Appendix A

Coversheet:

This spreadsheet contains a full listing of the identified damage cases and EPA's designation (i.e., proven, potential, or rejected) as of September 18, 2012. Note that this file doesn't address the 19 damage cases identified in Environmental Integrity Project's December 2011 Report *Risky Business: Coal Ash Threatens America's Groundwater Resources at 19 More Sites* (DCN SE01985). These alleged damage cases have not been reviewed or confirmed by EPA.

Tab	Tab Description
Proven	This table presents the damage cases designated by EPA as a "proven." A proven damage case means those cases where: (1) there were documented exceedances of primary MCLs or other health-based standards measured in ground water at sufficient distance from the waste management unit to indicate the hazardous constituents have migrated to the extent that they could cause human health concerns, (2) a scientific study provides documented evidence of another type of damage to human health or the environment (e.g., ecological damage), and/or (3) there has been an administrative ruling or court decisions with an explicit finding of specific damage to human health or the environment.
Potential	This table presents the damage cases designated by EPA as "potential." A potential damage case means those cases with: (1) documented exceedances of primary MCLs or other health-based standards only directly beneath or in very close proximity to the waste source, and/or (2) documented exceedances of secondary MCLs or other health-based standards on site or off site.
Rejected	This tab contains a listing of damage cases designated by EPA as "rejected."
References	This tab contains a listing of the damage case references.
Abbreviations	This tab contains a listing of the acronyms identified in this workbook.

EPA Proven Damage Cases

Facility	Location	State	Key Reference(s)	WU Type	Liner	Year Started	Year Damage Noted	Failure Mode	COCs/GW	COCs/SW	Reg Action	Current Status	NOV	CO/Admin Order	Study	Assmt Monitoring	Remedial Action	Law Suit	Fish Advisory/ Fishing Ban	Provide Drinking Water	Other (Closure)	Comments
Georgia Power Plant Bowen	Cartersville	GA	CCW DC Ass #8	SI	No	1968	2002; 2008	SW, Sediment		As, Cd, Cr, Pb, Hg, Ni, Cu	State/CO, requiring, among others, a fine and corrective action.	Active/modified		Y			Y				Fine	2002: Sinkhole developed, releasing slurry to creek. 2008: extreme rain event collapsed a dry ash stockpile; storm water overwhelmed perimeter ditching in the ash pond and carried ash off of plant property to the north to a storm water conveyance and across several adjacent properties where it was deposited in a sediment pond. From the sediment pond, some of the ash reached Euharlee Creek. About 40 tons of ash was released with about 2 tons of ash reaching Euharlee Creek. About 14 offsite properties in the neighborhood were affected. CERCLA cleanup ensued.
Gibson Generating Station Plant, Duke Energy (Cinergy)	Princeton	IN	Out of Control #6	2 LFs & 6 SIs, Cooling Reservoir	No	SIs: 1974 (2 SIs); 1991 (2 SIs); 1995; 1999. LFs: Late 1970s and (*not implicated*) 2009.	SW: 2003; GW: 2007	SW/Ecol, GW	As, Se, B, Fe, Mn	As, Se, B, Fe, Mn	None. Voluntary closing of cooling lake to fishing. Duke constructed (voluntarily) public water line to homes w/affected wells; no enforcement action by the State. Remedial actions in wildlife reserve - voluntary.	Active							Y	Y	None	CCR is periodically scooped out of the SIs and sent to an on-site CCR landfill. IDEM considers the SIs to be temporary CCR storage areas and not subject to solid waste regulations.
NIPSCO Yard 520	Pines	IN	CCW DC Ass #19	LF & BU	Partial	1983	2000	GW, Soils	As, Mo, Fe, Mn, Sf		State/AOC	Inactive		Y								Soil: Hexavalent chromium, arsenic. A Superfund Alternative site.
Constellation Energy's BBSS S&G Quarries	Gambrills	MD	CCR Proposed Rule, 6/2010	S&G pit	Compressed Fly Ash	1995	1999	GW, Fugitive Dust	As, Cd, Pb, Tl, Be, Al, Mn, Sf		State/CO, $1 million penalty; supply of alternative water. Out-of-court settlement of $54 million.	Inactive/2007		Y						Y	Penalty; out of court settlement	
PEPCO Morgantwon Faulkner offsite	Morgantown	MD	CCW DC Ass #5	LFs (3) & SIs (6); artificial wetland	No; failed	1970; 1979; 1989	1991	GW & SW; Ecolo (veget. Damage)	Fe, pH: (onsite: Al, Cl, Mn, Fe, Sf)	Fe, pH	State/CO; lawsuit in Federal court	Some active, some not		Y				Y				Curtis Pit is slated for closure; protracted history of violations.
Detroit Edison Range Road Landfill	East China Township, St. Clair County	MI	EPA-HQ-RCRA-2009-0640-6815 Attachment 5; Becky Cuthbertson Email, 11/9/2010. http://www.michigan.gov/documents/deq/DNRE-WHMD-SW-DETROIT_EDISON_RANGE_ROAD_OpLicense_320053_7.pdf	LF (Type III Low Hazard Industrial LF)	No	Early 1950s	1995	GW & SW	B, Li, Mn, Sf, Fe	B, Li, Mn, Sf, Fe	RI/FS; slurry wall installation	Active (email, Cuthbertson to Livnat, 11/9/2010)			Y		Y					Leachate migrating off-site in groundwater and reaching two small ponds (no drinking water source affected). *Note* : this site is not included in the 6/15/11 statistic analysis, nor in the interim damage case summary tables that are based on ICF's 10/2010 study. For a location map and capacity data (as of the late 1990s), see: http://www.cis.stclaircounty.org/downloads/04_sw_plan_ii_1_through_30.pdf
JR Whiting generating Plant - CMS/Consumers Energy	Erie	MI	CCW DC Ass #76 [According to ICF (6/2010)- "Rejected"]	SIs (6)	?	1952 1959 1974	2008?	SW/Ecol Sediments		As, Se, Br (Oligochates); Se, Br, Co, Ni, Cr (Fish); As, Co, Se, Ni (Sediment)	State: Final closure of the ponds was approved in 2005 and is still under way.	Active									Closure	
Lansing Board of Water & Light N. Lansing LF	North Lansing	MI	CCW DC Ass #18	S&G pit	No	1980	1993	GW	Se, Li		State/Remedial Action Plan	Inactive/1997					Y				CERCLA cleanup	2002: Sinkhole developed, releasing slurry to creek. 2008: extreme rain event collapsed a dry ash stockpile; storm water overwhelmed perimeter ditching in the ash pond and carried ash off of plant property to the north to a storm water conveyance and across several adjacent properties where it was deposited in a sediment pond. From the sediment pond, some of the ash reached Euharlee Creek. About 40 tons of ash was released with about two tons of ash reaching Euharlee Creek. About 14 offsite properties in the neighborhood were affected. CERCLA cleanup ensued.
Colstrip PP, PPL Montana	Colstrip	MT	Out of Control #10	SIs (2), Cooling Lake, Evap. Ponds	3: Clay; 1: Partial Clay; 1: Hypalon; 1- HDPE	1975-76 (2); 1975; 1983 (2); 1992	Early 1980s	GW & SW	Se (?), B, Mo, Sf, TDS	Sf	In 2/2010, state proposed (but has not yet issued) a CO. Previous corrective action involved installing hundreds of monitoring wells, lining the more-recently installed SIs with a rubber-like liners, and the introduction of a pump-and-treat system.	Some active, some not		Proposed 2/2010, due in 2012 (?)		Y	Y			Y	Lining of SIs. Citizens' suit - out of court settlement	
Belews Lake Duke energy	Stokes, Rockingham, Guilford, and Forsyth Counties	NC	CCW DC Ass #11	Cooling Reservoir	No	1970s	1974	SW/Ecol		Se/fish	State/CO, Fish advisory. State required operating changes to mitigate contamination.	Active/modified		Y					Y		State req'd operating changes	
Hyco Lake	Roxboro	NC	CCW DC Ass #7	Cooling Reservoir	No	1964	1974	SW/Ecol		Se/fish	State/Fish advisory; stopped wet handling. The NC DEWQ is requiring long-term monitoring of the lake.	Active				Y			Y		State req'd operating changes	
Swift Creek Structural Fill Site ReUse Techn	Rocky Mount	NC	Out of Control #14	Structural Fill	No	1991	2004	GW	As, Pb, Hg, Ba, Sf		State/NOV, CO (NOV in 2002 for failure to bring the fill area into compliance with an original plan for waste placement. A CO, in 2006, included a fine and a requirement to delineate the nature and extent of GW and surface water contamination.)	Inactive	Y	Y								Soil: Hexavalent chromium, arsenic.
Reid Gardner Generating Nevada Energy	Moapa	NV	Out of Control #18	LF & SIs (8)	SIs: No LF: No	1976	1997	GW, Fugitive Dust	As, Se, V, Cr, Mo, B, Cl, Mg, Mn, Ti, Na, Nitr, Sf, TDS		State/AOCs - 1997 and 2008: continue with environmental contaminant characterization activities and for the identification of corrective actions and/or clean-up measures for the soil and groundwater at the Site.	Some active, some not		Y	Y	Y						
Cayuga Coal Ash Disposal LF, AES	Lansing	NY	In Harm's Way #22	LF & SI (Leachate Pond)	No (Phase I); Composite (Phase II)	1980s	Early 2000s	GW & SW	As, Cd, Se, Pb, B, Al, Mn, Sf, Fe, TDS	As, Cd, Se	State/NOV for excess disposal	Inactive (Phase I), Active (Phase II)	Y									EPA-HQ-RCRA-2009-0640-6815, Attach. #5
Don Frame Trucking Fly Ash LF	Pomfret	NY	CCW DC Ass #3	LF	No	?	1989	GW	Pb, Mn (TDS, Sf)		State required remedial action, court order to cease receiving wastes	Inactive/1988					Y					
Conesville FGD LF, AEP	Conesville	OH	CCW DC Ass #63	LF	No	1976	1979/80	GW	Pb, As, Cd, Se, Cr, Fe, Sf, Ca, Mg, TDS		State/LF capped by a 2' clay cap with 6" topsoil cover in 1988. The utility voluntarily monitored groundwater in the 1980s, no monitoring is presently required. Post-closure inspections continue.	Inactive/1988									Closure	Curtis Pit is slated for closure; protracted history of violations.
Bruce Mansfield First Energy's Power Station	Shippingport	PA	In Harm's Way #29	SI	No	1977	1993	GW & SW	Cd, Ba, Pb, TSS, Al, Cl, Fe, Mn, Sf, TDS, pH	As, Se, Tl, Cd, Pb, Cr, Sb, B, pH	State/settlement Agreement; several NOV for exceedance of NPDES permits; remedial plan for collection of impacted spring water; NOI to sue by citizen groups (5/2012); a CO requiring impact studies, closure of the Little Blue Run SI at the end of 2016; and measures to control fugitive dust; 2 NOVs (fugitive dust).	Active	Y	Y	Y	Y	Y	Y		Y	Settlement Agreement (1994); Closure required by the end of 2016.	
Fern Valley LF Orion Power Holdings	Elrama	PA	Out of Control #22	LF	3' Cemented Ash	1989	1995	GW & SW	As, B, Cl, Sf, TDS	As, Se, B, Cl, Sf, TDS	State/NOVs: Due to placement of waste outside of the permitted LF boundaries and failure to report monitoring data, PADEP issued several noticed of violation in 2002. Water quality assessments have been required and will continue through 2017 in response to citizen and regulatory concerns. Actions and responses by the operator have satisfied regulators resulting in no further corrective regulatory actions.	Inactive/2007	Y			Y						
Hatfield's Ferry Allegheny Energy Power Station	Masontown	PA	In Harm's Way #30	LF	No	1984	2001	GW & SW	As, Tl, Cr, Mo, B, Al, Fe, Mn, Sf, TDS	As, Tl, Cr, Mo, B, Al, Fe, Mn, Sf, TDS	State/COA	Active		Y								
Martin's Creek PP, PPL	Mt Bethel Township	PA	CCR Proposed Rule, 6/2010	SI	No	1955	2005	SW/Sediments, GW	Se, Cr, Fe (onsite)	As, Pb, Ni, Ag, Zn, Al, Cu, Fe, Mn	State/NOV, CO	Active (Basin 4), Inactive (Basin 1)	Y	Y								Dike failure
Canadys Plant, SCE&G	Walterboro	SC	CCW DC Ass #10	SIs (2)	No; Failed slurry wall	1974 1988	1982 2008	GW	As, Ni, Se		State/CO; slurry wall around old and new SIs; dewatering of old SI and contents' removal towards clean closure; extended monitoring well system. Mixing/compliance zone established.	Some active, some not		CO		Y	Y				Closure	
DOE Savannah River D-Area	Savannah River	SC	CCW DC Ass #12	SIs	No	1950s	Mid 1970s	SW/Ecol, Sediments		Se, Cd, Cr, hg, Al, Cu, Zn, Fe, Sf, pH, TSS	State/Federal: ROD, capping, and institutional control.	Some active, some not					Y				Closure	
Urquhart Station SCE&G	Beech Island	SC	Out of Control #26 [According to ICF (6/2010)- "Rejected"]	LF & SIs (2 Settling basins)	No	Late 1980s to mid-1990s	1989; 2007	GW, Soil	As, Ni	As, Ba, Cr, Co, Hg, Ni, Zn, Mn (Soil)	None (Utility ia assessing the nature and extent of the contamination associated with the SIs. According to DHEC, no offsite monitoring has been required since results in wells near the river have not exceeded drinking water standards; these activities are considered to be "informal" actions, and no violations or orders have been issued to the owner. Informal state actions have been required, including listing site on GW Contamination Inventory (2008) for arsenic from ash basins.	Active									None	
CCW LF Trans Ash Inc.	Camden	TN	Out of Control #29	LF & SI	0.25" geosynthetic, partial and improperly installed	2002	2005	GW & SW	As, Cr, Pb, Hg, Ni, ag,		State/Order + penalty	Active		Y							Penalty	EPA-HQ-RCRA-2009-0640-6815, Attach. # 5
DOE Oak Ridge Y-12 OU 2	Oak ridge	TN	CCW DC Ass #9	SI	No	1955	1989	SW/Ecol, GW	Al, Fe, Mn	As, Al, Fe, Mn	State/Federal: NPL, RI, Remedial Action.	Inactive			Y		Y				NPL	
TVA Kingston	Harriman	TN	CCR Proposed Rule, 6/2010	SI	No	1950s	2008	GW, SW/Sediments, Soils	Se, Co, Mn	As, Cd, Cr, Pb; As (Sediment); As, Co, Tl, FE (Soil)	State/CO, Fish advisory; Federal/CERCLA, impact studies	Active		Y	Y				Y		CERCLA cleanup	Dike failure
Brandy Branch Reservoir SW Electric Power's Pirkey pp	Marshall	TX	CCW DC Ass #20	Cooling Reservoir	No	1983	1986	SW/Ecol		Se/fish	State/Fish advisory; Fish selenium study	Active		Y	Y				Y			
Southwestern Electric Power Welsh Reservoir	Mount Pleasant	TX	CCW DC Ass #21 [According to ICF (6/2010)- "Rejected"]	Cooling Reservoir	No(?)	1976	1981	SW/Ecol		Se	State/Fish advisory, fish selenium study. State required operating changes to mitigate contamination.	Active		Y	Y				Y		State req'd operating changes	
Texas Utilities Electric Martin Lake	Tatum, Rusk and Manola Counties	TX	CCW DC Ass #22	Cooling Reservoir	No	1974	1978	SW/Ecol		Se/fish	State/Fish advisory, Fish Se study. State required operating changes to mitigate contamination.	Active		Y	Y				Y		State req'd operating changes	
Clinch River PP AEP-Appalachian Power (Carbo power plant)	Cleveland	VA	In Harm's Way #36	SI	No	1964	1967	SW/Ecol		Al, pH	None	Some Active, some not									None ('pre-regulatory era')	Dike failure. Subsequent actions included closure of the SI and a wastewater treatment plant (1993)
Glen Lyn Plant, AEP/Appalachian Power	Glen Lyn	VA	In Harm's Way #37 [According to ICF (6/2010)- "Rejected"]	SIs (2)	?	1963 1965	Late 1970s	SW/Ecol		Cd, Se, Ni, TSS, pH, Thermal	None (In its comment to the docket, Virginia DEQ characterizes this incident as a not recent case and a legacy issue which is not an accurate picture of VA's current regulatory program.)	Inactive									None	
VEPCO Chisman Creek	Yorktown	VA	CCW DC Ass #6	S&G pit	No	1957	1980	GW (SW)	Se, V, Sf	?	State/CO Federal/NPL	Inactive/1974		Y							NPL	
Columbia Energy Center Alliant Energy	Pardeeville	WI	In Harm's Way #38	SIs (3)	No	1975	1977	SW/Ecol		As, Cd, Cu, Cr, Ba, Al, Fe, Zn, Conduct	State/CO	Inactive		Y								
Dairyland Power E.J. Stoneman		WI	CCW DC Ass #13	SI	No	1950	1976	GW	Cd, B, Fe, Mn, Sf (offsite); Cd, Cr, ba, Sf, Mn, Fe (onsite)		State/Admin Order for long-tem groundwater monitoring, closure.	Inactive		Y		Y					Closure	Leachate migrating off-site in GW and reaching 2 small ponds (no drinking water source affected). This site is not included in the 6/15/11 statistics.
Oak Creek Power Plant – Wisconsin Energy/Wisconsin Electric Power (Caledonia)	Oak Creek	WI	In Harm's Way #39; Collapse coverage based on EPA Region 5 and WDNR cleanup bulletins and media coverage.	3 LFs; Old Structural Fill	2 Inactive LFs: probably No; Active LF: Clay (Phase I); Composite w/leachate collect (Phase II). Structural Fill: No	1969, 1976; Fill - from 1950s to late 1960s	2002 or earlier; Fill's partial collapse: 10/31/11	GW; SW: Fill collapsed into Lake Michigan	Mo, B, Mn, As, Hg, Sf, F	Cr, As, TCE, diesel	WDNER has been investigating (as of 6/2010) to better establish local background and gradients to determine if CCRs are source of exceedances. Collapse cleanup was a multi-agency effort. Containment efforts included 1,500' of linear boom on the Lake to contain the debris and fuel. An early January 2012 joint NOAA/Coast Guard report established that the ash that ended in the Lake would be so dispersed that it would not have any significant environmental impact. However, some long term, sub-lethal impacts on local fish and raptor populations cannot be totally ruled out.	Some Active, some not			Y, (Y)*					Y	CERCLA cleanup	Twelve offsite private wells found exceedances of molybdenum and boron. A consultant to WE determined that molybdenum in the private wells was not coming from CCR in the LFs. WE has been supplying (as of 8/2009) bottled water to several dozen residents in the area without assuming responsibility for the contamination. Collapse of old structural fill used for auxiliary facilities landed about 25,000 cubic yards in the Lake and in two coastal settlemt ponds. *Note* : This site, re-categorized from potential to proven damage case following the 10/2011 collapse, is included in the 6/15/11 statistical analysis as a potential, rather than a proven damage case.
WEPCO Cedar Sauk Ash LF	Cedarburg	WI	CCW DC Ass #16	S&G pit	No	1969	Early 1980s	GW	Se, B, Sf		State: monitoring and site capping	Inactive/1979				Y					Closure	
WEPCO Hwy 59 We Energies	Waukesha	WI	CCW DC Ass #14	S&G pit	No	1969	1988	GW	As, Sf, B, Mn, Fe, Cl		State: Remediation plan, capping, alternative water source to residents.	Inactive/1978					Y			Y	Closure	Elevated GW table
John Amos PP, AEP/Appalachian Power	Winfield/St. Albans	WV	Out of Control #30 [According to ICF (6/2010)- "Rejected"]	SIs (2); LF (1)	SIs: No; LF - ?	1971	1974	SW/Ecol		Se, As	State/Compliance Schedule; NOV (2/2009) due to inadequate LF stormwater control resulting in deposition of fly ash in adjacent wetland.	Active	Y								Compliance schedule	Dike failure; a compliance schedule to meet end-of-pipe chronic toxicity limitations on this discharge in the most recent NPDES permit (7/2007).

EPA Potential Damage Cases

Facility	Location	State	Key Reference(s)	WU Type	Liner	Year Started	Year Damage Noted	Failure Mode	COCs/GW	COCs/SW	Reg Action	Current Status	Comments	NOV	CO/Admin Order	Study	Assmt or other Monitoring	Remedial Action	Law Suit	Fish Advisory/ Fishing Ban	Provide Drinking Water	Other (Closure; Design or Operational change)
TVA Colbert Fossil Fuel Plant	Colbert County	AL	CCW DC Ass #33	2 SIs & 2 LFs	SIs: Clay LFs: ?	SI: 1972 LF: 1984	?	GW	Sf, Cr, Se, Cd, Al, Fe, Sb, As, Cr, Pb, B, Mn, Mo, Nitrate.		Sinkhole treated and capped.	Some Active, some not	Landfill is a stacking operation; two sinkhole collapses induced switch to dry handling. Operational change (abandonment of sinkhole-prone WUs).									Y
TVA Widows Creek Fossil Fuel Plant	Stevenson	AL	CCW DC Ass #32	SIs	3: No	1950	Early 1990s	GW	Pb, Cd, Cr		None. CO recommended; No Administrative Action was taken by the state; no remediation was performed because contamination in an up-gradient well was attributed to an off-site source.	Active										
Flint Creek Power Plant, SWEPCO (American Electric Power)	Gentry	AR	In Harm's Way #1	LF & 2 SIs	LF: No	1978	GW: 1994; SW: 1996	GW & SW	Se, Fe, Mn, As, B, Mo, pH, Sulfate, TDS	Ba, B, Cr, Pb, Se, Sf, TDS, pH	ADEQ ordered assessment monitoring (2005) due to statistically significant increase in selenium, sulfate and TDS. Notice of Deficiency (NOD) in 2008.	Active		Y		Y	Y					
Independence Steam Station – Entrgy/AP&L	Newark	AR	In Harm's Way #2	LF; 3 wastewater recycle & surge ponds	No	1983	Early 1990s	GW	As, Cd, Pb, Fe, Mn, Sf, TDS, pH		None. Since no primary MCL exceedances noted in the recent years, the state has not responded because it does not enforce SMCLs.	Active	The landfill permit issued in 2002 required that GW samples be collected to monitor 28 heavy metal and indicator parameters, and that statistical analyses of increases in concentrations should serve as a basis for corrective actions. AP & L has recently stopped sampling 26 wells at the surge pond and plant areas without objection from ADEQ, but eight wells around the landfill keep operating.									
Arizona Public Service Co. Cholla Steam electric Generating Station	Joseph County	AZ	CCW DC Ass #67	2 SIs and 2 ash contact wastewater ponds (Zero discharge facility)	2 SIs: No	1978	Pre-1999	GW	Sf, Cl, F, TDS		None	Active	Baseline groundwater quality (sulfate, chloride, fluoride, and TDS) was worse than that of the contaminant plume. 'Zero discharge facility', high evaporation rates result in high sodium and chloride levels in the ash ponds, as well as in salty seeps.									
Power Montville Generating Station - NRG Energy,	Montville	CT	In Harm's Way #3	SIs; Ash storage area	No	1919	SW: Late 1960s	GW & SW; Soil	As, Be, Pb, Mn, pH	Cd, Cu, Ni, Zn, As, Be, Fe, Sf, TDS; As, Be, Pb (Soils)	USEPA made final determination that migration of contaminated groundwater is under control (2000).	Inactive	The Thames River close to the power plant is saline, classified as unsuitable for shellfish harvesting, or as a fish/ shellfish habitat. Due to its high base flow, it is highly unlikely that groundwater contaminated in excess of SWPC would adversely impact the River.			Y	Y					Y
Indian River Power Plant – NRG Energy, Burton Island	Millsboro	DE	Out of Control #1	SI & LF	SI: No; LF-I: No	1957; 1980	2005	GW, SW, Sediments, Ecologic (?), Fugitive Dust (?)	As, Se, Cr, Tl	SW: Al, As, Ba, Fe; Sediments: As, Cd, Cr, Cu, Pb, Hg, Ni, Zn	CO for RI and remediation of the Burton Island (SI) area; New LF (II) permit granted while presumably incompatible with several State regulations	Some Active, some not	OU #2 (LF, land areas, berms) is currently under RI including ecological risk assessment and natural resource damage assessment.		Y	Y		Y				
Big Bend Station – Tampa Electric Co.	Apollo Beach	FL	Out of Control #4	LF, 4 SI, FGD storage Area	LF – Yes; FGD Storage Area: No; SIs: ?	1968	2000	GW & SW; damaged vegetation	As, Tl, Mn, Sf, Cl	B, Fe, TSS	CO; A Remedial Action Plan and groundwater monitoring plan; closure of a SI impacting	Some Active, some not	The unlined Gypsum Management Area is one of the sources of contaminants. State claims impact is limited to the Zone of Discharge (ZOD).		Y							Y
CD McIntosh Jr. Power Plant – City of Lakeland	Lakeland	FL	In Harm's Way #4	2 LFs; Sludge dewatering area, process wastewater ponds; artificial wetland (?)	LF: No	1981	1997	GW	As, Pb, Se, Mn, Cd, V, Fe, Sf, Nitr, TDS		FDEP issued a Consent Order (2001) because of impacts to groundwater and required additional on-site monitoring and about $180,000 in civil penalties.	Active	Built on top of abandoned phosphate mine, which likely has some influence on groundwater flow under the site. Contamination is still within the ZOD.		Y		Y					
Curtis Stanton Energy Center, Orlando Utility Commission	Orlando	FL	Out of Control #2	LF; 3 Ruoff Ponds	Yes	1981	2003	GW & SW	Gross Alpha, Ra-226, Al, Fe, Mn, V, Cl, Na, Sf, TDS, pH	Al, Na, Cl, Sf, Gross Alpha	State required upgrades, additional monitoring of LF, determination of waste type. EIP claims that OUC has not fully addressed FDEP's requests.	Active					Y					
Florida Power & Light Lansing Smith Plant	Bay County	FL	CCW DC Ass #36	SI	No	1965	Pre-1985	GW	Cd, Cr, F, Cl, Sf, Mn, Fe		None; impact restricted to ZOD	Active	According to the Utility, groundwater impacts are reported to occur within the approved FDEP ZOD, so they are in compliance with FDEP's groundwater regulations.									
Seminole Generating Station – Seminole Electric Cooperative	Palatka	FL	Out of Control #3	LF; 5 Ruoff and process Ponds	LF: Yes; 3 SIs: Some Yes	1984	2004	GW & SW	As, Pb, B, Fe, Cl, Sf, TDS	As, B, Al	State required Interim Remedial Action Plan (groundwater capture system and remedial monitoring)	Active	Landfill - stabilized FGD. State claims impact is limited to the Zone of Discharge (ZOD).					Y				
George Neal Station North Landfill - MidAmerican Energy	Sergeant Bluff/Sioux City	IA	In Harm's Way #5	LF & 3 SIs	LF: No; SIs: No	LF: 1978; 2 SIs: 1972; 1 SI: 1975	2001	GW (LF)	As, Fe, Mn, Sf		IDNR requested MidAmerican to provide more evidence for their claim that arsenic contamination comes from an offsite source. Issue is still under consideration.	Some Active, some not	The Utility suggested that the up-gradient arsenic contamination was due to up-gradient sources and is not CCR-related. *In Harm's Way* counters that some of the up-gradient wells are improperly classified because groundwater does flow from the monofill towards these wells due to mounding.									(Y)*
George Neal Station South Ash Monofill - MidAmerican Energy,	Salix	IA	In Harm's Way #6	LF	?	Early 1980s	2000	GW	As, Fe, Mn, Sf, Ba, Se, Zn		IDNR requested (2005) that future groundwater reports from MidAmerican discuss potential for groundwater mounding under the LF, evaluate if listed wells are truly "upgradient," discuss potential for migration and possible receptors. The	Active	There are indications that the only "up-gradient" monitoring point (MW4) has been affected by CCR constituents as a result of groundwater mounding within the landfill. MidAmerican and IDNR claim that the background levels of arsenic naturally exceed the MCL at the site.			Y						
Muscatine Co. LF		IA	CCW DC Ass #64	2 LFs	2: No	1964; 1975	Pre-1987	GW	Se, Sf		Capping and seeding; groundwater monitoring/study. No further state remediation action.	Some Active, some not	Not certain that the active landfill is co-located with the closed landfill. Limited-size landfill and plume with no down-gradient recipients. A 1987 scientific article concluded that "the pollution potential for this small upland LF appears limited to a small area, and is unlikely to adversely affect any water supplies utilized by humans in the near future."			Y						Y
Ameren (formerly: Central Illinois Light Co.) Duck Creek Station	Canton	IL	CCW DC Ass #47	SI	No	1976	1999	GW	Mn, Fe, Cl, Sf, TDS		Closure of unlined SIs, including dewatering; overhaul of monitoring well system. Remedial action under development.	Some Active, some not					Y	Y				Y
Ameren (formerly: Central Illinois Public Service Co.) Hutsonville Power Station	Hutsonville	IL	CCW DC Ass #53	SI	No	1968	2000	GW	Mn, B, Sf, TDS		CO to close unlined SI and replace w/2 synthetically-lined SIs. Groundwater program in effect.	Some Active, some not	SI removed from service in 2000.		Y		Y					(Y)*
Ameren Coffeen/White & Brewer Trucking Fly Ash LF	Coffeen, Montgomery County	IL	CCW DC Ass #56	LF	No	1977 or earlier	GW: 1984; SW: 1995	GW & SW; stressed vegetation	Cd, Ni, Tl, Mn, Fe, B, Ba, Sf, TDS	B, Sulfate, Ni, TDS, Mn, Fe, Zn, Cr	Leaking cells capped; groundwater monitor in effect. A 5/1995 memo documents areas of dead grass on-site, due to	Inactive	An approved GMZ; as of 10/2011, further assessment is underway.			Y						Y
Commonwealth Edison Powerton Plant – Mahoney LF	Pekin, Tazewell Co.	IL	CCW DC Ass #40	LF	Poz-O-Pac (ash w/lime)	1972	Pre-1985	GW & SW	Pb, Fe, Mn, Ca, Nitr, Sf	Pb, Fe, Mn, Ca, Nitr, Sf	?	Inactive/1982										
Dynegy Midwest (formerly: Illinois Power Co. Hennepin Power Station	Hennepin	IL	CCW DC Ass #48	SIs	2: No	1952; 1958	1989	GW	Fe, Mn, B, Sf, TDS		CO by State. Old SI closed in 1996, replaced with a lined SI.	Some Active, some not	An approved GMZ.		Y		Y					Y
Dynegy Midwest (formerly: Illinois Power Co.) Havanna Power Plant	Havanna	IL	CCW DC Ass #49	2 SIs	1: No	1947	1989	GW	Mn, B, Sf		Consent Order; Closing by State/2009.	Some Active, some not			Y							Y
Dynegy Midwest (formerly: Illinois Power Co.) Wood River Power Station	Alton	IL	CCW DC Ass #54	SI	No	1978	1989	GW	Mn, Fe, B, Cl, Sf, TDS		CO (switched to dry handling; groundwater monitor program). An approved GMZ.	Active/ modified	In late 1990s, two cells were lined: one-double clay w/leachate collect, one composite (45-mil HDPE/clay)		Y							Y
Dynegy Midwest (formerly: Illinois Power) Vermillion Power Station	Oakwood	IL	CCW DC Ass #52	2 SIs	No	1989	Pre-2000	GW	Sf, TDS		Study; groundwater monitoring program.	Active	Utility claims contamination related to coal mining. A GMZ application, and a Corrective Action Plan (including a Closure Work Plan) to deal with contamination issues at the site was due 4/1/2012.			Y	Y	(Y)*				(Y)*
Joliet Generating Station 9 – Lincoln Stone Quarry Landfill - Midwest Generation	Joliet	IL	In Harm's Way #8	LF in former quarry; 2 SIs	No	1962	1994	GW	As, Se, Cd, Ba, Cu, B, Mo, Sf, Ammon, TDS, pH		IEPA issued a NOV (8/2009) for "failure to operate a leachate collection and management system that assures the protection of Class I potable resource groundwater", identifying 50 exceedances of groundwater standards in 10 wells. IEPA approved a	Active	MG offered to either buy out the properties or drill new, deeper wells for the affected residences. There are presently two Ground Water Management Zones (GMZs) designation for the landfill area (with a potential for allowing off-site contamination of groundwater within one of the GMZs).	Y		Y	Y	Y				
Marion Plant - Southern Illinois Power Cooperative	Marion	IL	In Harm's Way #9	1 LF; 7 SIs	LF: No; 6 SIs: No; 1 SI: Yes	1963	1994	GW & SW	Cd, Fe, Sf, B	Al, B	IEPA asked the Utility for and approved a "hydrogeologic assessment plan" to determine the source and extent of elevated Fe and Cd contamination at the site, including an upgrade and extension of the monitoring well system.	Active					(Y)*					
Venice Power Station – Union Electric/Ameren/AmerenUE	Venice	IL	In Harm's Way #10	3 SIs	No	1950s	1995	GW	As, Cd, Fe, Mn, B, TDS		None, but proposed closure of the SIs through capping and a GMZ.	Inactive	As part of the plan for final closure of the SIs, AmerenUE proposed (3/2010) final capping and a "Groundwater Management Zone" to contain contaminant plumes within the property.			Y						Y
Clifty Creek Station, Indiana-Kentucky Electric Corporation	Madison	IN	Out of Control #7	LF & SI (Boiler slag)	No	SI: 1955; LF: 1991	2002	GW	B, Mn, Fe, Sf		Assessment Monitoring. IDEM claims that the parameters that are detected in the monitoring program are reflective of the active total chemistry of the formation, including levels of manganese, magnesium, and iron that exceed secondary MCLs in	Active	State and Utility claim that the as of 10/2011 flow discharges to the Ohio River and does not risk any drinking water resources.			Y	Y					
Hoosier Energy Merom Generating Station CCW LF		IN	CCW DC Ass #60	2 LFs	Area 1: No; Area 2A: Clay	1982; 1994	1987; 1990	GW & SW; Fugitive Dust	Ba, Cr, Cd, Pb, Sf, Cl	SW: Se	State: Corrective Action and groundwater monitor for groundwater impacts. (Federal: Consent Decree for emission violations)	Some Active, some not	A 5' clay liner ($1x10^{-6}$ hydraulic conductivity). Also: "Poz-O-Tec" (processed ash and FGD waste).		Y			Y				
Indiana Power & Light Petersburg Generating Station		IN	CCW DC Ass #59	LF	No	1976	1997	GW	Sf, TDS		None	Active	IDEM accepted Utility's claim that impacts are due/inseparable from those caused by coal mining activities									
NiSource (formerly: NIPSCO) Bailly Generating Station	Chesterton	IN	CCW DC Ass #44	2 SIs, 2 LFs	2 LFs and 2 SIs: No	1962-1970s	1976	GW, SW, Ecologic (?) (stressed vegetation)	As, Pb, (Cd?), Al, B, Mn, Mo	SW: B, Mn; Sediment/Soil: Cd, As, Se, B, Mo, Al, Cr	RCRA EPA Corrective Action, monitoring wells, Baseline Ecologic Risk Assessment; NIPSCO required to investigate whether contamination from the site is affecting soil, groundwater, or Lake Michigan.	LFs: Inactive (1976, 1986); SIs: Active	Near the Indiana National Lakeshore on Lake Michigan. In 1978, the SIs were dredged then lined with a composite liner (HDPE over clay).			Y	Y	Y				
NiSource (formerly: NIPSCO) Michigan City Site	Michigan City	IN	CCW DC Ass #43	2 SIs	2: No	1974	Pre-1982	GW	As, Pb(?)		Located on highly permeable sands on the shore of Lake Michigan, w/GW flow towards the Lake. Steel slurry wall down-flow	Active	While no wells were placed off-site, Dames & Moore concluded that a steel slurry wall downflow from the disposal site, in addition to natural attenuation, mitigated and limited the				Y	Y				
R.M. Schafer Generation Station		IN	CCW DC Ass #55	LF	No	1984	Pre-1993	GW	Fe, Mn, Mo, B, Sf, Cl, Na		Original unlined cells capped; switched to dry handling; groundwater monitoring in effect.	Active/ modified	Phase III & IV have composite liner w/leachate collection.				Y					Y
Southern Indiana Gas & Electric Co. A.B. Brown Generating Station		IN	CCW DC Ass #57	LF	No	1979	Pre-1987	GW	Al, Sf, Cl, TDS, pH		A slurry wall was installed in the NE corner of the original LF in late 1987. Leaking cells capped; groundwater monitor in effect.	Some Active, some not	An FGD solids landfill; compacted clay liner in expanded landfill area.				Y					Y
Cinergy East Bend Scrubber Sludge LF	Rabbit Hash	KY	CCW DC Ass #35	SIs; LF	3 SIs: No LF:?	1980	1981	GW	Fe, Sf, TDS		Extended monitoring, groundwater studies and a Risk Assessment.	Active				Y	Y					
Mill Creek Station – Louisville Gas &Electric	Louisville	KY	In Harm's Way #11	3 LFs; 1 Ash SI; 4 FGD process ponds	2 LFs: No; 1 LF: Yes; Ash SIs: No; FGD ponds: ?	1972	1994	GW	As, Sf, TDS		KY has discretion, under 401 KAR 45:160 Sect.1, to require or not require a groundwater corrective action. The O/O is currently not required to perform a corrective action. Assessment monitoring for sulfate is currently required.	Active	KDWM required a risk evaluation and river sampling to demonstrate that the effects of CCR management at the site would not negatively affect human health or water quality in the Ohio River. The findings of these studies confirmed no impacts to human health or the environment. In addition, groundwater flow for the location is in the direction of the Ohio River and there are no residential wells (or non-company owned properties) between the plant and the River. All local households are connected to public water supplies.			Y	Y					
Shawnee Fossil Plant - TVA	Paducah	KY	In Harm's way #12	2 LFs & 2 SIs	LFs: No; SIs: No	SIs: 1950s and 1971; LF: 1984	1980s	GW & SW	As, Se, Cr, Pb, Be, Co, Ni, Mo, V, Sulfate, TDS, B, pH	Reddish Leachate	A groundwater assessment was performed at the site in the 1980s; no KDWM enforcement action since. KDWM permitted (in 2007) the expansion of the LFs without a liner (as "special waste landfills"), over old, unlined ash ponds.	Some Active, some not	Groundwater has been assessed onsite; however, no offsite groundwater data are available. Metal constituent monitoring started only in 9/2008.				Y					
Spurlock Power Station - Eastern Kentucky Power Cooperative	Maysville	KY	In Harm's Way #13	LF & SI	LF (1996 expansion): 2' compressed clay; SIs: ?	LF: 1982; SI: 1976	2005	GW	As, Sf, TDS		EKPC has been directed by the KDWM to conduct an assessment in wells MW-2A & MW-3A, to determine the cause of the *detection of arsenic in MW-3 at a concentration exceeding the permit limit*. The Commonwealth of Kentucky did require a Remedial Action Plan under its regulations and, as noted above, the plan has been approved and the cooperative has implemented it.	Active	The Kentucky Division of Waste Management is unable to determine the location of any well or the direction and rate of groundwater flow at the site because it does not require that a potentiometric surface diagram be submitted with groundwater reports. In its comment to the docket, KDEP states that there only appears to be one residential well down-gradient from the landfill within the two-mile radius. This well needs to be investigated for its actual use, as it appears it may be on the power plant's property.				y	(y)*				
Big Cajun 2 Power Plant – NRG/Louisiana Generating	New Roads	LA	In Harm's Way #14	5 SIs & Surge treatment ponds	3 SIs: clay; 2 SIs: ?	1980	1989	GW	Se, Ca, TDS		LDEQ issued a Notice of Deficiency (NOD) during permit renewal regarding inadequacy of monitoring well system and required that 10 additional downgradient wells be installed. No other regulatory corrective action or administrative ruling.	Active	The higher groundwater elevations in the pond area wells suggest groundwater mounding beneath the ponds due to leakage, causing localized reversal of groundwater flow to the west away from the Mississippi River.	y		y						
Dolet Hills Power Station - CLECO Power	Mansfield	LA	In Harm's Way #15	1 LF & 9 SIs	LF: ?; 2 ash ponds: clay; 7 SIs: ?	1986	1992	GW	As, Pb, Se, Sf, Ca, TDS, pH, Alkalin, Sp. Conduct.		LDEQ required (2008) on-site assessment monitoring.	Active					y					
Rodemacher Power Station - CLECO Power	Lena	LA	In Harm's Way #16	1 LF; 1 leach pond; 2 ash SIs; 4 other ponds	2 ash ponds: clay; 5 leach & wastewater ponds: 60-mil HDPE	SIs: 1982; Leach pond: 2009	1983	GW	As, Pb, Cl, TDS, pH, Sf, Sp. Conduct.		LDEQ required (2008) on-site assessment monitoring.	Active					y					
K.R. Rezendes South Main St Ash LF, PG&E (compare with CCW DC Ass #72, 'Copicut Road', and footnotes #135 and #141 therein)	Freetown	MA	CCW DC Ass #25	S&G Pit; structural fill	No	1976	2001	GW	Se, Sf, Mn, Fe, Al, TDS		CO, a partial cap.	Inactive 2001	Operations at the landfill ended in 2001 as the result of a bylaw passed by the Town of Freetown. The bylaw bans the disposal of coal combustion wastes within the town.		Y		Y					Y
Brandywine Coal Ash LF – Mirant Mid-American	Brandywine, Prince George's County	MD	Out of Control #8	LF, 4- leachate ponds, wastewater ponds	LF: No – all but one pit (Composite liner since 2007); Ponds: Yes	1970; 1971	2002	GW & SW; Fugitive Dust (?)	Cd, Fe, Al, Mn, Sf, Cl, TDS	Cd, Pb, Se	In 4/2010, MDE filed suit in federal court maintaining that the disposal site was leaching pollutants in violation of the CWA and state law	Active							Y			
Mirant Dickerson's Generation Station's Westland Disposal Site	Dickerson, Montgomery County	MD	BNA, 1/5/2011	1 LF; 4(?) ash settling and leachate treatment ponds	'Inadequately lined'	1959; 1962	2010 (?)	GW & SW	Al, As, Ba, Cd, Cr, Co, Cu, Fe, Pb, Mg, Mn, Ni, Se, Zn, Cl, Sf	Al, As, Ba, Cd, Cr, Co, Cu, Fe, Pb, Mg, Mn, Ni, Se, Zn, Cl, Sf, pH, TSS	MDE filed notices of intent to sue Mirant Mid-Atlantic LLC in federal court (1/2011) for alleged water pollution violations.	Active							(Y)*			
Consumers Energy BC Cobb		MI	EPA-HQ-RCRA-2009-0640-6815, Attach #5	LF	No	1970	?	GW	B, Li		?	Inactive 1982	Exceedances of the state's health-based standards for boron and lithium.									
Consumers Energy J.H. Campbell		MI	EPA-HQ-RCRA-2009-0640-6815, Attach #5	SI	No?	1962	?	GW & SW/Potential for ecologic	Se, B, Li, Sb	Se, B, Li, Sb	?	Inactive 1998	Exceedances of the state's health-based standards for selenium, boron, lithium, and antimony, and release to Pigeon River: J. M. Besser et al., Ecotoxicology & Envir Safety 35, 7-15 (1966).									
John Warden Ash Site	Baraga	MI	EPA-HQ-RCRA-2009-0640-6815, Attach #5	LF	No	1974	?	GW & SW	B, Li		?	Inactive 1993	Exceedances of the state's health-based standards for boron and lithium.									
Karn/Weadock Generating Facility – Consumer Energy	Saginaw	MI	Out of Control #9	2 SIs	No	1959; 1961	1982	GW	As, B, (Hg, Li)		Consent Decree requires slurry walls to be built to stop leakage, and monitoring of groundwater/surface water interface. Due	Active	MDEQ recently claimed that under the revised "mixing zone" standards, and State revisions for boron and arsenic standards 'based on new science', the discharge levels of these landfills		Y	Y	Y	Y				(Y)*
Marquette Board of Light & Power Pine Hill	Marquette	MI	EPA-HQ-RCRA-2009-0640-6815, Attach #5	LF	No	1985	?	GW	B, Li, Na		?	Inactive 1995	Exceedances of the state's health-based standards for boron and lithium.									
Muskegon County Type II LF	Muskegon Co.	MI	EPA-HQ-RCRA-2009-0640-6815, Attach #5	LF	No	1980	?	GW	B, Mn		?	Inactive 2001	Exceedances of the State's health-based standards for boron and manganese.									
We Energies Presque Isle Power Plant	Marquette	MI	EPA-HQ-RCRA-2009-0640-6815, Attach #5	LF	No	1979	?	GW	B, Li, Na		?	Inactive 1993	Exceedances of the state's health-based standards for boron and lithium.									
Xcel Energy/Southern Minnesota Municipal Power Agency (Sherco) Generating Plant	Becker, Sherburne Co.	MN	CCW DC Ass #41	4 SIs, 1 LF, recycling basin	2 SIs: Clay	1975	Pre-1985	GW	As, Cd, Cr, F, Pb, Cu, Fe, Mn, Zn, Cl, Sf, Nitr		None(?); not clear whether the capping/closing and active dewatering of Pond #1 are in response to state requirements.	Some Active, some not.	According to the Utility, arsenic, barium, chloride, Copper, fluoride, lead, sulfate, and zinc were only detected in samples collected from wells screened in the CCP pond.									Y
Asheville Steam Electric Plant, Progress Energy	Arden	NC	Out of Control #16	2 SIs (one of which serves as a constructed wetland)	2 SIs: No	1964; 1982	2007	GW	Fe, Mn, B, pH (Cr, Pb, As, TDS)		None. DWQ has sent a letter to PE, directing them to place wells at their Compliance Boundaries.	Active	The State has no plans of taking regulatory action until groundwater contamination reaches the compliance boundary. In the wake of EPA's followup on citizen complaints in public hearings, additional groundwater monitoring wells were installed at the Compliance Boundary in 2/2011, and DWQ is evaluating groundwater monitoring data to determine if any			Y						
Belews Creek Steam Station, Duke Energy	Belews Creek	NC	Out of Control #15	3 LFs & 1 SI	3 LFs: geosynthetic; SI: No	LFs: 1974, 2007, 2008; SI: 1974	2005	GW & SW	Pb, As, Se, B, Mn, pH, Sf, Nitr	B, Fe, Mn, Sf, TDS	Groundwater Corrective Action Plan and Closure of the Pine Hall Road LF, but not for the other two LFs. DWQ has sent a letter to PE, directing them to place wells at their Compliance Boundaries. Detection monitoring at all the 3 LFs 'is moving toward assessment monitoring'.	Some Active, some not	State and industry claim that iron and manganese are due to background levels. This very power plant was associated with the Belews Lake ecological damage case.				(Y)*					
Cape Fear Steam Plant – Progress Energy	Moncure	NC	Out of Control #13	5 SIs (one of which is active)	No	1956; 1963; 1970; 1978; 1985	2007	GW	Pb, B, Cr, Fe, Mn, Sf		None. NC DENR has not required any corrective action: DWQ has sent a letter to PE, directing them to place wells at their Compliance Boundaries.	Some Active, some not	The State has no plans of taking regulatory action until groundwater contamination reaches the compliance boundary.									
Dan River Steam Station - Duke Energy	Eden	NC	In Harm's Way #18	2 SIs & LF	No	LF: 1949; SIs: 1956 & 1976	1993	GW	Pb, Cr, Ag, Fe, Sf		State will not require action until contamination is outside the "compliance boundary." Additional GW monitoring wells were installed at the Compliance Boundary in 2/2011, and DWQ is evaluating GW monitoring data to determine if any additional	Some Active, some not	The landfill has been capped and is now inactive; the rest of the power plant is to be soon decommissioned.				y					y
Duke Power Allen Steam Generating Plant	Belmont	NC	CCW DC Ass #34	SIs	2: No	1957; 1973	1985	GW	Mn, Fe, B, pH		None: NC DENR does not require groundwater monitoring; has no record of groundwater monitoring; no indication that violations or enforcement actions occurred.	Some Active, some not	Past study showed high levels of Fe and Mn in background soils, as well as exceedences of SMCLs for Fe and Mn in background GW and the river/lake up-gradient and upstream of the site, at levels similar to those seen in the wells immediately adjacent to the ash ponds.			Y						
Lee Steam Plant – Progress Energy	Goldsboro	NC	Out of Control #12	SI	No	1951	2007	GW	As, B, Mn, Fe, pH		None. NC DENR has not required any corrective action: DWQ has sent a letter to PE, directing them to place wells at their Compliance Boundaries.	Active	The State has no plans of taking regulatory action until groundwater contamination reaches the compliance boundary.									
Sutton Steam Plant – Progress Energy	Wilmington	NC	Out of Control #11	2 SIs	1972: No; 1982: Clay	1972; 1982	2006	GW	As, Fe, Mn, B		A NOV (1987) and request for corrective action; a CO (2004) was terminated by the company (2007) following a "Site Reassessment Report" by NCDENR which recommended the site be re-designated as "No Further Remedial Action Planned".	Active	The site has been the subject of several EPA investigations under Superfund (CERCLIS # NCD000830646).	Y	Y	Y	Y					
Basin Electric, W.J. Neal Plant	Velva	ND	CCW DC Ass #23	SI	No	1950s	1982	GW & SW; Sediments	Cd, Pb, Zn, Al, As, Cr		State issued a special use disposal permit to allow disposal to continue, but required continued monitoring and site closure.	Inactive 2000	Unclear whether an impacted drinking water well was located on-site or off-site.				Y					Y
Great River Energy Coal Creek Station	Underwood	ND	CCW DC Ass #24	SIs and ash contact evaporation ponds (Zero discharge facility)	2: Yes	1978; 1979	1979	GW	As, Se, Sf, B, Fe, Na, Cl, TDS		State required relining of SIs in 1990; groundwater monitoring in effect.	Active	All ponds were relined with composite geosynthetic/clay liners. This case is a possible candidate for categorization as a proven damage case.			Y						Y
Leland Olds Station - Basin Electric Power Cooperative	Stanton	ND	In Harm's Way #20	5 SIs	SIs 1-3: No; SIs 4-5: Probably No	1966; 1975 (2); 1985; unspecified	1985	GW & SW	As, Pb, Se, B, TDS	(Se, B)	None	Some Active, some not	Groundwater has been evaluated onsite; however, no offsite assessment or monitoring has been required.									
Montana-Dakota Utilities R.M. Heskett Station		ND	CCW DC Ass #66	LF/Ash Pile	No	1954	1998	GW	Se, B, Mn, Sf		State required corrective action: site capped and closed; groundwater monitoring in effect.	Inactive					Y					Y
Sheldon Station – Nebraska Public Power District	Hallam	NE	In Harm's Way #21	1 LF (closed)	No	1989	1999	GW	Se, Sf, Cl		NDEQ required the Utility to install additional wells and extended post-closure groundwater monitoring period from 10 to 15 years due to evidence of contamination. In December 2010 additional wells were installed in the down gradient direction from the LF. The facility will conduct six semi-annual sampling events of all groundwater monitoring wells around the facility and perform statistical analysis of these results.	Some Active, some not	NDEQ argues that selenium and sulfate exist as naturally occurring minerals throughout the region. In evaluation of the site, the natural occurrence of both substances is being considered, as well as the possibility of a localized discharge of cooling tower water used for fire suppression or similar power plant activity.				Y					
AES Creative Resources Weber Ash Disposal Site		NY	CCW DC Ass #27	LF & SI	20 mil PVC/leach collect	1978-80	1991	GW	Sf, Mn, Fe, Al, TDS, pH		CO. Closed and capped; groundwater monitoring in operation.	Inactive 2001			Y		Y					Y
C.R. Huntley Flyash LF	Tonawanda	NY	CCW DC Ass #29	4 LFs	4 Closed: No Phase II: Yes	Early 1970s	?	GW, SW	As, Fe, Mn, Sf, TDS	Fe, TSS	In 7/2006, State Administrative Penalty Order ($500) for oil leak in discharge.	Some Active, some not	Phase II landfill not implicated		Y							
Central Hudson Gas & Electric Corp. Danskammer Waste Management Facility, , NY	Newburgh	NY	CCW DC Ass #28	LF	No	1959	?	GW	As, Se, Fe, Mg, Mn, Na, B, Sf, Sulf, TDS, pH		Corrective Measure Assessment.	Active	Currently, owned by Dynegy's Northeast Generation Inc.			Y						
Cardinal Fly Ash Reservoir (FAR) 1 & 2 – AEP	Brilliant	OH	In Harm's Way #23	LF (FGD) & 2 SIs	LF: Synthetic; SIs: No	SIs: 1973 & 1987; LF: Post-2000	1993	GW & SW	As, B, Mo	As, Mo	The OH EPA placed (2004) four Groundwater monitoring wells under "assessment monitoring" due to evidence of CCR	Some Active, some not	The Tidd-Dale Subdivision, about 2000' from the FAR 2 Dam, relies on private drinking water wells (at least nine wells). The latest potentiometric map of the power plant suggests that this				Y					
Cincinnati Gas & Electric Co. Miamiview LF		OH	CCW DC Ass #58	S&G Pit	Clay	1983	1994	GW	Mn, Sf		Closed and capped.	Inactive						Y				Y
Cinergy W.C. Beckjord Station	New Richmond	OH	CCW DC Ass #61	SI	No	1956	1985	GW	Se, Sf		Groundwater investigation and remediation oerformed, monitor wells in effect. Ohio EPA encouraged the facility to install an interceptor well, but there was no formal compliance action. The one public water supply well that was located on site has	Active/ modified	[NOVs (EPA) for emission/PM violations in the late 1990s.]				Y	Y				
General James M. Gavin Power Plant – AEP/Ohio Power	Cheshire	OH	In Harm's Way #24	6 LFs & 2 SIs	LFs: Composite; SI: Geosynthetic	SIs: 1974; LFs: 1994, 1996, 1998	1994	GW & SW; Ecologic	As, Ba, Cd, Pb, Mn, Mo, Gross Alpha, Cl, TDS	B, Al, Ni, Zn	OH EPA required assessment monitoring onsite to determine extent and rate of contamination and to address the contamination.	Some Active, some not	OH EPA increased the plant's allowable daily maximum concentration for boron in 2009 so it no longer exceeds NPDES requirements; it has also set water quality criteria for Kyger Creek for several metals that are all much higher than for the Ohio River; this results in significant mortality rate of the fathead minnow next to the outfalls' mixing zone.				Y					Y
Muskingum River Plant – AEP/Ohio Power	Beverly	OH	In Harm's way #26	SI	No	1968	2005	GW & SW	Ba, Fe, Sf, Gross Alpha, TDS	As, Ba, Hg, Sf	OH EPA mandated AEP (2004) to implement a groundwater monitoring plan and install 15 Groundwater monitoring wells, four groundwater elevation monitoring wells, and five piezometers. However, OH EPA does not support the conclusion that the Power plant has demonstrated an indication of an impact on groundwater quality.	Active					Y					
Northeastern Station Ash LF, AEP/Public Service Co. of Okla	Oologah	OK	In Harm's Way #27	LF	No	1978	2008	GW	As, Ba, Cr, Pb, Se, Tl, V, Sf, pH		ODEQ required AEP (9/2007) to establish a groundwater monitoring program at the LF (26 wells). Concerned about the karstic milieu and the proximity to the Verdigris River, ODEQ required further investigation and possible remedial action.	Active	AEP has submitted a proposal to construct a slurry wall and grout curtain barrier along the length of the LF facing the Verdigris River, as well as a proposal to ensure rainwater infiltration into the LF proper is minimized/ eliminated.				Y	Y				
Hunlock Power Station – UGI Development Co.	Hunlock Creek	PA	Out of Control #23	2 SIs	Partial, in situ clay	1959	2000	GW & SW; Soil	As, Fe, Mn, Li, Ba, B	SW: As; Soil: As, Se	PADEP ordered groundwater assessment (2008) to delineate source and extent of contamination. As of early in 2010, PADEP was assessing monitoring data for well network adequacy to determine the scope of abatement necessary under closure.	Inactive	As of 5/22/2010, the Hunlock power plant is no longer operative, including all the associated disposal activities.				Y					(Y)*
Mitchell Power Station, Allegheny Energy	Courtney	PA	Out of Control #19	LF; 2 Wastewater lagoons	LF: No; 2 wastewater lagoons: compacted soil/bottom ash	1963	1998	GW Fugitive Dust	As, B, Mo, Ni, Mn, Fe		None (State law does not require state response to onsite exceedances of secondary MCLs); NOV for fugitive dust.	Active	State claims that elevated levels of iron and manganese and sporadic low levels of arsenic and boron are attributed to AMD created by past mining of the Pittsburgh Coal Seam upgradient of the site. USWAG claims that the data should be more appropriately compared to Pennsylvania Statewide Health Standards of medium specific concentrations (MSCs) for non-									
Phillips Power Plant – Duquesne Light Co.	Crescent Township	PA	Out of Control #20	LF (FGD); 2 SIs	LF: Yes? Leachate collection; SIs: No	1969	SIs: Late 1980s; LF: mid-1990s	GW	Al, Mn, Cl, F, TDS		Consent Order and Agreement was signed in 1990 providing several options to remediate contamination source; included $50,000 penalty for discharge violations.	Inactive; early and late-1990s	In the late 1980s, several water supply wells of the Cresswell Heights Joint Municipal Water Supply in Beaver County, Pennsylvania were contaminated with high levels of TDS from the two coal ash ponds. PADEP claims that the decommissioning of the SIs was due to closing of the power plant and not required by legal action.		Y		Y					
Portland Generating Station's Bangor Quarry Ash Disposal Site – RRI Energy, Inc	Bangor, Northapmton County	PA	Out of Control #24	LF in a quarry; Stormwater sedimentation & leachate collection ponds	60-mil LLDPE geomembrane over 6" fly ash sub base.	Pre-1995	GW: 2001; SW: 2006	GW & SW	Al, Mn, Fe, F, Sf, TDS	Cr +6, Se, Cd, B	None (State law does not require state response for onsite exceedances of secondary MCLs). PADEP states that the exceedances in the surface water are also present in the up-gradient surface water sample. Unless demonstrated that the intermediate and down-gradient surface water samples show change in parameter concentration that are indicative of	Active	RRI claims that there are no permit limits stipulated for discharges of boron, cadmium, and selenium into Brushy Meadow Creek from Outfall 002. As to unpermitted discharges of boron, cadmium, hexavalent chromium, and selenium into Brushy Meadow Creek from Outfall 001, RRI claims that the CCC is not an end of the pipe standard, but rather a standard used in modeling of allowable downstream levels of a pollutant.			(Y)*						
Seward Generating Station – RRI Energy, Inc.,	New Florence	PA	Out of Control #21	2 unpermitted LFs; Co-disposal coal ash/coal refuse pit	No	1954	2004	GW & SW	Sb, As, Cd, Cr, Pb, Se, Al, Fe, Mn, Ni, Zn, Cl, Sf, TDS	Al, Ni, Zn, Fe, Mn, pH	CO (1982) for closing of unpermitted pits and $308,000 fine for violating SWM Act. COA (2000); several COAs to cease discharge from coal ash/coal refuse pit.	Inactive	PADEP and the power plant claim that is the legacy of the original Seward Power Station that has been demolished; and the neutrailzation of old coal refuse with FBC ash used for the foundation of the newly constructed Co-Gen plant.		Y	Y						Y
Grainger Generating Station South Carolina Public Service Authority	Conway	SC	Out of Control #27	2 SIs	No	1966 & 1977	1996	GW	As, pH		SC DHEC required a proposal (2009) for stabilizing arsenic exceedances in three monitoring wells or a corrective action plan. DHEC also indicated that no remediation of the SIs is being conducted, that ongoing assessment activities are "informal," and no violations or orders have been issued to the site owner.	Active				Y	(Y)*	(Y)*				
Wateree Station – South Carolina Elctric & Gas	Eastover, Richland County	SC	Out of Control #25	2 SIs in former S&G open pit in river bed; additional, non-implicated WUs	No	1970	1997	GW & SW; Potential ecologic damage (arsenic in fish)	As (Cr, Cd, Pb)	As	CO (2001) in response to monitoring well violations of arsenic seeping from the SIs. It established a Groundwater Mixing Zone, with waivers for arsenic (3000 ppb), sulfate, lead, chromium, and cadmium. On 10/14/2011, SCE&G signed a private, legally non-binding Memorandum of Agreement (MOA) with DHEC. The MOA sets out an anticipated timeline in which SCE&G	Active	The site is upstream of the Congaree National Park, one of the largest contiguous sections of floodplain forest in North America. Neighboring landowners filed lawsuits (2009) to stop contamination from reaching their properties.		Y				Y			
Cumberland Steam Plant – TVA	Cumberland City	TN	In Harm's Way #32	2 SIs (one of which is active) & Ash stack	SIs: No	1969	2008	GW	As, Se, B, Al, Fe, Mn, Cl, Sf, TDS		None. Apparently, state law does not require a response to onsite exceedances.	Some Active, some not	The construction of two CCR storage-disposal areas on top of earlier SIs and on top of a former creek channel, have created conditions conducive to groundwater contamination.									
Gallatin Fossil Plant – TVA	Gallatin	TN	In Harm's Way #33	3 SIs	No	1959	2008	GW	Cd, Hg, Be, B, Ni, Co, V, Fe, Mn, Sf, TDS		Groundwater Assessment Plan in place since 4/2011.	Some Active, some not	Adjacent to the Cumberland River, in Karstic terrain.				Y					Y
John Sevier Fossil Plant – TVA	Rogersville	TN	Out of Control #28	1 SI converted into dry stacking; 1 SI	No	1955; 1979	?	GW & SW; Dam Failure (1973)	Cd, Al, Mn, Sf	Cd, As, Mn	None. Apparently, state law does not require a response to onsite exceedances.	Active										
Johnsonville Fossil Plant – TVA	New Johnsonville	TN	In Harm's Way #34	2 SIs & 1 LF	1 SI: Clay; 2 SIs: No; LF: no	1952	1986	GW & SW	As, Cd, Pb, B, Mo, Al, Fe, Mn, Sf, TDS, Co	Mn, Fe, Al	None. Both New Johnsonville and the City of Camden intake their municipal water supplies from the Tennessee River near the power plant's outfalls. Despite evidence of surface water quality impacts from the power plant's CCR disposal, the state has not required the power plant to limit its discharge, monitor CCR disposal areas more frequently, or take any corrective action. The power plant quit monitoring in 1994.	Some Active, some not	One of the power plant's disposal units - an 87-acre unlined CCR SI - is located on an island in the Tennessee River.									
TVA Bull Run Steam Plant,	Oak Ridge	TN	CCW DC Ass #31	3 SIs	No	1965	1974	GW, SW	Sf, Al, Ca, Fe, As, B, Mn, Mo	Sf, Al, Ca, Fe	None, assuming dilution by the Clinch River. NOV for fugitive dust.	Active	Toxicity study indicated potential for ecologic damage.									
Fayette Power Project (Sam Seymour) – Lower Colorado River Authority	Le Grange, Fayette County	TX	In Harm's Way #35	2 SIs & 1 LF (FGD)	SIs: Clay; LF: ?	SIs: 1979 & 1988; LF: ?	2005	GW	Se, Co, Mo, Al, V, Mn, Sf, Cl, TDS		TCEQ required (2005) a selenium assessment at one of the SIs as the likely source of selenium; investigations remain underway. Assessment monitoring, capping/closure of leaking SI, and notification of residents in adjacent properties.	Active	The power plant is located on Lake Fayette. The Lake serves as a cooling reservoir and is also a popular recreational site for fishing and boating. Half of the CCR SI was closed down in 1988; the remaining part is to be closed by 2012 and switch to dry handling.				Y					(Y)*
Dominion Virginia Power's Battlefield Golf Course	Chesapeake	VA	CCR Proposed Rule, 6/2010	Structural Fill	No	2002-2007	2008	GW & SW	As, Cr, Pb, V, Cu, B	Tl, Cr, Pb, Al, Fe, Mn	In response to the City of Chesapeake's request, EPA conduct site inspection under CERCLA. Dominion Power undertook installing public water to the two closest communities. Lawsuit brought by citizens against the power plant and the gulf course owners. Dominion claims that the two lawsuits alleging groundwater contamination filed by residents of the neighboring community were dismissed by the Court based on the lack of factual or scientific support.	Inactive	The golf course is filled w/1.5 million cubic yards of fly ash, amended with 1.7% to 2.3% cement kiln dust. Virginia's Administrative Code allowed the use of fly ash as fill material without a liner as long as the fly ash was placed at least 2' above groundwater and covered by an 18" soil cap.			Y			Y		Y	
(Wisconsin Power and Light Co.) Alliant Edgewater 1-4 Ash Disposal site	Sheboygan	WI	CCW DC Ass #45	4 SIs	No	1969 (2), 1977 (2), 1985 (2)	1980s	GW	As, B, Fe, Sf, Cl, TDS		State required upgrade of groundwater monitoring, studies, and remediation.	Active	Ongoing monitoring at the site (including monitoring of the private wells) includes boron, sulfate, and arsenic. Previous monitoring included selenium, iron, fluoride, and chloride.			Y	Y	Y				Y
Dairyland Power Alma Cooperative On-site Fly Ash LF	Grant County	WI	CCW DC Ass #50	SI	No	1947	1975	GW	Mn, B, Sf, pH		AOC; requirement for additional monitoring wells; ultimately-site closure, now under post-closure monitoring.	Inactive	Site is in the Mississippi River's floodplain and ash fill may have been placed below the water table/surface water elevation. WDNR issued administrative order in 1975 for a groundwater study and if found necessary, for ultimate closure . Closure plan, approved in 1981, included groundwater monitoring. In 1986 WDNR required additional monitoring wells. A groundwater		Y		Y					Y
Dairyland Power Cooperative Alma Off-site Fly Ash LF	Belvidere, Buffalo County	WI	CCW DC Ass #51	SI, converted into LF	Clay	1983	1991	GW	Cd, Cr, Mn, Fe, B, Sf, TDS, conductance		Analysis of LF performance, better liner and mitigation study.	Some Active, some not	Ash was originally sluiced to this landfill. The facility switched to dry CCR handling in 1995.			Y	Y					Y
Dewey Ash Landfill (Wisconsin Power & Light/ Alliant Nelson)	Cassville, Grant County	WI	CCW DC Ass #15	2 SIs, 1 LF	No	Early 1960s	1986	GW	As, Se, B, Mn, Sf, F, TDS, pH		The State required an investigation of groundwater contamination, capping and closing.	Inactive 2001	The Barge Company (CRT) potable water well (located between the fly ash basin and the landfill) has been rendered unsuitable for drinking, due to contamination by sulfate, boron, fluoride, and TDS. SI capped and closed once the plant switched to dry handling. Soil at the site - unconsolidated, high-permeability glacial outwash (between about 10-2cm/sec and 10-									Y
Oak Creek Power Plant – Wisconsin Energy/Wisconsin Electric Power (Caledonia): SEE #38 UNDER *PROVEN*	Oak Creek	WI	In Harm's Way #39	3 LFs, 1 (inactive) structural fill	2 Inactive LFs: No; Active LF: Clay (Phase I); Composite w/leachate collection (Phase II)	1969, 1976	2002 or earlier	GW, SW	Mo, B, Mn, As, Hg, Sf, F	As, Cr, TCE, diesel	WDNER has been investigating (as of 6/2010) to better establish local background and gradients to determine if CCRs are source of exceedances.	Some Active, some not	Twelve offsite private wells found exceedances of molybdenum and boron. A consultant to WE determined that molybdenum in the private wells was not coming from CCR in the landfills. WE has been supplying (as of 8/2009) bottled water to several dozen residents in the area without assuming responsibility for the contamination.				Y				Y	
WEPCO Port Washington Facility/Druecker Quarry Fly Ash Site		WI	CCW DC Ass #17	S&G Pit	No	1948	1990s or earlier	GW	Se, B		The property with the quarry and impacted private well that had pre-remediation boron and sulfate exceedances was purchased by the utility and retired.	Inactive 1971	Operated from 1948-1971. A well located about 250' south of the old quarry was impacted by very high levels of boron (the state did not have a health-based standard for boron at the time of the exceedances).									Y
Wisconsin Power and Light Alliant (WP&L) Rock River Ash Disposal Facility	Rock County	WI	CCW DC Ass #42	SIs (ash disposal area and 4 settling	No	1954	1976-1977	GW	As, Hg, Fe, Sf, B, Ba, Al, TDS		Landfill was capped in 2007, included 2' of soil with 6" topsoil cover. Remediation has been performed, and a groundwater	Active	The power plant switched to natural gas in 2000.				Y	Y				Y
Wisconsin Power Supply Co. (WEPSCO) Pulliam ash Disposal Site	Green Bay	WI	CCW DC Ass #46	LF	No	1971	1994	GW	B, Mn, Fe, Sf, TDS		State required upgrade of GW monitoring and studies.	Inactive 1986	Landfill in a diked area built on a former shallow wetland. The site borders a significant water body (Green Bay) and fly ash may have been placed below the water table and/or surface water elevation.			Y	Y					Y
PacifiCorp Energy's Dave Johnston Power Plant, WY	Glenrock	WY	CCW DC Ass #65	3 LFs	3: No	Late 1960s; 1988	Pre-1985	GW, SW	Cd, Mn, Sf, B		No Information on State response. Studies indicate that cadmium and manganese are naturally occurring.	Some Active, some not	The testing documented in the 1988 RTC suggests uncertainty as to the cause of the impacts to downgradient groundwater because cadmium, manganese, and sulfate were also found in upgradient wells. The utility reports that a follow-up investigation found that the cadmium and manganese occur naturally.									

Note: **(Y)***: plan submitted for future action, or ongoing.

EPA Rejected Damage Cases

Facility	Location	State	References	Status/Rationale	Comments
American Coal Corporation #5 Landfill			CCW DC Ass #68	Rejected: No Information.	No Info
Cardinal PFBC Monofill	Brilliant	OH	CCW DC Ass #69	Superseded by *In Harm's Way* #23 (a Potential DC).	Re-categorized as a damage case
Cardinal Fly Ash Reservoir II Impoundment		OH	CCW DC Ass #70	Superseded by *In Harm's Way* #23 (a Potential DC).	Re-categorized as a damage case
Clinch River		VA	CCW DC Ass #71	Superseded by *In Harm's Way* #36 (a Proven DC).	Re-categorized as a damage case
Copicut Road Monofill	Freetown	MA	CCW DC Ass #72	Double count': Superseded by CCW DC Ass Case #25, K. R. Rezendes South Main Street Coal Ash Landfill (a Potential DC).	Re-categorized as a damage case
Dixie Caverns County Landfill	Roanoke Co.	VA	CCW DC Ass #73	Rejected: "The fly ash disposed at the site is emission control dust from an electric arc furnace, not fossil fuel combustion waste." No subsequent new information.	Out of Scope
Gavin Impoundments	Cheshire	OH	CCW DC Ass #74	Superseded by *In Harm's Way* #24 (a Potential DC).	Re-categorized as a damage case
Kyger Creek Power Plant Impoundments		OH	CCW DC Ass #75	Rejected: "Ohio EPA staff are unaware of any issues related to this pond." No subsequent new information.	Lack of verification by state regulator
Lake Erie, Ohio			CCW DC Ass #76	Superseded by *In Harm's Way* Case #17, 'JR Whiting generating Plant - CMS/ Consumers Energy' (a Proven DC).	Re-categorized as a damage case
Muskingum River Power Plant Impoundments	Beverly	OH	CCW DC Ass #77	Superseded by *In Harm's Way* #26 (a Potential DC).	Re-categorized as a damage case
Muskogee Environmental Fly Ash Disposal Site		OK	CCW DC Ass #78; EPA-HQ-RCRA-2003-0796-0019	Rejected: "There is insufficient information available to identify the extent and nature of damages present and attribute them to fossil fuel combustion wastes."	Inadequate information
Public Service Co Fly Ash Disposal Site		OK	CCW DC Ass #79; EPA-HQ-RCRA-2003-0796-0019	Rejected: "There is insufficient information available to identify the extent and nature of damages present and attribute them to fossil fuel combustion wastes."	Inadequate information
Star Coal Company #6 Landfill	Monroe Co.	IA	CCW DC Ass #80	Rejected: "No information available."	Inadequate information
Star Coal Company #14 Landfill	Monroe Co.	IA	CCW DC Ass #81	Rejected: "No information available."	Inadequate information
Stuart Station Impoundments/Dayton Power & Light Stuart Station		OH	CCW DC Ass #82	Rejected: "This site is categorized as a case without documented evidence of proven or potential damage to human health or the environment." No subsequent new information.	Inadequate information
Thompson Landfill		MI	CCW DC Ass #83	Rejected: "There is insufficient information available to identify the extent of ground water contamination, or to positively identify the source of the contamination."	Inadequate information
Turris Coal Company Elkhart Mine		IL	CCW DC Ass #84	Rejected: "An underground mine that disposes of coal processing waste and coal combustion waste in a diked surface lagoon...insufficient information to identify the extent of the contamination or confirm the source of the contamination."	Minefilling
Western Farmers Electrical Fly Ash Site	Chactaw Co.	OK	CCW DC Ass #85	Rejected: "There is insufficient information available to identify the extent and nature of damages present and attribute them to fossil fuel combustion wastes." No new information.	Inadequate information
Salem Acres Site	Salem	MA	CCW DC Ass #1; ICF (10/2010), Appendix A, P. 1	Rejected: "Contribution of FFC wastes to damage not separable from other wastes." ""The co-managed wastes contributed metal contamination indistinguishable from CCRs."	CCRs commingled with other waste
Vitale Fly Ash Pit	Beverly	MA	CCW DC Ass #2; ICF (10/2010), Appendix A, P. 2	Rejected: "Non-CCR wastes primarily USTs were focus of MADEP remediation."	CCRs commingled with other waste
VEPCO	Possum Point	VA	CCW DC Ass #4; ICF (10/2010), Appendix A, P. 4	Rejected: "Co-Managed CCR wastes without clear implication of CCR wastes in damages."	CCRs commingled with other waste
Mitchell Generating Station	Moundsville	WV	CCW DC Ass #31; ICF (10/2010), Appendix B, #31, p. 62	Rejected: " The site is reported to co-manage CCR and unspecified "coal mining wastes"; therefore the claim does not specifically implicate CCRs as a cause of damage to human health or the environment."	CCRs commingled with other (coal mining) waste
Four Corners Power Plant	Fruitland	NM	Out of Control # 17; ICF (10/2010), Appendix B, #17, p. 33	Rejected: "CCR is managed alongside mining wastes on the site, and the studies presented do not specifically implicate CCRs as a cause for contamination. The onsite water sample from a "well" in the CCR disposal area which had arsenic above the primary EPA MCL and boron above the EPA Child Health Advisory is arguably not a groundwater sample, but more representative of an ash pore water sample."	CCRs commingled with other (coal mining) waste
Lansing Station Ash Ponds and Landfill – Alliant/IP&L	Lansing	IA	In Harm's Way #7; ICF (10/2010), Appendix C, #7, p. 14	Rejected: *Inadequate Information* to uphold it as a damage case:"Groundwater exceedances of the primary MCL for arsenic and the EPA SMCLs for iron, sulfate, and manganese have been found onsite in only one well (MW11) during limited rounds. However, the ability of this well to provide representative groundwater samples is in question as it has been dry for all but three of the past 11 sample collection rounds. Therefore, there is inadequate information to determine if the observed sporadic groundwater contaminant concentrations are attributable to CCRs."	Inadequate information
Industrial Excess Landfill Superfund Site	Uniontown	OH	In Harm's Way #25; ICF (10/2010), Appendix C, #25, p. 52	Rejected: "Although there are numerous exceedances of primary and secondary EPA MCLs in both onsite and offsite groundwater, high incidences of cancer in the surrounding neighborhoods, and several regulatory actions, there are no explicit indications that CCRs are solely responsible for the damages. Large quantities of other non-CCR wastes have been co-managed at the landfill since the 1960s."	
Boardman Plant – Portland General Electric	Boardman	OR	In Harm's Way #28; ICF (10/2010), Appendix C, #28, p. 58	Rejected: *Inadequate Information* to uphold it as a damage case: "Groundwater exceedances of primary and secondary EPA MCLs have been found onsite but at distance and upgradient from CCR materials. There is inadequate information to determine whether exceedances are site- related, from offsite sources, or from on-site but non-CCR sources. There has not been any assessment of groundwater or surface water offsite and there are no other impact or damage claims."	Inadequate information
Big Stone Power Plant – Otter Tail Power	Big Stone City	SD	In Harm's Way #31; ICF (10/2010), Appendix C, #31, p. 64	Rejected: "Although there are exceedances of primary EPA MCLs, EPA Lifetime Health Advisories, and EPA SMCLs in onsite groundwater, the exceedances generally occur near the brine ponds and are possibly related to the water softening and treatment process: CCRs cannot be directly implicated as a source of the contamination."	CCRs commingled with other waste
New England Power	Brayton Point	MA	CCW DC Ass #26	Rejected: One of nine sites managing oil combustion wastes that are associated with largest coal- and oil-powered generating station in New England.	Out of Scope
Elrama Plant		PA	CCW DC Ass #30	Rejected: Landfill in an abandoned coal mine.	CCRs commingled with other (coal mining) waste
Florida Power & Light Plant	Port Everglades	FL	CCW DC Ass #37	Rejected: One of nine sites managing oil combustion wastes that have groundwater contamination identified for the 1999 RTC.	Out of Scope
Florida Power & Light Plant	Port Riviera	FL	CCW DC Ass #38	Rejected: One of nine sites managing oil combustion wastes that have groundwater contamination identified for the 1999 RTC.	Out of Scope
Florida Power & Light P.L. Bartow Plant		FL	CCW DC Ass #39	Rejected: One of nine sites managing oil combustion wastes that have groundwater contamination identified for the 1999 RTC.	Out of Scope

References:

(1) Coal Combustion Waste Damage Case Assessments, USEPA Office of Solid Waste, July 9, 2007: http://www.regulations.gov/#!documentDetail;D=EPA-HQ-RCRA-2006-0796-0015

(2) The preamble to the June 21, 2010 proposed rulemaking (Disposal of Coal Combustion Residuals from Electric Utilities Proposed Rule, 75 FR 35128): http://www.regulations.gov/#!documentDetail;D=EPA-HQ-RCRA-2009-0640-0352

(3) Michigan's comment to the proposed CCR rule's docket: http://www.regulations.gov/#!documentDetail;D=EPA-HQ-RCRA-2009-0640-6815 (Attachment 5)

(4) Wisconsin's comment to the proposed CCR rule's docket: http://www.regulations.gov/#!documentDetail;D=EPA-HQ-RCRA-2009-0640-6416 (Appendix – Section D: Groundwater Impacts from Coal Combustion Ash Disposal Sites in Wisconsin, Table 2)

(5) Out of Control: Mounting Damages from Coal Ash Waste Sites, Thirty-one New Damage Cases of Contamination from Improperly Disposed Coal Combustion Waste. Environmental Integrity Project and EarthJustice, February 24, 2010. http://www.environmentalintegrity.org/news_reports/documents/OutofControl-MountingDamagesFromCoalAshWasteSites.pdf

(6) In Harm's Way: Lack of Federal Coal Ash Regulations Endangers Americans and Their Environment, Thirty-nine New Damage Cases of Contamination from Improperly Disposed Coal Combustion Waste. Environmental Integrity Project, EarthJustice and Sierra Club, August 26, 2010. http://earthjustice.org/sites/default/files/files/report-in-harms-way.pdf

(7) Assessment of Previously Identified Proven Damage and Recently Alleged Damage Cases. ICF International. Unpublished report prepared for U.S. EPA, Office of Resource Conservation and Recovery, EPA Contract No. EP-W-07-003, Work Assignment No. 3-88, October 2010.

Abbreviations:

AMD	Acid Mine Drainage
AOC	Administrative Order of Consent
BNA	Bloomberg Bureau of National Affairs
CCC	Criteria Continuous Concentration
CO	Consent Order
COA	Consent Order and Agreement
COC	Contaminant of Concern
FBC	Fluidized Bed Combustion
FGD	Flue Gas Desulphurization
GMZ	Groundwater Mixing Zone
GW	Groundwater
HDPE	High-density Polyethylene
IPCB	Illinois Pollution Control Board
LF	Landfill
LLDPE	Linear Low-Density Polyethylene
NOD	Notice of Deficiency
NOV	Notice of Violation
NPDES	National Pollutant Discharge Elimination System
NPL	National Priority List
O/O	Owner/Operator
OU	Operational Unit
PDWS	Primary Drinking Water Standard
PM	Particulate Matter
RI	Remedial Investigation
ROD	Record of Decision
RTC	Report to Congress
S&G	Sand and Gravel
SI	Surface Impoundment
SW	Surface Water
SWPC	Surface Water Protection Criteria
USWAG	Utility Solid Waste Activities Group
WU	Waste Unit
ZOD	Zone of Discharge