

ILLINOIS POLLUTION CONTROL BOARD  
August 22, 2024

IN THE MATTER OF: )  
 )  
STANDARDS FOR THE DISPOSAL OF ) R20-19(A)  
COAL COMBUSTION RESIDUALS IN ) (Rulemaking – Land)  
SURFACE IMPOUNDMENTS: PROPOSED )  
NEW 35 ILL. ADM. CODE 845 )

**ADDENDUM**

TITLE 35: ENVIRONMENTAL PROTECTION  
SUBTITLE G: WASTE DISPOSAL  
CHAPTER I: POLLUTION CONTROL BOARD  
SUBCHAPTER j: COAL COMBUSTION WASTE SURFACE IMPOUNDMENTS

PART 845  
STANDARDS FOR THE DISPOSAL OF COAL COMBUSTION  
RESIDUALS IN SURFACE IMPOUNDMENTS

SUBPART A: GENERAL PROVISIONS

Section	
845.100	Scope and Purpose
845.110	Applicability of Other Regulations
845.120	Definitions
845.130	Surface Impoundment Identification
845.140	Right of Inspection
845.150	Incorporations by Reference
845.160	Severability
845.170	Inactive Closed CCR Surface Impoundments

SUBPART B: PERMITTING

Section	
845.200	Permit Requirements and Standards of Issuance
845.210	General Provisions
845.220	Construction Permits
845.230	Operating Permits
845.240	Pre-Application Public Notification and Public Meeting
845.250	Tentative Determination and Draft Permit
845.260	Draft Permit Public Notice and Participation
845.270	Final Permit Determination and Appeal
845.280	Transfer, Modification and Renewal

845.290 Construction Quality Assurance Program

### SUBPART C: LOCATION RESTRICTIONS

#### Section

845.300 Placement Above the Uppermost Aquifer  
845.310 Wetlands  
845.320 Fault Areas  
845.330 Seismic Impact Zones  
845.340 Unstable Areas and Floodplains  
845.350 Failure to Meet Location Standards

### SUBPART D: DESIGN CRITERIA

#### Section

845.400 Liner Design Criteria for Existing CCR Surface Impoundments  
845.410 Liner Design Criteria for New CCR Surface Impoundments and Any Lateral Expansion of a CCR Surface Impoundment  
845.420 Leachate Collection and Removal System  
845.430 Slope Maintenance  
845.440 Hazard Potential Classification Assessment  
845.450 Structural Stability Assessment  
845.460 Safety Factor Assessment

### SUBPART E: OPERATING CRITERIA

#### Section

845.500 Air Criteria  
845.510 Hydrologic and Hydraulic Capacity Requirements for CCR Surface Impoundments  
845.520 Emergency Action Plan  
845.530 Safety and Health Plan  
845.540 Inspection Requirements for CCR Surface Impoundments  
845.550 Annual Consolidated Report

### SUBPART F: GROUNDWATER MONITORING AND CORRECTIVE ACTION

#### Section

845.600 Groundwater Protection Standards  
845.610 General Requirements  
845.620 Hydrogeologic Site Characterization  
845.630 Groundwater Monitoring Systems  
845.640 Groundwater Sampling and Analysis Requirements  
845.650 Groundwater Monitoring Program  
845.660 Assessment of Corrective Measures  
845.670 Corrective Action Plan

845.680 Implementation of the Corrective Action Plan

SUBPART G: CLOSURE AND POST-CLOSURE CARE

Section

845.700 Required Closure or Retrofit of CCR Surface Impoundments  
845.710 Closure Alternatives  
845.720 Closure Plan  
845.730 Initiation of Closure  
845.740 Closure by Removal  
845.750 Closure with a Final Cover System  
845.760 Completion of Closure Activities  
845.770 Retrofitting  
845.780 Post-Closure Care Requirements

SUBPART H: RECORDKEEPING

Section

845.800 Facility Operating Record  
845.810 Publicly Accessible Internet Site Requirements

SUBPART I: FINANCIAL ASSURANCE

Section

845.900 General Provisions  
845.910 Upgrading Financial Assurance  
845.920 Release of Financial Institution and Owner or Operator  
845.930 Cost Estimates  
845.940 Revision of Cost Estimates  
845.950 Mechanisms for Financial Assurance  
845.960 Trust Fund  
845.970 Surety Bond Guaranteeing Payment  
845.980 Surety Bond Guaranteeing Performance  
845.990 Letter of Credit

AUTHORITY: Implementing Sections 12, 22, and 22.59 of the Environmental Protection Act [415 ILCS 5/12, 22, and 22.59] and authorized by Sections 22.59, 27, and 28 of the Environmental Protection Act [415 ILCS 5/22.59, 27, and 28].

SOURCE: Adopted in R20-19 at 45 Ill. Reg. 5884, effective April 21, 2021; amended in R20-19A at 48 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_.

SUBPART A: GENERAL PROVISIONS

**Section 845.120 Definitions**

Except as stated in this Section, or unless a different meaning of a word or term is clear from the context, the definition of words or terms in this Part will be the same as that applied to the same words or terms in the Environmental Protection Act:

"1000-year flood" means a flood of magnitude (or greater) of 1 in 1000 probability of occurring in any given year.

"Act" means the Illinois Environmental Protection Act [415 ILCS 5].

"Active facility" or "active electric utility" or "independent power producer" means any facility, subject to the requirements of this Part, that is in operation on or after October 19, 2015. An electric utility or independent power producer is in operation if it is generating electricity that is provided to electric power transmission systems or to electric power distribution systems on or after October 19, 2015. An off-site CCR surface impoundment is in operation if it is accepting or managing CCR on or after October 19, 2015.

"Active life" or "in operation" means the period of operation beginning with the initial placement of CCR in the CCR surface impoundment and ending at completion of closure activities in accordance with Subpart G.

"Agency" means the Illinois Environmental Protection Agency.

"Aquifer" means a geologic formation, group of formations, or portion of a formation capable of yielding usable quantities of groundwater to wells or springs.

"Area-capacity curves" means graphic curves that readily show the reservoir water surface area, in acres, at different elevations from the bottom of the reservoir to the maximum water surface, and the capacity or volume, in acre-feet, of the water contained in the reservoir at various elevations.

"Areas susceptible to mass movement" means those areas of influence (i.e., areas characterized as having an active or substantial possibility of mass movement) where, because of natural or human-induced events, the movement of earthen material at, beneath, or adjacent to the CCR surface impoundment may result in the downslope transport of soil and rock material by means of gravitational influence. Areas of mass movement include, but are not limited to, landslides, avalanches, debris slides and flows, soil fluctuation, block sliding, and rock fall.

"Beneficial use of CCR" means CCR that meets the definition of "coal combustion by-product" in Section 3.135 of the Act [415 ILCS 5/3.135] and the definition of "beneficial use of CCR" in 40 CFR 257.53, incorporated by reference in Section 845.150.

"Board" means Illinois Pollution Control Board.

"Certified laboratory" means any laboratory certified under Section 4(o) of the Act or certified by USEPA for the specific constituents to be examined.

"Closed" for purposes of this Part means placement of CCR in a CCR surface impoundment has stopped, and the owner or operator has completed closure of the CCR surface impoundment and has initiated post-closure care in accordance with Subpart G.

*"Coal combustion residuals" or "CCR" means fly ash, bottom ash, boiler slag, and flue gas desulfurization materials generated from burning coal for the purpose of generating electricity by electric utilities and independent power producers. [415 ILCS 5/3.142]*

"CCR fugitive dust" means solid airborne particulate matter that contains or is derived from CCR, emitted from any source other than a stack or chimney.

"CCR storage pile" means any ~~temporary~~ accumulation of solid, non-flowing CCR placed on the land that is designed and managed to control releases of CCR to the environment, utilizing the measures specified in Section 845.740(c)(4)(A)-(G) of this Part. CCR contained in an enclosed structure is not a CCR storage pile. Examples of control measures to control releases from CCR storage piles include: periodic wetting, application of surfactants, tarps, or wind barriers to suppress dust; tarps or berms for preventing contact with precipitation and controlling run-on/run-off; and impervious storage pads or geomembrane liners for soil and groundwater protection. For this Part, a CCR storage pile will be considered as CCR landfill as defined in 40 CFR 257.53, unless the owner or operator can demonstrate that CCR is not accumulated over a period longer than one year under Section 845.740(c)(4)(F).

*"CCR surface impoundment" or "impoundment" means a natural topographic depression, man-made excavation, or diked area, which is designed to hold an accumulation of CCR and liquids, and the surface impoundment treats, stores, or disposes of CCR. [415 ILCS 5/3.143]*

"Dike" means an embankment, berm, or ridge of either natural or man-made materials used to prevent the movement of liquids, sludges, solids, or other materials.

"Displacement" means the relative movement of any two sides of a fault measured in any direction.

"Disposal" means the discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste as defined in section 1004(27) of the Resource Conservation and Recovery Act into or on any land or water or into any well so that the solid waste, or constituent thereof, may enter the environment or be emitted into the air or discharged into any waters, including groundwater. For purposes of this Part, disposal does not include the beneficial use of CCR.

"Downstream toe" means the junction of the downstream slope or face of the CCR surface impoundment with the ground surface.

"Enclosed structure" means:

A completely enclosed, self-supporting structure that is designed and constructed of manmade materials of sufficient strength and thickness to support itself, the CCR, and any personnel and heavy equipment that operate within the structure, and to prevent failure due to settlement, compression, or uplift; climatic conditions; and the stresses of daily operation, including the movement of heavy equipment within the structure and contact of that equipment with containment walls;

The structure has containment walls that are designed to be sufficiently durable to withstand any movement of personnel, CCR, and handling equipment within the structure;

The structure is designed and operated to ensure containment and prevent fugitive dust emissions from openings, such as doors, windows and vents, and the tracking of CCR from the structure by personnel or equipment.

"Exceedance of the groundwater protection standard" means:

For existing CCR surface impoundments and inactive CCR surface impoundments:

an analytical result with a concentration greater than the numerical value of the constituents listed in Section 845.600(a), in a down gradient well; or

when the up gradient background concentration of a constituent exceeds the numerical value listed in Section 845.600(a), an analytical result with a concentration at a statistically significant level above the up gradient background concentration, in a down gradient well.

For new CCR surface impoundments and lateral expansions of existing CCR surface impoundments, an analytical result with a constituent concentration at a statistically significant level above the up gradient background concentration, in a down gradient well.

"Existing CCR surface impoundment" means a CCR surface impoundment in which CCR is placed both before and after October 19, 2015, or for which construction started before October 19, 2015 and in which CCR is placed on or after October 19, 2015. A CCR surface impoundment has started construction if the owner or operator has obtained the federal, State, and local approvals or permits necessary to begin physical construction

and a continuous on-site, physical construction program had begun before October 19, 2015.

"Facility" means all contiguous land, and structures, other appurtenances, and improvements on the land, used for treating, storing, disposing of, or otherwise conducting solid waste management of CCR. A facility may consist of several treatment, storage, or disposal operational units (e.g., one or more landfills, surface impoundments, or combinations of them).

"Factor of safety" or "safety factor" means the ratio of the forces tending to resist the failure of a structure to the forces tending to cause that failure, as determined by accepted engineering practice.

"Fault" means a fracture or a zone of fractures in any material along which strata on one side have been displaced with respect to that on the other side.

"Flood hydrograph" means a graph showing, for a given point on a stream, the discharge, height, or other characteristic of a flood as a function of time.

"Free liquids" means liquids that readily separate from the solid portion of a waste under ambient temperature and pressure.

"Groundwater" means water below the land surface in a zone of saturation.

"Hazard potential classification" means the possible adverse incremental consequences that result from the release of water or stored contents due to failure of the diked CCR surface impoundment or mis-operation of the diked CCR surface impoundment or its appurtenances. The hazardous potential classifications include Class 1 and Class 2, defined as follows:

Class 1 CCR surface impoundment means a diked surface impoundment where failure or mis-operation will probably cause loss of human life.

Class 2 CCR surface impoundment means a diked surface impoundment where failure or mis-operation results in no probable loss of human life, but can cause economic loss, environmental damage, disruption of lifeline facilities, or impact other concerns.

"Height" means the vertical measurement from the downstream toe of the CCR surface impoundment at its lowest point to the lowest elevation of the crest of the CCR surface impoundment, not including spillways.

"Holocene" means the most recent epoch of the Quaternary period, extending from the end of the Pleistocene Epoch, at 11,700 years before present, to present.

"Hydraulic conductivity" means the rate at which water can move through a permeable medium (i.e., the coefficient of permeability).

"Inactive CCR surface impoundment" means a CCR surface impoundment in which CCR was placed before but not after October 19, 2015 and still contains CCR on or after October 19, 2015. Inactive CCR surface impoundments may be located at an active facility or inactive facility.

"Inactive Closed CCR surface impoundment" means an inactive CCR surface impoundment that completed closure before October 19, 2015 with an Agency-approved closure plan.

"Inactive facility" or "inactive electric utilities or independent power producers" means any facility that is not in operation on or after October 19, 2015.

"Incised CCR surface impoundment" means a CCR surface impoundment that is constructed by excavating entirely below the natural ground surface, holds an accumulation of CCR entirely below the adjacent natural ground surface, and does not consist of any constructed diked portion.

"Inflow design flood" means the flood hydrograph that is used in the design or modification of the CCR surface impoundment and its appurtenant works.

"In operation" means the same as "active life".

"Karst terrain" means an area where karst topography, with its characteristic erosional surface and subterranean features, is developed as the result of dissolution of limestone, dolomite, or other soluble rock. Characteristic physiographic features present in karst terrains include, but are not limited to, dolines, collapsed shafts (sinkholes), sinking streams, caves, seeps, large springs, and blind valleys.

"Lateral expansion" means a horizontal or vertical expansion of the waste boundaries of an existing CCR surface impoundment made after October 19, 2015.

"Liquefaction factor of safety" means the factor of safety (safety factor) determined using analysis under liquefaction conditions.

"Lithified earth material" means all rock, including all naturally occurring and naturally formed aggregates or masses of minerals or small particles of older rock that formed by crystallization of magma or by induration of loose sediments. This term does not include man-made materials, such as fill, concrete, and asphalt, or unconsolidated earth materials, soil, or regolith lying at or near the earth surface.

"Maximum horizontal acceleration in lithified earth material" means the maximum expected horizontal acceleration at the ground surface as depicted on a seismic hazard

map, with a 98% or greater probability that the acceleration will not be exceeded in 50 years, or the maximum expected horizontal acceleration based on a site-specific seismic risk assessment.

"New CCR surface impoundment" means a CCR surface impoundment or lateral expansion of an existing or new CCR surface impoundment that first receives CCR or starts construction after October 19, 2015. A new CCR surface impoundment has started construction if the owner or operator has obtained the federal, State, and local approvals or permits necessary to begin physical construction and a continuous on-site, physical construction program had begun after October 19, 2015.

"Operator" means the person or persons responsible for the overall operation of a CCR surface impoundment.

"Outermost damage zone of a fault" means the volume of deformed wall rocks around a fault surface that results from the initiation, propagation, interaction and build-up of slip along faults.

"Owner" means the person or persons who own a CCR surface impoundment or part of a CCR surface impoundment.

"Poor foundation conditions" means those areas where features exist which indicate that a natural or human-induced event may result in inadequate foundation support for the structural components of an existing or new CCR surface impoundment. For example, failure to maintain static and seismic factors of safety, as required in Section 845.460, would cause a poor foundation condition.

"Probable maximum flood" means the flood that may be expected from the most severe combination of critical meteorologic and hydrologic conditions that are reasonably possible in the drainage basin.

"Qualified person" means a person or persons trained to recognize specific appearances of structural weakness and other conditions that are disrupting, or have the potential to disrupt, the operation or safety of the CCR surface impoundment by visual observation and, if applicable, to monitor instrumentation.

"Qualified professional engineer" means an individual who is licensed under the Professional Engineering Practice Act of 1989 [225 ILCS 325] to practice one or more disciplines of engineering and who is qualified by education, technical knowledge and experience to complete the engineering analyses and make the specific technical certifications required under this Part.

"Recognized and generally accepted engineering practices" means engineering maintenance or operation activities based on established codes, widely accepted standards, published technical reports, or a practice widely recommended throughout the

industry. These practices generally detail approved ways to perform specific engineering, inspection, or mechanical integrity activities.

"Retrofit" means to remove all CCR and contaminated soils and sediments from the CCR surface impoundment, and to ensure the surface impoundment complies with the requirements in Section 845.410.

"Run-off" means any rainwater, leachate, or other liquid that drains over land from any part of a CCR surface impoundment or lateral expansion of a CCR surface impoundment.

"Run-on" means any rainwater, leachate, or other liquid that drains over land onto any part of a CCR surface impoundment or lateral expansion of a CCR surface impoundment.

"Sand and gravel pit" or "quarry" means an excavation for the extraction of aggregate, minerals or metals. The term sand and gravel pit and/or quarry does not include subsurface or surface coal mines.

"Seismic factor of safety" means the factor of safety (safety factor) determined using analysis under earthquake conditions using the peak ground acceleration for a seismic event with a 2% probability of exceedance in 50 years, equivalent to a return period of approximately 2,500 years, based on the U.S. Geological Survey (USGS) seismic hazard maps for seismic events with this return period for the region where the CCR surface impoundment is located.

"Seismic impact zone" means an area having a 2% or greater probability that the maximum expected horizontal acceleration, expressed as a percentage of the earth's gravitational pull (g), will exceed 0.10 g in 50 years.

"Slope protection" means engineered or non-engineered measures installed on the upstream or downstream slope of the CCR surface impoundment to protect the slope against wave action or erosion, including rock riprap, wooden pile, concrete revetments, vegetated wave berms, concrete facing, gabions, geotextiles, or fascines.

"Solid waste management" or "management" means the systematic administration of the activities that provide for the collection, source separation, storage, transportation, processing, treatment, or disposal of solid waste.

"Static factor of safety" means the factor of safety (safety factor) determined using analysis under the long-term, maximum storage pool loading condition, the maximum surcharge pool loading condition, and the end-of-construction loading condition.

"Structural components" means liners, leachate collection and removal systems, final covers, run-on and run-off systems, inflow design flood control systems, and any other component used in the construction and operation of the CCR surface impoundment that

is necessary to ensure the integrity of the surface impoundment and ensure that the contents of the surface impoundment are not released into the environment.

~~"Temporary accumulation" means an accumulation on the land that is neither permanent nor indefinite. To demonstrate that the accumulation on the land is temporary, all CCR must be removed from the pile at the site. The entity engaged in the activity must have a record in place, such as a contract, purchase order, facility operation and maintenance, or fugitive dust control plan, documenting that all the CCR in the pile will be completely removed according to a specific timeline.~~

"Unstable area" means a location that is susceptible to natural or human-induced events or forces capable of impairing the integrity of that area, including structural components of some or all the CCR surface impoundment that are responsible for preventing releases from the surface impoundment. Unstable areas can include poor foundation conditions, areas susceptible to mass movements, and karst terrains.

"Uppermost aquifer" means the geologic formation nearest the natural ground surface that is an aquifer, as well as lower aquifers that are hydraulically interconnected with this aquifer within the facility's property boundary. Upper limit is measured at a point nearest to the natural ground surface to which the aquifer rises during the wet season.

"Waste boundary" means a vertical surface located at the hydraulically downgradient limit of the CCR surface impoundment. The vertical surface extends down into the uppermost aquifer.

"Wetlands" means those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

(Source: Amended at 48 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

## SUBPART E: OPERATING CRITERIA

### Section 845.500 Air Criteria

- a) The owner or operator of a CCR surface impoundment, or any lateral expansion of a CCR surface impoundment, must adopt measures that will effectively minimize CCR from becoming airborne at the facility, including CCR fugitive dust originating from CCR surface impoundments, roads, and other CCR management and material handling activities.
- b) CCR Fugitive Dust Control Plan. The owner or operator of the CCR surface impoundment must prepare and operate in accordance with a CCR fugitive dust control plan as specified in this subsection (b). This requirement applies in

addition to, not in place of, any applicable standards under the Occupational Safety and Health Act (29 USC 15), including 29 CFR 1910.1018, 29 CFR 1910.1024, 29 CFR 1910.1025, 29 CFR 1910.1027, and 1910.1053, or any other State or federal law.

- 1) The CCR fugitive dust control plan must identify and describe the CCR fugitive dust control measures the owner or operator will use to minimize CCR from becoming airborne at the facility. The owner or operator must select, and include in the CCR fugitive dust control plan, the CCR fugitive dust control measures that are most appropriate for site conditions, along with an explanation of how the measures selected are applicable and appropriate for site conditions. Examples of control measures that may be appropriate include: locating CCR inside an enclosure or partial enclosure; operating a water spray or fogging system; reducing fall distances at material drop points; using wind barriers, compaction, or vegetative covers; establishing and enforcing reduced vehicle speed limits; paving and sweeping roads; covering trucks transporting CCR; reducing or halting operations during high wind events; or applying a daily cover.
- 2) The CCR fugitive dust control plan must include procedures to log every complaint from members of the public received by the owner or operator involving CCR fugitive dust events at the facility. The owner or operator must:
  - A) Include for each logged complaint the date of the complaint, the date of the incident, the name and contact information of the complainant, if given, and all actions taken to assess and resolve the complaint; and
  - B) Submit quarterly reports to the Agency no later than 14 days from the end of the quarter of all complaints received in that quarter, including the information required by subsection (b)(2)(A).
- 3) The Agency must evaluate quarterly complaint reports received under Section 845.500(b)(2)(B):
  - A) If the Agency determines the mitigation measures under the CCR fugitive dust control plan are not addressing the dust issues beyond the property boundary, the Agency may require the owner or operator to revise the plan to include additional mitigation measures, including air quality (dust) monitoring at the property boundary.
  - B) If the Agency determines that the facility is causing dust issues over a period of time based on complaints received during at least

two consecutive quarters in an area of environmental justice concern identified under Section 845.700(g)(6), the Agency must require the owner or operator to revise the CCR fugitive dust control plan to include additional mitigation measures, and air quality (dust) monitoring.

C) Air quality (dust) monitoring under subsections (b)(3)(A) and (b)(3)(B) must include at least four each of PM<sub>10</sub> and PM<sub>2.5</sub> air monitors located at or near facility's property boundary with one air monitor each of PM<sub>10</sub> and PM<sub>2.5</sub> located at each cardinal point (north, south, east, west) with additional two each of PM<sub>10</sub> and PM<sub>2.5</sub> air monitors located at downwind locations if not covered by the cardinal point monitors.

43) The CCR fugitive dust control plan must include a description of the procedures the owner or operator will follow to periodically assess the effectiveness of the control plan.

54) The owner or operator of a CCR surface impoundment must prepare an initial CCR fugitive dust control plan for the facility by October 31, 2021, or by initial receipt of CCR in any CCR surface impoundment at the facility if the owner or operator becomes subject to this Part after October 31, 2021.

65) Amendment of the Plan. The owner or operator of a CCR surface impoundment subject to the requirements may amend the written CCR fugitive dust control plan at any time provided the revised plan is submitted to the Agency. The owner or operator must amend the written plan whenever there is a change in conditions that would substantially affect the written plan in effect, such as the construction and operation of a new CCR surface impoundment.

76) The owner or operator must place the initial and any amendments to the fugitive dust control plan in the facility's operating record as required by Section 845.800(d)(7). The most recent fugitive dust control plan must be placed in the facility's operating record and available on the owner's or operator's CCR website before submitting a permit application under this Part.

87) The owner or operator must obtain a certification from a qualified professional engineer that the initial CCR fugitive dust control plan, or any subsequent amendment of it, meets the requirements of this Section.

c) Annual CCR Fugitive Dust Control Report. The owner or operator of a CCR surface impoundment must prepare an annual CCR fugitive dust control report

that includes a description of the actions taken by the owner or operator to control CCR fugitive dust and the four quarterly fugitive dust complaint reports submitted under subsection (b)(2)(B) along with any Agency determinations under subsection (b)(3). The annual CCR fugitive dust control report must be submitted as a part of the annual consolidated report required by Section 845.550.

(Source: Amended at 48 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### **Section 845.550 Annual Consolidated Report**

- a) By January 31 of each year, the owner or operator of the CCR surface impoundment must prepare an annual consolidated report for the preceding calendar year that includes the following:
  - 1) Annual CCR fugitive dust control report (see Section 845.500(c));
  - 2) Annual inspection report (see Section 845.540(b)), including:
    - A) Annual hazard potential classification certification, if applicable (see Section 845.440);
    - B) Annual structural stability assessment certification, if applicable (see Section 845.450);
    - C) Annual safety factor assessment certification, if applicable (see Section 845.460); and
    - D) Inflow design flood control system plan certification (see Section 845.510(c)).
  - 3) Annual Groundwater Monitoring and Corrective Action Report (see Section 845.610(e)).
  - 4) CCR storage pile pad or geomembrane inspection report under Section 845.740(c)(4).
  - 5) CCR storage pile demonstration under Section 845.740(c)(4)(F).
- b) The owner or operator of the CCR surface impoundment must submit the annual consolidated report to the Agency in addition to placing the annual consolidated report in the facility's operating record as required by Section 845.800(d)(14).

(Source: Amended at 48 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### **Section 845.740 Closure by Removal**

- a) Closure by Removal of CCR. An owner or operator may elect to close a CCR surface impoundment by removing all CCR and decontaminating all areas affected by releases of CCR from the CCR surface impoundment. CCR removal and decontamination of the CCR surface impoundment are complete when all CCR and CCR residues, containment system components such as the impoundment liner and contaminated subsoils, and CCR impoundment structures and ancillary equipment have been removed. Closure by removal must be completed before the completion of a groundwater corrective action under Subpart F.
- b) After closure by removal has been completed, the owner or operator must continue groundwater monitoring under Subpart F for three years after the completion of closure or for three years after groundwater monitoring does not show an exceedance of the groundwater protection standard established under Section 845.600, whichever is longer.
- c) The owner or operator of a CCR surface impoundment removing CCR during closure must responsibly handle and transport the CCR consistent with this subsection.
  - 1) Transportation
    - A) Manifests
      - i) When transporting CCR off-site by motor vehicle, manifests must be carried as specified in 35 Ill. Adm. Code 809. For purposes of this Part, coal combustion fly ash that is removed from a CCR surface impoundment is not exempt from the manifest requirement.
      - ii) When transporting CCR off-site by any other mode or method, including trains or barges, manifests must be carried specifying, at a minimum, the following information: the volume of the CCR; the location from which the CCR was loaded onto the mode of transportation and the date the loading took place; and the location where the CCR is being taken and the date it will be delivered.
    - B) The owner or operator of a CCR surface impoundment from which CCR is removed and transported off-site must develop a CCR transportation plan, which must include:

- i) Identification of the transportation method selected, including whether a combination of transportation methods will be used;
  - ii) The frequency, time of day, and routes of CCR transportation;
  - iii) Any measures to minimize noise, traffic, and safety concerns caused by the transportation of the CCR;
  - iv) Measures to limit fugitive dust from any transportation of CCR;
  - v) Installation and use of a vehicle washing station;
  - vi) A means of covering the CCR for any mode of CCR transportation, including conveyor belts; and
  - vii) A requirement that, for transport by motor vehicle, the CCR is transported by a permitted special waste hauler under 35 Ill. Adm. Code 809.201.
- 2) The owner or operator of a CCR surface impoundment must develop and implement onsite dust controls, which must include:
  - A) A water spray or other commercial dust suppressant to suppress dust in CCR handling areas and haul roads; and
  - B) Handling of CCR to minimize airborne particulates and offsite particulate movement during any weather event or condition.
- 3) The owner or operator of a CCR surface impoundment must provide the following public notices:
  - A) Signage must be posted at the property entrance warning of the hazards of CCR dust inhalation; and
  - B) When CCR is transported off-site, a written notice explaining the hazards of CCR dust inhalation, the transportation plan, and tentative transportation schedule must be provided to units of local government through which the CCR will be transported.

- 4) The owner or operator of the surface impoundment must take measures to prevent contamination of surface water, groundwater, soil and sediments from the removal of CCR, including the following:
- A) CCR removed from the surface impoundment may only be temporarily stored, and must be stored in a lined landfill, CCR surface impoundment, enclosed structure, or CCR storage pile.
  - B) CCR storage piles must:
    - i) Be tarped or constructed with wind barriers to suppress dust and to limit stormwater contact with storage piles;
    - ii) Be periodically wetted or have periodic application of dust suppressants;
    - iii) Have a storage pad, or a geomembrane liner, with a hydraulic conductivity no greater than  $1 \times 10^{-7}$  cm/sec, that is properly sloped to allow appropriate drainage, and large enough to allow each portion of the pad or liner to be uncovered for inspection at least once in a year under subsection (c)(4)(C)(iii);
    - iv) Be tarped over the edge of the storage pad where possible;
    - v) Be constructed with fixed and mobile berms, where appropriate, to reduce run-on and run-off of stormwater to and from the storage pile, and minimize stormwater-CCR contact; and
    - vi) Have a groundwater monitoring system that is consistent with the requirements of Section 845.630 and approved by the Agency.
  - C) The owner or operator of the CCR surface impoundment must:
    - i) incorporate general housekeeping procedures including such as daily cleanup of CCR, tarping of trucks, maintaining the pad and equipment; ~~and~~
    - ii) incorporate good practices during unloading and loading including minimizing drop distance on to CCR piles; and-
    - iii) inspect the storage pad or geomembrane of CCR storage piles at least once a year and repair any cracks, holes, tears,

or other damage identified during the inspection as soon as practicable. An annual inspection report summarizing the results of inspection under this subsection must be included in the annual consolidation report under Section 845.550.

- D) The owner or operator of the CCR must minimize the amount of time the CCR is exposed to precipitation and wind.
  - E) The discharge of stormwater runoff that has contact with CCR must be covered by an individual National Pollutant Discharge Elimination System (NPDES) permit. The owner or operator must develop and implement a Stormwater Pollution Prevention Plan (SWPPP) in addition to any other requirements of the facility's NPDES permit. Any construction permit application for closure must include a copy of the SWPPP.
  - F) The owner or operator must demonstrate that CCR is not accumulated in a storage pile over a period longer than one year by using photographs, records (contracts, purchase orders), or other observable or discernable information that shows CCR is being removed within one year of being placed in the pile. This demonstration must be included in the annual consolidation report under Section 845.550.
- d) At the end of each month during which CCR is being removed from a CCR surface impoundment, the owner or operator must prepare a report that:
- 1) Describes the weather, precipitation amounts, the amount of CCR removed from the CCR surface impoundment, the amount and location of CCR being stored on-site, the amount of CCR transported offsite, the implementation of good housekeeping procedures required by subsection (c)(4)(C), and the implementation of dust control measures; and
  - 2) Documents worker safety measures implemented. The owner or operator of the CCR surface impoundment must place the monthly report in the facility's operating record as required by Section 845.800(d)(23).
- e) Upon completion of CCR removal and decontamination of the CCR surface impoundment under subsection (a), the owner or operator of the CCR surface impoundment must submit to the Agency a completion of CCR removal and decontamination report and a certification from a qualified professional engineer that CCR removal and decontamination of the CCR surface impoundment has been completed in accordance with this Section. The owner or operator must place the CCR removal and decontamination report and certification in the facility's operating record as required by Section 845.800(d)(32).

- f) Upon completion of groundwater monitoring required under subsection (b), the owner or operator of the CCR surface impoundment must submit to the Agency a completion of groundwater monitoring report and a certification from a qualified professional engineer that groundwater monitoring has been completed in accordance with this Section. The owner or operator must place the groundwater monitoring report and certification in the facility's operating record as required by Section 845.800(d)(24).

(Source: Amended at 48 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

## SUBPART H: RECORDKEEPING

### **Section 845.800 Facility Operating Record**

- a) Each owner or operator of a CCR surface impoundment subject to the requirements of this Part must maintain files of all information required by this Section in a written operating record at the facility.
- b) Unless specified otherwise, each file must be retained for at least three years past the date the Agency approved the owner's or operator's request to terminate post-closure care, when closure is with a final cover system, or the completion of groundwater monitoring under Section 845.740(b), when closure is by removal.
- c) An owner or operator of more than one CCR surface impoundment subject to the provisions of this Part may comply with the requirements of this Section in one recordkeeping system provided the system identifies each file by the name and identification number of each CCR surface impoundment. The files may be maintained on microfilm, on a computer, on computer disks, on a storage system accessible by a computer, on magnetic tape disks, or on microfiche.
- d) Unless otherwise required below, the owner or operator of a CCR surface impoundment must place the following information, as it becomes available, in the facility's operating record:
- 1) Copies of all permit applications and permits issued under this Part;
  - 2) Documentation recording the public meetings held under Section 845.240;
  - 3) Weekly CQA reports under Section 845.290(b);
  - 4) Hazard potential classification assessments for CCR surface impoundments (see Section 845.440(a)(3)(D));

- 5) Structural stability assessments for CCR surface impoundments (see Section 845.450(d)(4));
- 6) Safety factor assessments for CCR surface impoundments (see Section 845.460(c)(4));
- 7) The CCR fugitive dust control plan and any subsequent amendment of the plan (see Section 845.500(b)(6)), except that only the most recent fugitive dust control plan must be maintained in the facility's operating record, irrespective of the time requirement specified in subsection (b);
- 8) Inflow design flood control system plans for CCR surface impoundments (see Section 845.510(c)(4)(D));
- 9) Emergency Action Plan (see Section 845.520(a)), except that only the most recent EAP must be maintained in the facility's operating record irrespective of the time requirement specified in subsection (b);
- 10) Documentation prepared by the owner or operator recording all activations of the EAP (see Section 845.520(f));
- 11) Documentation prepared by the owner or operator recording the annual face-to-face meeting or exercise between representatives of the owner or operator of the CCR surface impoundment and the local emergency responders (see Section 845.520(g));
- 12) Safety and Health Plan (see Section 845.530(a));
- 13) Documentation recording the results of each inspection and instrumentation monitoring by a qualified person (see Section 845.540(a)(2));
- 14) Annual consolidated report (see Section 845.550), which contains the following:
  - A) The annual CCR fugitive dust control report (see Section 845.500(c));
  - B) The annual inspection report (see Section 845.540(b)(3)); and
  - C) The annual groundwater monitoring and corrective action report (see Section 845.610(e));
- 15) All groundwater monitoring data submitted to the Agency and any analysis performed (see Section 845.610(b)(3)(D));

- 16) Within 30 days after detecting one or more monitored constituents above the groundwater protection standard, the notifications required by Section 845.650(d) and (e);
- 17) The semi-annual report describing the progress in selecting and designing the remedy (see Section 845.670(a));
- 18) Within 30 days after completing the corrective action plan, the notification required by Section 845.680(e);
- 19) USEPA-approved or denied demonstration as required by Section 845.700(d)(2)(F);
- 20) The preliminary written closure plan and any amendment of the plan (see Section 845.720(a)) except that only the most recent closure plan must be maintained in the facility's operating record, irrespective of the time requirement specified in subsection (b);
- 21) The written demonstrations, including the certification required by Section 845.730(b)(3), for a time extension for initiating closure (see Section 845.730(b)(2));
- 22) The notification of intent to close a CCR surface impoundment (see Section 845.730(d));
- 23) The monthly reports for closure by removal (see Section 845.740(d));
- 24) The closure report and certification (see Section 845.760(e)(3)), or the completion of groundwater monitoring report and certification (see Section 845.740(f));
- 25) The notification of completion of closure of a CCR surface impoundment (see Section 845.760(f));
- 26) The notification recording a notation on the deed (see Section 845.760(h));
- 27) The preliminary written retrofit plan for a CCR surface impoundment (see Section 845.770(a)(3));
- 28) The notification of intent to initiate retrofit of a CCR surface impoundment (see Section 845.770(d));

- 29) The retrofit completion report and certification (see Section 845.770(g)(3));
- 30) The notification of completion of retrofit activities (see Section 845.770(h));
- 31) The notification of completion of post-closure care period (see Section 845.780(f));
- 32) The completion of CCR removal and decontamination report and certification (see Section 845.740(e)); and
- 33) The most current cost estimates (see Section 845.940(d)).
- 34) The quarterly fugitive dust complaint reports submitted to the Agency under Section 845.500(b)(2)(B) along with any Agency determinations under Section 845.500(b)(3).

(Source: Amended at 48 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)