



Duke Energy – Gallagher Station, New Albany, Indiana

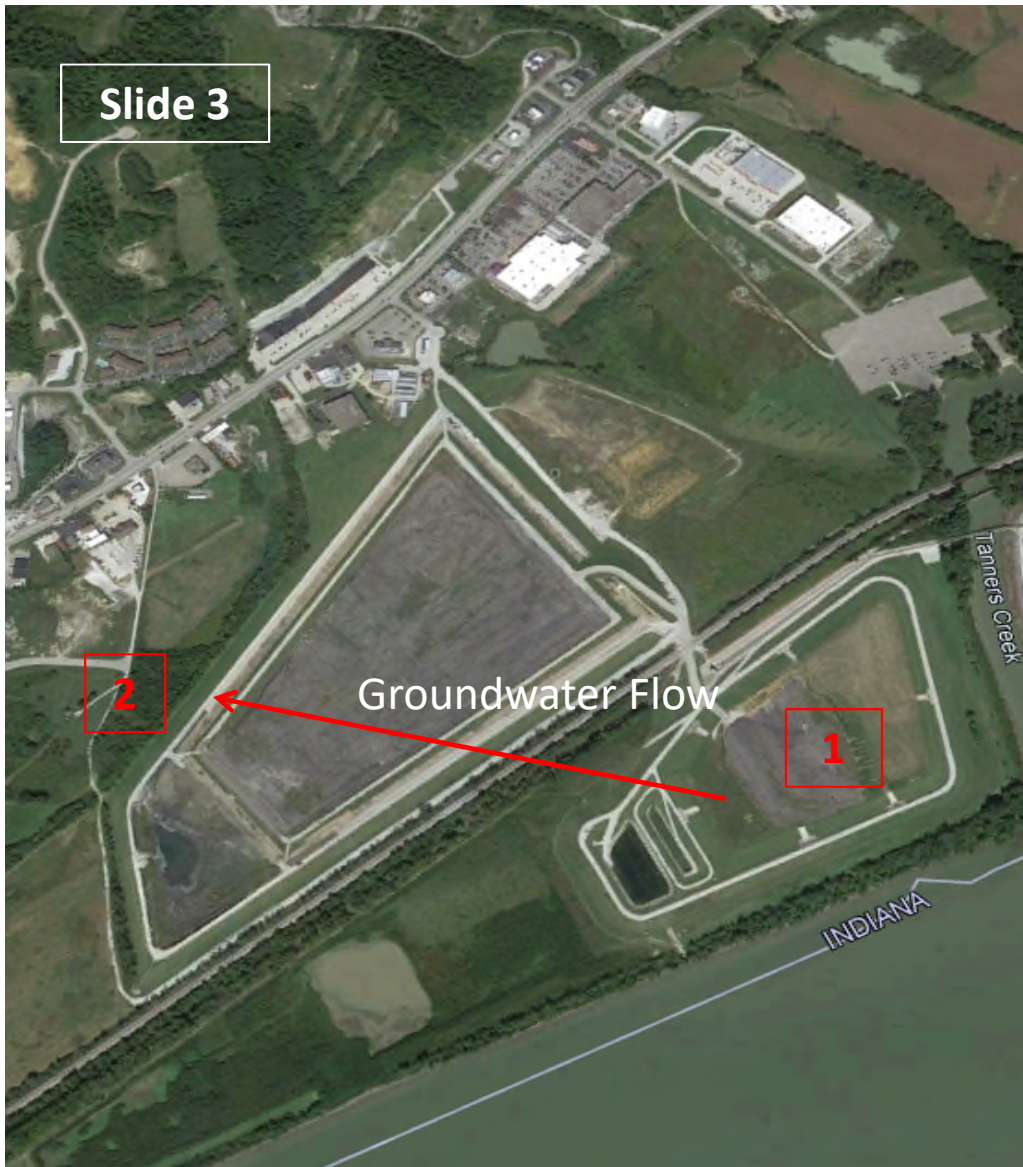
Gallagher reported 12 different active, planned, and retired landfills on EPA's 2010 Steam Electric Questionnaire, Publishes Data for only one landfill

- 1) Unregulated , Unlined, Closed CCR Impoundment, groundwater flows through CCR on way to River.
- 2) Regulated, Unlined, CCR Impoundments, Proposed Closure is capping in place, with CCR in contact with groundwater.
- 3) Permitted CCR Landfill being constructed **over an Unregulated, Unlined, Impoundment** with CCR in contact with groundwater and subject to flood inundation.
- 4) Two additional Unregulated, Unlined, Closed impoundments in floodplain of Ohio River



AEP Tanners Creek/ Tanners Creek Development Lawrenceburg, IN - 2006

- 1) Visible Outlines of Unregulated, Closed Impoundments, CCR in contact with groundwater
- 2) Waste units overlie cone of depression from adjacent municipal water supply well field. Released contaminants migrate toward the municipal water well field.
- 3) Entire property lies on the floodplain of the Ohio River and is regularly subject to inundation.



AEP Tanners Creek/ Tanners Creek Development Lawrenceburg, IN - 2016

- 1) Lined CCR Landfill constructed over unregulated and unlined CCR impoundments immediately adjacent to and in the floodplain of the Ohio River. Owner claims that impacts to groundwater quality are all from the unregulated units.
- 2) Various CCR-related contaminants are detected in groundwater that supplies municipal water supply well field.

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**NIPSCO – Michigan City Generating Station,
Michigan City, IN - 1951**

- 1) Steel sheet-pile seawall has been constructed in Lake Michigan to contain area to be filled to reclaim area from lake.
- 2) Location of the original shoreline with visible beach sands prior to backfilling behind the seawall.

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NIPSCO – Michigan City Generating Station 1961

- 1) The portion of Lake Michigan behind the seawall has been backfilled with a combination of black CCR and some light colored sandy material. CCR used as fill material placed directly into what had been Lake Michigan



NIPSCO – Michigan City Generating Station, Michigan City, IN - 2021

- 1) Regulated CCR units are located in CCR fill behind the seawall.
 - 2) Seawall containing CCR has been shown to be deteriorating.
 - 3) Background groundwater quality has never been adequately determined because background wells are impacted by the CCR backfill into which the wells were constructed.
- Proposed closure of regulated units is to remove CCR from impoundments, but leave the unregulated ash fill that is retained behind deteriorating steel seawalls.

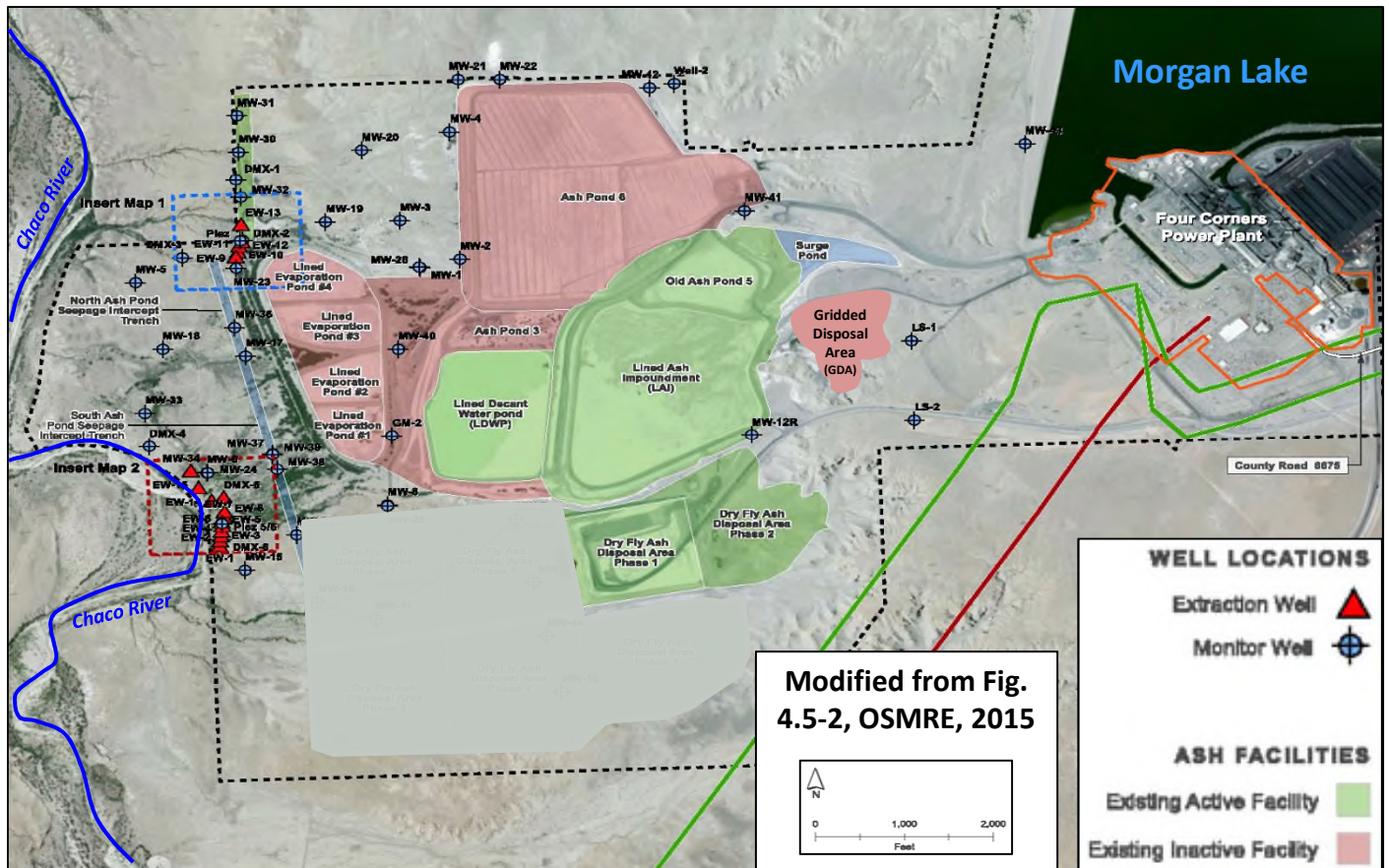
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Alabama Power – Plant Barry Bucks, AL

- Aerial Photo of the regulate Plant Barry Ash Impoundment which is located inside a meander bend of the mobile River and in wetlands of the Mobile-Tensaw Delta, at the head of Mobile Bay.

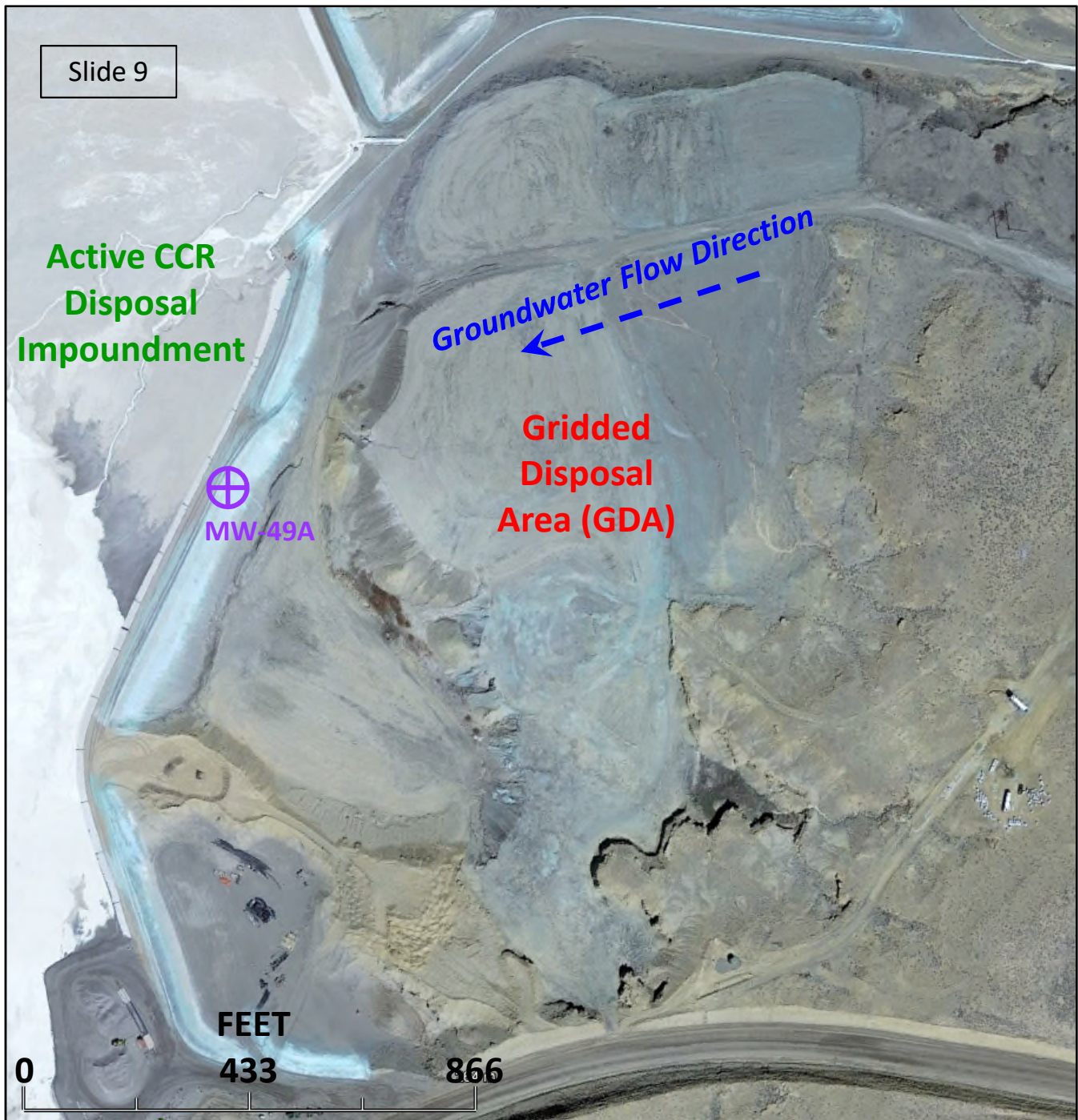
An example of the many CCR units located in places that are simply not suitable for a permanent waste disposal site.



Arizona Public Service – Four Corners Power Plant – Fruitland, NM

- Green shaded CCR units are active and regulated by the current CCR Rule.
- Pink shaded areas are historic CCR units and dumps exempt from regulation.
- Groundwater generally flows from east to west and toward the Chaco River.
- Groundwater contamination is associated with the active and historic CCR units, plus other CCR units not shown here.
- CCRs dumped in the pink-shaded “Gridded Disposal Area” (GDA) located east of the active CCR disposal units exemplifies how the regulatory exemptions in the current rule defeat the rule’s cleanup requirements.

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Four Corners Power Plant – Gridded Disposal Area (GDA)

- September 2022 aerial photo of the unregulated and unlined Gridded Disposal Area.
- The GDA is located hydraulically upgradient of the adjacent regulated CCR units and the “background” water-quality monitoring well MW-49A.
- “Background” well MW-49A penetrates 43.5 feet of unregulated, historic CCRs located immediately above the well’s screen.
- Well MW-49A is almost certainly impacted by contaminants released from the unregulated GDA and the older CCR units underlying the regulated CCR units.