coupled with negative ORP readings. This is indicative of a reducing environment in the vicinity of this well. The DO and ORP data for wells MW-2 through MW-4 show some variability in these field parameter readings between sampling events. Generally, any negative ORP measurements tend to be less in these wells than at location MW-1. There were no elevated detections of arsenic in any of the other three downgradient monitoring wells (MW-2 through MW-4). If the subject ash ponds were the cause of the noted arsenic exceedances, then one would expect to see similarly elevated levels of this constituent in the other downgradient monitoring wells, which is not the case here.

High pH levels were sporadically seen in three groundwater wells. An exceedance of the pH groundwater standard was observed in three sampling events in monitoring well MW-1. There were single, non-reproducible pH exceedances at monitoring well locations MW-2 and MW-3. Because pH is a field parameter, these alleged pH exceedances need to be considered in the context of the other detected parameters before drawing any conclusions as to their cause. When the alleged pH exceedances are viewed in their proper context, the data does not support a conclusion that the ash ponds are the source of the elevated pH levels.

In sum, the pattern of the constituent concentrations in groundwater from all of the monitoring wells, including repeatedly observing higher concentrations of constituents in the upgradient well, clearly does not support the contention that the ash ponds are the source of the alleged groundwater standards exceedances. The data are more consistent with the opposite conclusion, namely that the ash ponds are not the source of the alleged exceedances.

⁸ The corrected, enclosed table shows there was an additional exceedance of manganese reported for MW-5.

⁹ The corrected, enclosed table shows there was not an exceedance of antimony in MW-1, but there was an exceedance of antimony reported for MW-2.

C. The Waukegan Ash Ponds Are Not Causing Groundwater Exceedances

Because the Illinois EPA failed to specify which of the provisions of Section 12 of the Act MWG allegedly violated, MWG has had to speculate to identify the potential Section 12 violations this response needs to address. As stated above, MWG objects to the vagueness of, and legally deficient notice provided by, the VN and reserves its right to respond further when and if the Agency properly identifies the provisions of Section 12 on which it is relying.

For purposes of this response, based upon the regulations cited by the Agency in the VN, MWG has assumed that the Illinois EPA's alleged violations of Section 12 are limited to sections 12(a), which prohibits causing or allowing water pollution, and to Section 12(d), which prohibits causing or allowing the creation of a water pollution hazard. 415 ILCS 5/12(a), (d). Based on these assumptions regarding the substance of the Illinois EPA's alleged violations, MWG submits that Agency cannot show that the ash ponds at Waukegan caused or allowed water pollution or created a water pollution hazard.

Overall the analytical results show that there is no relationship between the ash ponds and the groundwater exceedances. The pattern of the constituent concentrations in groundwater from monitoring wells across the site, including repeatedly observing higher concentrations in the upgradient well, clearly does not support the Agency's contention that the ash ponds are the source of these impacts. The data are more consistent with the opposite conclusion, namely that the ash ponds are not the source of the alleged exceedances.

To show a violation of Section 12(a) and 12(d), there must be a showing not only of the presence of a potential source of contamination, but also that it is in sufficient quantity and concentration to render the waters harmful. *Bliss v. Illinois EPA*, 138 Ill. App. 3d 699, 704 (1985) ("mere presence of a potential source of water pollutants on the land does not necessarily constitute a water pollution hazard"). In other words, there must be a causal link between the potential source and the water or groundwater. The groundwater monitoring data on which the Agency relies does not establish this essential causal link between the ash ponds and the groundwater. Therefore, the Agency has failed to meet its burden to prove that the ash ponds are the cause of the alleged exceedances of the groundwater standards as required to prove a violation of Sections 12(a) or 12(d) of the Act. 415 ILCS 5/12(a), (d).

The Agency also alleges violations of the groundwater quality regulations based on exceedances of the groundwater quality standards in 35 Ill. Admin. Code § 620.401. There is no violation here of Section 620.401: Section 620.401 solely provides the legal criteria that groundwater must meet the standards appropriate to the groundwater's class. It is a foundational regulation, allowing for different classes of groundwater to meet different groundwater standards. It is not a prohibition regulation. There is no conduct prohibited by this section of the regulations in which MWG is alleged to have engaged. MWG cannot and did not violate Section 620.401.

The remaining alleged groundwater regulation violations, Sections 620.115, 620.301, 620.405, and 620.410 of the Board Regulations, are all based on the Agency's contention that MWG's operation of the ash ponds has caused the exceedances of the groundwater standards detected in the monitoring data. To sustain these allegations, the Agency must show that MWG caused a discharge of the subject constituents from ash ponds which in turn caused the exceedances of the groundwater standards.¹⁰ The relevant facts and circumstances do not support either conclusion.

The use and condition of the ash ponds does not support a finding that they are releasing constituents to the groundwater. They are not disposal sites. The ash is regularly removed from the ponds by MWG. The linings in all of the ash ponds are of sufficient low permeability, exceeding accepted regulatory guidance to prevent the release of constituents. Finally, pursuant to the terms of the Waukegan Station's NPDES Permit, these ash ponds are part of the flow-through wastewater treatment process at the station. MWG's operation of the ash ponds has been carried out in accordance with the terms and conditions of the NPDES Permit. Under Section 12(f) of the Act, compliance with the terms and conditions of any permit issued under Section 39(b) of the Act is deemed compliance with this subsection.

Similarly, the groundwater data on which the Agency relies does not provide a sufficient scientific or technical evidentiary basis on which to conclude that the ash ponds are causing the alleged groundwater exceedances. The essential "causal link" between the ash ponds and the elevated constituents in the groundwater is missing. The groundwater impacts in the upgradient well are consistently greater than in the wells downgradient of the ash ponds. The distribution of the impacts is not consistent with the ash ponds being the source of the exceedances. As a whole, the data is at best inconclusive on this issue, while certain data results clearly point to other, unrelated causes.

Because the ash ponds have not been shown to have caused a release of any contaminants that is causing the groundwater exceedances, the Agency's VN does not support its claims that MWG has violated Sections 620.405 or 620.301 of the Board regulations. Accordingly, MWG also has not violated Section 620.115 of the Board regulations.

III. Compliance Commitment Agreement

This VN should not have been issued. Given the absence of proof that the ash ponds are the cause of the alleged groundwater exceedances, the Agency's request for a Compliance Commitment Agreement (CCA) to address the ash ponds is an attempt to compel MWG to conduct unnecessary corrective action to resolve the alleged violations.

¹⁰ See *People of the State of Illinois v. ESG Watts, Inc.*, PCB 96-107 slip op. at p. 41 (February 5, 1998) (By finding the respondent caused a discharge of constituents into the groundwater causing a violation of the Class II Groundwater standards, the Board found the respondent also violated 35 IAC §§ 620.301 and 620.115)

Moreover, with the pending federal regulatory process to enact regulations for the design and operation of ash ponds, it is prudent to await the outcome of the proposed federal regulations to determine whether any changes to the ash ponds construction or operation are required by those regulations. The Agency itself has previously advanced this position. In 2010, the Agency's Steven Nightingale testified before the Illinois Pollution Control Board that the Board should consider initiating a temporary moratorium on the closure of coal ash impoundments because of the U.S. EPA's intention to regulate them. (*See In the Matter of Ameren Ash Pond Closure Rules (Hutsonville Power Station): Proposed 35 Ill. Adm. Code Part 840.101 Through 840.152*, Docket R09-21 (October 7, 2010) at p. 64) On behalf of the Agency, Mr. Nightingale told the Board that if industry had to take action in the interim, it "could end up expending substantial money and resources only to find they are subject to additional and/or different closure requirements for those units." (*Id.*) The Agency's pursuit of this enforcement action, particularly given the deficiencies in its alleged evidence, also threatens to force MWG to take actions that may conflict with or otherwise differ from the requirements in the upcoming federal regulations.

As the hydrogeologic assessment showed, there is no threat to human health presented by the alleged exceedances of the groundwater standards. The hydrogeologic assessment investigated the presence of potable water sources within a 2,500-foot radius of the site. Eight groundwater wells are installed within 2,500 feet of the site, all east and upgradient of the site. Shallow groundwater at the site discharges to Lake Michigan. Although Lake Michigan is used as a drinking water source, the nearest intake location is too far away to be impacted by the alleged groundwater exceedances. In the absence of any potable groundwater receptors or use, groundwater at the Waukegan site does not pose any risk to human health. Accordingly, awaiting the outcome of the federal regulatory proposal is appropriate under these circumstances. Because MWG's preference is to cooperate with the Agency in this matter, MWG presents here a proposed CCA that should be acceptable based on the relevant facts and circumstances. The proposed CCA terms are as follows:

Because MWG's preference is to cooperate with the Agency in this matter, MWG presents here a proposed CCA that should be acceptable based on the relevant facts and circumstances. The proposed CCA terms are as follows:

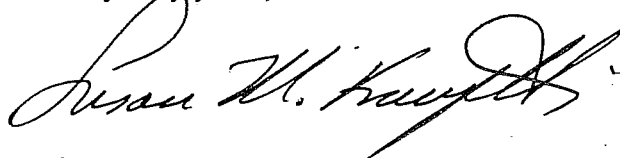
- A. The ash ponds will not be used as permanent disposal sites and ash will continue to be removed from the ponds on a periodic basis.
- B. The ash ponds will be maintained and operated in a manner which protects the integrity of the existing liners. During the removal of ash from the ponds, appropriate procedures will be followed to protect the integrity of the existing liners, including operating the ash removal equipment in a manner which minimizes the risk of any damage to the liner.
- C. During the ash removal process, visual inspections of the ponds will be conducted to identify any signs of a breach in the integrity of the pond liners. In the event that a

breach of the pond liners is detected, MWG will notify the Agency and will submit a corrective action plan for repair or replacement, as necessary, of the liner. Upon the Agency's approval, and the issuance of any necessary construction permit, MWG will implement the correction action plan.

- D. Institutional controls will be evaluated for addressing the alleged exceedances of the groundwater standards. There are already Environmental Land Use Controls (ELUCs) in place at a portion of the Waukegan Station.
- E. MWG will continue to monitor the groundwater through the existing five groundwater monitoring wells and report its findings to Illinois EPA. MWG reserves the right to request the Agency's approval of a cessation of all or some of the monitoring requirements based on future monitoring results.
- F. MWG will continue to monitor the development of the Coal Combustion Residuals Proposed Rules, EPA-HQ-RCRA-2009-0640. When the final rule is issued, MWG will promptly notify Illinois EPA how it will comply with the new Federal Rules.

This letter constitutes our response to and proposed CCA for the Violation Notice W-2012-00056. MWG also reserves the right to raise additional defenses and mitigation arguments as may be necessary, in defense of the allegations listed in the Violation Notice in the event of any future enforcement. We look forward to discussing the above information further at the soon to be scheduled meeting with the Agency's representatives. Please contact me to schedule a mutually convenient date for the meeting.

Very truly yours,



Susan M. Franzetti
Counsel for Midwest Generation, LLC

Enclosures

cc: Maria L. Race, Midwest Generation, LLC

Table 3
 GROUNDWATER ANALYTICAL RESULTS - AMENDED JULY 2012
 Waukegan Station
 Waukegan, Illinois
 Midwest Generation
 21153.033

Chemical Name	Sample Analysis Method	Groundwater Quality Standard (mg/L) Class 1*	MW-1		MW-2		MW-1		MW-2		MW-1		MW-2	
			(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
Antimony	Metals 6020	0.006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	Metals 6020	0.05	0.052	0.04	0.17	0.077	0.057	0.078	0.078	0.016	0.012	0.0087	0.0094	0.0094
Barium	Metals 6020	2.0	0.023	0.022	0.02	0.038	0.034	0.034	0.034	0.014	0.024	0.02	0.023	0.017
Beryllium	Metals 6020	0.004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	Metals 6020	0.005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chromium	Metals 6020	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cobalt	Metals 6020	1.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Copper	Metals 6020	0.65	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyanide	Dissolved 9014	0.2	ND	ND	0.02	0.013	ND	ND	ND	ND	ND	ND	ND	ND
Iron	Metals 6020	5.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lead	Metals 6020	0.0075	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Manganese	Metals 6020	0.15	ND	0.0027	0.0086	0.02	0.011	0.032	0.032	0.018	0.032	0.038	0.035	0.028
Mercury	Mercury 7470A	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	Metals 6020	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Selenium	Metals 6020	0.05	0.031	0.03	0.016	0.039	0.032	0.037	0.037	0.0085	0.028	0.022	0.0086	0.0046
Silver	Metals 6020	0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Thallium	Metals 6020	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	Metals 6020	5.0	ND	ND	2.6	2.5	2.8	2.5	2.8	2.2	2	1.7	1.9	2
Boron	Metals 6020	2	2.6	2	2.6	2.5	2.8	2.5	2.8	2.2	2	1.7	1.9	2
Sulfate	Dissolved 9038	400	350	230	260	280	330	390	330	160	150	200	180	200
Chloride	Dissolved 9251	200	39	48	52	41	32	47	42	45	46	45	50	53
Nitrogen/Nitrate	Nitrogen By calc	10	ND	ND	ND	0.52	0.5	0.5	0.5	ND	ND	0.23	0.12	ND
Total Dissolved Solids	Dissolved 2540C	1,200	460	470	460	570	750	630	630	410	400	460	490	400
Fluoride	Dissolved 4500 FC	4	0.45	0.59	0.71	0.33	0.46	0.46	0.46	0.35	0.53	0.8	0.56	0.67
Nitrogen/Nitrite	Dissolved 4500 NO2	NA	ND	ND	ND	ND	0.021	0.1	0.1	ND	ND	ND	ND	ND
Nitrogen/Nitrate/Nitrite	Dissolved 4500 NO3	NA	ND	ND	ND	0.52	0.52	0.52	0.52	ND	ND	0.23	0.12	ND

Notes:
 *Class 1 Groundwater Standards from 35 IAC Part 620
 Bold values show exceedences of 35 IAC Part 620
 NA - upgradient value not calculated due to non-detection in upgradient wells
 ND-non detect
 mg/L-milligrams per liter

AMENDMENTS
 - Value amended from original Table 3 (May 11, 2012).
 - Value has not changed; font has been changed from bold to normal.

Table 3
 GROUNDWATER ANALYTICAL RESULTS - AMENDED JULY 2012
 Waukegan Station
 Waukegan, Illinois
 Midwest Generation
 21153.033

PATRICKS ENGINEERING	Chemical Name	Sample Analysis Method	Groundwater Quality Standard (mg/L) Class 1*	MW-3										MW-4				
				(mg/L) 10/25/10	(mg/L) 3/24/11	(mg/L) 6/13/11	(mg/L) 9/13/11	(mg/L) 12/6/11	(mg/L) 3/14/12	(mg/L) 10/25/10	(mg/L) 3/24/11	(mg/L) 6/13/11	(mg/L) 9/13/11	(mg/L) 12/6/11	(mg/L) 3/14/12			
	Antimony	Metals 6020	0.006	0.0051	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Arsenic	Metals 6020	0.05	0.0043	0.0041	0.0049	0.0077	0.0077	0.0049	0.0071	0.0066	0.0077	0.0059	0.0058	0.0065	0.0068	0.0068	0.0068
	Barium	Metals 6020	2.0	0.0057	0.0086	0.018	0.0044	0.0038	0.0049	0.0038	0.0049	0.025	0.034	0.039	0.036	0.038	0.038	0.038
	Beryllium	Metals 6020	0.004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Cadmium	Metals 6020	0.005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Chromium	Metals 6020	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Cobalt	Metals 6020	1.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Copper	Metals 6020	0.65	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Cyanide	Dissolved 9014	0.2	ND	ND	ND	ND	0.03	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Iron	Metals 6020	5.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Lead	Metals 6020	0.0075	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Manganese	Metals 6020	0.15	ND	0.0059	0.0044	ND	0.0034	0.0036	0.0036	0.0036	0.023	0.023	0.025	0.025	0.025	0.025	0.025
	Mercury	Mercury 7470A	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Nickel	Metals 6020	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Selenium	Metals 6020	0.05	0.0094	0.016	0.03	0.012	0.011	0.0064	0.0064	0.0039	ND	0.022	0.025	0.015	0.0091	0.0091	0.0091
	Silver	Metals 6020	0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Thallium	Metals 6020	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Zinc	Metals 6020	5.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Boron	Metals 6020	2	1.7	2.2	2.3	1.6	1.6	1.5	1.5	2	2	2	1.8	2.1	2.2	2.2	2.2
	Sulfate	Dissolved 9038	400	120	130	130	97	110	140	140	250	170	160	160	160	160	280	280
	Chloride	Dissolved 9251	200	53	49	53	49	51	52	39	39	47	45	59	60	71	71	71
	Nitrogen/Nitrate	Nitrogen By calc	10	ND	ND	0.29	ND	ND	ND	ND	ND	ND	0.18	0.14	ND	ND	ND	ND
	Total Dissolved Solids	Dissolved 2540C	1,200	280	350	340	300	380	340	340	430	400	380	470	480	480	490	490
	Fluoride	Dissolved 4500 FC	4	0.27	0.47	0.39	0.24	0.67	0.64	0.6	0.6	0.84	0.97	0.67	0.82	0.73	0.73	0.73
	Nitrogen/Nitrite	Dissolved 4500 NO2	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Nitrogen/Nitrate/Nitrite	Dissolved 4500 NO3	NA	ND	ND	0.29	ND	ND	ND	ND	ND	ND	0.18	0.14	ND	ND	ND	ND

Notes:
 *Class 1 Groundwater Standards from 35 IAC Part 620
 Bold values show exceedences of 35 IAC Part 620
 NA - upgradient value not calculated due to non-detection in upgradient wells
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Table 3
 GROUNDWATER ANALYTICAL RESULTS - AMENDED JULY 2012
 Waukegan Station
 Waukegan, Illinois
 Midwest Generation
 21153-033

PATRICKS ENGINEERING	Chemical Name	Sample Analysis Method	Groundwater Quality Standard (mg/L) Class 1*	MW-5 (mg/L)					
				10/25/10	3/24/11	6/13/11	9/19/11	12/6/11	3/14/12
	Antimony	Metals 6020	0.006	ND	ND	ND	ND	ND	ND
	Arsenic	Metals 6020	0.05	0.0076	0.0082	0.0013	ND	ND	0.01
	Barium	Metals 6020	2.0	0.06	0.066	0.057	0.041	0.073	0.063
	Beryllium	Metals 6020	0.004	ND	ND	ND	ND	ND	ND
	Cadmium	Metals 6020	0.005	ND	ND	ND	ND	ND	ND
	Chromium	Metals 6020	0.1	ND	ND	ND	ND	ND	ND
	Cobalt	Metals 6020	1.0	ND	ND	ND	ND	ND	ND
	Copper	Metals 6020	0.65	ND	ND	ND	ND	ND	ND
	Cyanide	Dissolved 9014	0.2	ND	ND	ND	ND	ND	ND
	Iron	Metals 6020	5.0	3.5	2.8	0.95	0.42	5.6	6.6
	Lead	Metals 6020	0.0075	0.71	0.6	0.28	0.03	0.99	0.76
	Manganese	Metals 6020	0.15	ND	ND	ND	ND	ND	ND
	Mercury	Mercury 7470A	0.002	ND	ND	ND	ND	ND	ND
	Nickel	Metals 6020	0.1	ND	ND	0.0026	ND	ND	ND
	Selenium	Metals 6020	0.05	0.0028	ND	0.0094	ND	ND	ND
	Silver	Metals 6020	0.05	ND	ND	ND	ND	ND	ND
	Thallium	Metals 6020	0.002	ND	ND	ND	ND	ND	ND
	Zinc	Metals 6020	5.0	ND	ND	ND	ND	ND	ND
	Boron	Metals 6020	2	28	33	12	30	37	44
	Sulfate	Dissolved 9038	400	920	780	1,100	810	1,100	980
	Chloride	Dissolved 9251	200	100	120	540	220	110	50
	Nitrogen/Nitrate	Nitrogen By calc	10	ND	0.27	0.2	ND	ND	ND
	Total Dissolved Solids	Dissolved 2540C	1,200	1,500	1,800	3,300	2,300	2,300	2,000
	Fluoride	Dissolved 4500 FC	4	0.29	0.34	0.24	0.18	0.29	0.29
	Nitrogen/Nitrite	Dissolved 4500 NO2	NA	ND	ND	ND	ND	ND	ND
	Nitrogen/Nitrate/Nitrite	Dissolved 4500 NO3	NA	ND	0.27	0.2	ND	ND	ND

Notes:
 *Class 1 Groundwater Standards from 35 IAC Part 620
 Bold values show exceedences of 35 IAC Part 620
 NA - upgradient value not calculated due to non-detection in upgradient wells
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