

Week of 8/31/20 UPDATE

Frequently Asked Questions NIPSCO Bailly Generating Station Chesterton, IN Area C Statement of Basis

Answers to the following questions can be found below. The last page of this FAQ provides a list of acronyms you may come across in this FAQ, the Statement of Basis, the fact sheet or other materials you're reviewing as part of this public comment period.

COVID-19 Statement

EPA is aware of concerns associated with air quality and the on-going COVID-19 pandemic. EPA will require air monitoring to be conducted during the implementation of the work. The following statement has been provided by NIPSCO to address the movement of coal ash:

NIPSCO: "As part of normal operations, ash is transported safely each year from the generating stations for off-site disposal. This transportation is similar to what is being proposed. Constant oversight, inspections, and dust control measures will be in place to ensure that the work is being conducted safely, and the work is not believed to be a COVID concern. Also note that the earliest work is part of a pilot test which will not be conducted prior to 2021, with the bulk of material movement to occur at a later date."

Questions:

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Is NIPSCO permanently closing the coal fired power plant?

Will there be any environmental consequences to leaving the stabilized CCR in place? How long with the solidified mass last?

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Will NIPSCO be monitoring the remedy and for how long?

Are Areas A and B already cleaned up?

Who should I contact if I have questions on activities taking place at the site?

Q: What is CCR?

A: CCR stands for coal combustion residuals, or coal ash. CCR is the ash that is created when coal is burned, just as there is ash created from the burning of wood. The type of contamination found in CCR depends upon the make-up of the coal that was burned; however, all CCR contains some combination of metals. When CCR isn't disposed of properly, those metals can contaminate the environment.

Visit EPA's coal ash website for more information: www.epa.gov/coalash.

Q: How are the area NIPSCO facilities and the Town of Pines cleanup currently regulated?

A: NIPSCO owns four coal-fired power plants in the area of the Bailly facility: Bailly, Michigan City, Dean Mitchell and Schahfer. The Dean Mitchell facility has ceased operation and demolition has been completed. As explained below in more detail, the U.S. EPA is responsible for overseeing investigation and cleanup work at the Bailly plant. Indiana Department of Environmental Management is responsible for overseeing work at the Michigan City, Dean Mitchell, and Schahfer facilities, as well as certain portions of the Bailly facility. EPA's Superfund program is overseeing the ongoing cleanup in the nearby Town of Pines where NIPSCO is also involved. The regulatory authority for each is described below with the associated Agency contact information.

The **Bailly Generating Station** in Chesterton is being remediated under the U.S. EPA's RCRA Corrective Action Program. That means the federal EPA is overseeing the cleanup. RCRA regulates solid and hazardous waste. The Corrective Action program addresses facilities where hazardous waste was treated, stored or disposed. The program includes investigation and cleanup when a RCRA regulated facility's contaminants pose an unacceptable risk to either people or the environment. In 2012, the RCRA Corrective Action program investigated but did not find releases which posed an unacceptable threat to people or the environment from the then active, lined CCR ponds on the Bailly property. The current RCRA Corrective Action cleanup is focused on contaminants from unlined landfills at the Bailly Station, as well as the legacy plume impacts from the CCR ponds off-site.

The four lined CCR ponds located on the Bailly property are no longer in use. The lined ponds are regulated under the CCR Rule and separate state of Indiana CCR requirements. NIPSCO plans to submit a closure plan to the State agency, Indiana Department of Environmental Management, "IDEM".

The EPA project manager assigned to the oversight of Corrective Action at Bailly is:

Michelle Kaysen
kaysen.michelle@epa.gov
(312) 886-4253

The IDEM project manager assigned to the oversight of the CCR pond closure under the state's rules at Bailly is:

Alysa Hopkins
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(317) 234-4596

The **Michigan City** facility is a State-lead site. That means the responsible State agency, IDEM, is overseeing the cleanup. The Michigan City facility is also regulated under the Indiana RCRA law and NIPSCO entered into an Order on Consent with IDEM in October 2013. IDEM is addressing CCR ponds under various mechanisms. Two ponds, referred to as SWMU 12 and SWMU 3, are being managed under IDEM's Corrective Action program. Two ponds are being handled under IDEM's solid waste regulations because they closed prior to the CCR Rule and three ponds are closing under the CCR Rule. IDEM is currently reviewing the closure plan for these five ponds submitted by NIPSCO. It is anticipated that SWMUs 12 and 3 will be addressed at the time of site closure, which is projected to be around 2028.

The IDEM project manager assigned to the oversight of the Corrective Action at Michigan City is:

Chris Myer
cmyer@idem.in.gov
(317) 233-4625

The IDEM project manager assigned to the oversight of the CCR pond closures at Michigan City is:

Alysa Hopkins
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The former **Dean Mitchell** facility in Gary is a State-lead site. The Dean Mitchell facility has ceased operation. The generating station has been demolished and the property is still owned by NIPSCO. IDEM is overseeing the cleanup at this site under a Corrective Action Order that was issued in 2014. All the areas that were subject to the investigation and required cleanup have been addressed except one pond. The final pond is regulated under the CCR Rule and state requirements and will be managed as such.

The IDEM project managers assigned to the oversight of the cleanup and pond closure at the Dean Mitchell facility are:

Chris Myer
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(317) 233-4625

Alysa Hopkins
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(317) 234-4596

The **Schahfer** facility in Wheatfield is also being remediated under the IN RCRA law and the cleanup is a State-lead action. This facility has already gone through cleanup under State oversight, with the exception of the CCR-regulated units. IDEM completed its RCRA cleanup under its Corrective Action program. In April 2019, NIPSCO submitted a closure plan to IDEM for three ponds subject to the CCR requirements and will submit additional closure plans for other units in the future. The landfill located on the Schahfer facility is permitted to receive fly ash, bottom ash, and boiler slag generated onsite and from other NIPSCO facilities. It is also permitted by IDEM under their state requirements to receive CCR from surface impoundments. The state permit was renewed on May 27, 2020.

The landfill has eight phases with phases 1-5 certified closed. Phase 6 has a composite liner system with a leachate collection system but was constructed prior to the effective date of the CCR Rule, therefore it does not meet all the requirements for new CCR landfills. However, it is still compliant to receive CCR within the State program. Phases 7 and 8 will meet CCR Rule requirements. The entire landfill has groundwater monitoring requirements.

The IDEM contacts for the post-closure activities and pond closures at Schahfer are:

Don Stiliz
dstiliz@idem.in.gov
(317) 232-3409

Alysa Hopkins
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(317) 234-4596

At the **Town of Pines**, U.S. EPA is overseeing cleanup of contamination from coal ash that was disposed at a landfill (Yard 520) (now closed) and used as fill material for roads and landscaping at properties in and around the town. NIPSCO is one of the businesses conducting the Pines investigation and cleanup. Unlike the power stations, the Pines cleanup is not being conducted under the RCRA law. Instead, EPA is directing the Town of

Pines cleanup under the Superfund law, or the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The Superfund program can address contamination not covered by the RCRA law. The Town of Pines cleanup started in the early 2000's under the Superfund program. Since 2016, excavation and disposal of waste material from several private properties has been conducted under the Superfund "removal" program. The investigation into the nature and extent of the coal ash contamination, called a remedial investigation under Superfund, is similar to a RCRA Corrective Action Program facility investigation, and the Feasibility Study that evaluates different cleanup approaches have both been completed. The next step is the remedial design of the cleanup.

The EPA Superfund Remedial Project Manager assigned to this cleanup is:

Erik Hardin
hardin.erik@epa.gov
(312) 886-2402

The IDEM contact for the Pines project is:

Doug Petroff
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(317) 234-7179

Q: Is CCR (coal ash) migrating from the NIPSCO site into the National Park?

A: No. The ash that is on NIPSCO's property in SWMU 15 is underground and immobile. The buried ash has no way to move from NIPSCO's property into the National Park. The naturally occurring underground water (groundwater) that moves through SWMU 15 and comes in contact with the ash travels in the direction of the National Park. When that water comes in contact with the ash, the metals in the ash dissolve, little by little, into the water. As that water moves into the National Park it carries those dissolved elements, like boron, into the Park. All this activity is happening underground.

Q: Why didn't EPA propose to excavate all the ash from SWMU 15?

A: EPA has a systematic method of evaluating multiple potential remedies. The Corrective Action program must take several variables into consideration when selecting a remedy to propose for the public's input. We must follow our regulatory mandate and established policy when proposing a remedy.

Final remedies at Corrective Action sites must achieve the following: 1) Demonstrate an ability to protect human health and the environment, 2) Achieve media cleanup goals, and 3) Remediate the sources of the releases. These three criteria are called threshold criteria; proposed remedies must be able to meet these criteria to be further considered. EPA must then compare multiple potential remedies to each other using more flexible balancing criteria. Final remedies may use source removal, treatment, or containment to address source areas as long as the proposed method achieves the three threshold criteria.

EPA evaluated six potential remedies for SWMU 15. See Section VI of the Statement of Basis and page 17 for more details on the proposed remedies. Both full excavation and the current proposed remedy of half excavation, half solidification would achieve the three threshold criteria. Both remedies will perform well in both the short and long-term. In-situ solidification has been used widely at EPA cleanups for decades. Attachment B of the Statement of Basis provides in-depth information about the studies performed to

demonstrate the efficacy of solidification at SWMU 15. The issue of “implementability”, one of EPA’s balancing criteria, was strongly considered in the selection of the proposed remedy.

After detailed studies of the ash itself, EPA learned that the stability of the wet ash significantly increases safety concerns during an excavation scenario. The ash exhibits very low friction angles and cohesive strength while being almost 100% saturated. In other words, the ash has the potential to act like quicksand. Vibration and movement causes the ash to liquify and lose strength, potentially engulfing equipment. This combination of physical properties, in addition to the depth of the wet ash, would create unsafe excavation conditions. The other issue of implementability includes the de-watering (or groundwater pumping) that would be necessary during full excavation. The proximity of SWMU 15 to the National Park wetlands raises concerns regarding any de-watering activities. The on-going removal of groundwater from a deep SWMU 15 excavation would likely impact the hydrology of the wetlands. This issue intersects with the safety issue because without completely dewatering the excavation, the base of the excavation experiences a lot of upward pressure from the water trapped beneath. This also creates very unsafe excavation conditions as the ash loses stability and the capacity to support weight.

While weighing the various balancing criteria and site-specific details of a proposed remedy, EPA’s mandate is to propose the “best fit” remedy.

EPA recommends the following fact sheets to learn more about our remedy selection process:

<https://www.epa.gov/sites/production/files/2016-01/documents/select.pdf>

<https://www.epa.gov/sites/production/files/2016-01/documents/expect.pdf>

Q: How will the trucks be secured to ensure material doesn’t escape during transport?

A: EPA requested a response from NIPSCO and was provided with the following: “Plans for secure trucking will be developed in conjunction with the selected contractor and will entail methods to ensure material is transported properly, and would include consideration of what/how i.e., bed liners, leak-proof beds, sealed and locked tailgates, cover/tarps, truck washing, etc. the contractor proposes to use to prevent materials from spilling/leaking from the trucks during hauling activity.”

Q: Was any CCR disposed of or buried outside NIPSCO’s property, in the National Park? Will the proposed remedy disturb the National Park?

A: No. Coal ash was disposed of on NIPSCO’s property by placing it (burying it) in SWMU 14 and 15. NIPSCO’s property is zoned by Porter County as “High Impact”. The land around NIPSCO’s property includes a buffer zone called the “Greenbelt area”, zoned as such to provide a buffer between industrial land and natural areas. The only locations where ash was previously disposed were on NIPSCO’s property at SWMU 14 and 15. A small amount of ash sloughed off SWMU 15 during its disposal and resulted in ash in the Greenbelt buffer area. That ash was discovered during the investigation and is a part of this proposed remedy. It will be removed, and the area will be restored in consultation with the National Park Service. This excavation will result in the removal of ash and ash impacted soil at around 700 cubic yards.

The remedy as proposed will not disturb the dunes, woods or wetlands. A considerable amount of time and collaboration with the National Park Service went into the development of this proposed remedy. The proposal for Monitored Natural Attenuation for the groundwater plume that has migrated into the National Park was put forward specifically because it will cause the least amount of disruption to the resources. The weight given to this proposed remedy was largely from systematic planning meetings held between EPA, the National Park Service and NIPSCO. The remedy proposed for SWMU 15 will occur entirely within NIPSCO’s

property. The small amount of ash that will be removed from the Greenbelt buffer area is immediately in front of SWMU 15 and will not impact the National Park. The final grading and landscaping that will take place at SWMU 15 will be in a manner that is acceptable to the National Park.

Q: Is the Greenbelt area on NIPSCO's property? Who owns that land?

A: NIPSCO owns the land in the Greenbelt area. In 1996, NIPSCO and the National Park Service ("NPS") entered into a memorandum of agreement related to the Greenbelt property, which exists as a buffer between the developed portions of the Facility and Indiana Dunes National Park. The goal of the agreement was to ensure that the Greenbelt property was managed in a manner consistent with the adjacent IDNP. Through the agreement, a portion of the Greenbelt was conveyed to NPS by donation, a portion of the property was the subject of a perpetual conservation easement granted to NPS, and a portion of the property was made the subject of a revocable license granted to NPS. NIPSCO also entered the Greenbelt property into the Indiana DNR Classified Wetlands Program in 2010. In 2018, as part of a land exchange between NIPSCO and NPS, a 5.6-acre parcel of the Greenbelt located directly east of the operational area of Bailly Generating Station was transferred from NIPSCO to NPS. In 2019, NIPSCO, in coordination with IDNP, commenced ecological restoration efforts within the Greenbelt property and adjoining Park wetlands.

Q: Why is the site being cleaned up to commercial/industrial standards? Does this eliminate any possibility of this land being reclaimed as part of the National Park?

A: The RCRA Corrective Action program is a risk-based program. To assess risk, we use contaminant screening and action levels developed for specific land uses. Different risk levels are calculated for residential scenarios and for commercial/industrial scenarios based upon the frequency of exposure (for example, the number of days a person is present in a year, number of hours a person is present in a day, etc.) and type of exposure (inhalation, consumption, skin contact, etc.). Other levels are calculated for ecological settings where wildlife is a concern. These levels are health or environmental-based concentrations derived using chemical-specific toxicity information and scenario-specific exposure assumptions.

The Corrective Action program was designed to be a flexible, site-specific cleanup program at operating facilities. The EPA's Corrective Action policy, established in EPA's 1996 Advanced Notice of Proposed Rulemaking for RCRA Corrective Action Facilities (61 FR 19432), recognizes non-residential land use scenarios are appropriate at actively managed or otherwise not abandoned properties. EPA is charged with considering proposed cleanups within the context of current and reasonably anticipated future use. Our role and jurisdiction is to make sure the facility conducts the investigation and cleanup in a manner consistent with the criteria for the anticipated land use.

This Statement of Basis presumes that future land use at Bailly will be limited to uses consistent with the commercial/industrial cleanup levels. If a non-commercial/industrial use is proposed in the future, then additional risk associated with the specific alternative use must be evaluated. Should the analysis show more cleanup is necessary, then to be protective, additional work would be needed to support the alternative use. At this time, given the extent of the area's industrial development and the existence of a buffer zone between the industrial area and the National Park, EPA believes that the industrial/commercial use designation is appropriate and consistent with EPA guidance. It is also consistent with the Porter County Zoning Ordinance, which currently has the facility zoned as "High Impact Use" and the buffer area zoned as "Greenway Use". Of

course, the CCR-contaminated groundwater that has migrated off-site will be remediated to levels protective of the Great Lakes environment consistent with the sensitive status of the National Park.

Q: Why is NIPSCO in charge of the cleanup? Shouldn't EPA be conducting the cleanup?

A: The 1984 Hazardous and Solid Waste Amendments to RCRA extended the authority of the Corrective Action program specifically to avoid abandoned waste sites that could become future Superfund sites. If a party responsible for disposing waste is no longer in existence or is unable to pay for investigation and cleanup work, then EPA may conduct a Superfund cleanup using tax-payer dollars. The legislative history of RCRA Corrective Action explicitly includes the mandate that the responsibility to control contaminant releases from RCRA-regulated facilities lies with the facility owner and operator. NIPSCO's past hazardous waste management made the facility subject to RCRA Corrective Action. The 2005 Administrative Order on Consent between EPA and NIPSCO obligated NIPSCO to conduct and to pay for the facility investigation and cleanup. EPA's RCRA Corrective Action program has no legal mechanism to fund or conduct those activities or, in general, to compel the facility to hire an EPA-handpicked consultant to conduct the work. The RCRA Corrective Action program is charged with overseeing the investigation and cleanup activities to ensure the facility conducts the work in accordance with federal and state laws, policy, guidance and best practices.

Q: What is the chemical makeup of the CCR in SWMU 15? How will the proposed remedy, In-Situ Solidification/Stabilization (ISS) change the makeup of the CCR and make it safe?

A: Tests were performed on the CCR and samples of the CCR treated by ISS materials (see the NIPSCO Treatability Study Memo, 11/16/18). The CCR samples were tested for leaching characteristics (via EPA SPLP and LEAF tests), composition of the solid material, total organic carbon, moisture content, bulk density, solid specific gravity, particle size and atterberg limits (a measure of soil liquid limit and plasticity).

The first thing we learned about the CCR in SWMU 15 is that the ash within the unit is all uniform. This is important to know in order to ensure the ISS material performs effectively throughout the entire SWMU. We also learned that the CCR is chemically composed of mostly iron, calcium, magnesium, aluminum and carbon. Other components of the CCR that are present in lower concentrations include arsenic, barium, boron, chromium, molybdenum, potassium, silica and others. The untreated CCR sample showed that it leaches aluminum, arsenic, boron, manganese, molybdenum, and selenium. The boron that is leaching from SWMU 15 into the groundwater is the contaminant with the highest concentration and extends the greatest distance into the National Park.

The CCR that was treated with potential ISS mixtures were tested to evaluate the following performance criteria: unconfined compressive strength, hydraulic conductivity, freeze/thaw, wetting/drying and volumetric expansion. These tests followed ASTM test standards. The other performance criteria evaluated was leachability and that was tested by EPA methods (EPA SPLP Method 1312 and EPA LEAF Method 1315). These tests were designed to tell us how the solidified mass will perform and last through time. The EPA LEAF test method was specified as the primary approach for assessing overall effectiveness of the stabilization/solidification process. The EPA SPLP test method was utilized as a secondary assessment to evaluate incremental benefits of stabilization on the chemical fixation of metals.

The tests demonstrated that the Portland cement ISS mixture will reduce the hydraulic conductivity from 2-4 orders of magnitude. This is critical because hydraulic conductivity is the measure of how easily water can

move through the ground. A reduction in hydraulic conductivity means it is more difficult for water to move through the solidified CCR. In addition, the solidified CCR reduces the boron leachability by a factor of 6, as measured by the EPA LEAF method. Further testing of the solidified mass showed that less and less boron will leach from the outer surface of the mass through time as additional curing of the material continues to reduce the hydraulic conductivity. Last, as a test of the material through time, the solid mass was physically crushed in the lab and tested again for leachability. This test demonstrated that the boron fixation to the solid ISS material is as effective when the material is crushed.

The test results show us that solidification/stabilization will physically and chemically alter the CCR in a way that will stop contamination from degrading groundwater quality in the National Park.

Q: What is the difference between Area C and SWMU 15?

A: “Area C” broadly designated a large area to be evaluated during the investigation. Area C contains the “solid waste management units” or “SWMUs” located on-site. SWMUs are defined as areas where waste has been placed and they may or may not be contaminated. Area C also includes a very large off-site area to ensure that the investigation would identify any contamination from the facility that is present in the National Park. See Statement of Basis Figure 3.

Q: Is all of Area C contaminated by the site?

A: No. EPA wanted to be sure the Area C investigation included all the places where the contamination may have migrated. Consequently, Area C was drawn to include both the on-site SWMUs and a very large off-site area that included a lot of National Park property. The Area C investigation then identified areas that had been contaminated through sampling. The investigation found contamination in the on-site SWMUs as well as contamination that had migrated into some off-site areas in the National Park property directly adjacent to those SWMUs. See Statement of Basis Figure 2.

Q: Why was NIPSCO allowed to bury CCR in the ground during the 60’s and 70’s? Did they have a permit? Did regulations or our understanding of the science change?

A: At the time NIPSCO used portions of their property to dispose of CCR, CCR was not regulated, was not considered a toxic or hazardous waste and there was no permit requirement to do so. The hazardous waste that NIPSCO generated was from the cleaning chemicals used on the boiler, the unit that burned the coal. This material was not disposed of on site and was properly managed for offsite disposal under RCRA. CCR is regulated as a solid waste, it has never been regulated as hazardous waste. In 1980, Congress exempted coal combustion residuals from regulation under the hazardous waste requirements until EPA completed a study to assess risks and make a regulatory determination. After studying CCR, EPA made two separate regulatory determinations (in 1993 and in 2000) to exclude CCR from hazardous waste regulation under Subtitle C of RCRA and instead regulate them under the non-hazardous waste regulations under Subtitle D. The most recent CCR Rule, published in 2015, continues to regulate CCR as a non-hazardous solid waste. However, this rule now establishes a comprehensive set of requirements for the safe disposal of CCR. Both the regulations and the understanding of the science of CCR have evolved over time. See below for a timeline of NIPSCO’s disposal history in relation to CCR regulatory history (see also, EPA’s CCR regulatory history website at: <https://www.epa.gov/coalash/legislative-and-regulatory-timeline-fossil-fuel-combustion-wastes>). CCR will no longer be generated or managed at this facility since closing in 2018.

Q: Is boron the only contaminant that was found? What risk does boron, or any other contaminants, pose?

A: No, boron was not the only contaminant that was found. Section III of the Statement of Basis describes all contaminants identified during the investigation. Of all the contaminants investigated, boron demonstrated the highest risk to receptors. In particular, at elevated concentrations, boron may become toxic to plants. Since the National Park has an abundance of sensitive, threatened or endangered plant species, boron poses an unacceptable risk. Other metal contaminants associated with coal ash were found in the groundwater in the same approximate area where boron was found. Those metals included: aluminum, arsenic, molybdenum and selenium. Further evaluation was performed for the soil, sediment and surface water where the groundwater reaches ground surface and forms wetlands. Potential risks were found to exist from these metals to a variety of receptors, such as the small organisms that live in the wet soils of wetlands. However, due to the contaminant levels being low and the ecological risk assessment process containing inherent uncertainties, boron was the contaminant that proved to demonstrate the most unacceptable risk and is considered the “risk driver” for the cleanup. Other metals demonstrated some, but potentially not as much, risk. The outcome of eliminating the SWMU 15 source and performing monitored natural attenuation will address all the metals, not just boron.

Q: Why isn't SWMU 14 going to be remediated?

A: SWMU 14 is also an area where NIPSCO disposed of coal ash during the 60's and 70's. The unit is less than 4 acres and the ash was never placed at or below the water table; therefore, unlike SWMU 15, the ash is not sitting in groundwater. SWMU 14 was investigated and a risk assessment performed. Although ash is not submerged in groundwater, rain can still infiltrate from the ground surface and move down through SWMU 14. EPA was concerned that the infiltration of that rainwater could pick up contamination and move it into the National Park in groundwater. The downgradient area adjacent to SWMU 14 was sampled with this scenario in mind. Boron and molybdenum were found above levels that are typical in the area, known as “background” concentrations; however, those levels were not above the conservative Great Lakes Initiative (GLI) screening levels. The groundwater that is downgradient of SWMU 14 does not pose a risk to the park. Since the RCRA Corrective Action program is a risk-based program, EPA cannot compel a company to cleanup an area that does not pose a risk to either human health or the environment.

Q: How can contamination be present but not pose a risk to either people or the environment?

A: “Contamination” can refer to man-made chemicals or naturally occurring elements. We use a variety of chemicals in our lives daily in products such as cleaning supplies, garden and lawn products, and even personal care products. However, when those chemicals or products are not used in the correct way or disposed of properly, they could become “contamination”. Contamination can also be thought of as elements or chemicals in quantities, concentrations or locations that may be problematic. The evaluation of contamination takes into consideration the amount (quantity or volume), the type (specific chemicals), the toxicity (the effects from that chemical), and the exposure (who is contacting it and for how long). The risk of any given contamination is a function of its toxicity and exposure. So, it is possible that “contamination” may be present at a site, but it may be there in low enough levels to not cause adverse health effects or there isn't a complete pathway between the ‘contamination” and the receptor. Meaning the “contamination” does not come in contact with the person, animal or plant being evaluated as part of the risk assessment. In those

cases, the contamination can still be present, but the risk assessment process has concluded that it does not pose a risk to people or the environment. Section IV of the Statement of Basis discusses the risk assessments.

Q: Where will the excavated CCR be disposed of?

A: The exact permitted, solid waste landfill where the CCR will be disposed of has not yet been identified. NIPSCO will assess disposal options as part of the cleanup's bidding process. As part of that evaluation, NIPSCO will be assessing their own NIPSCO Schahfer Generating Facility's disposal unit as an option.

Q: Is any contamination from NIPSCO getting into Lake Michigan?

A: No. Samples of groundwater at the locations where groundwater enters the lake were collected in both Areas A and C. Contamination was not found to be moving from the site into the lake. The groundwater plumes at the NIPSCO site are not highly mobile, meaning they don't move very quickly or very far. Groundwater that is contaminated with metals can be inhibited from moving by several factors. The movement of metals in groundwater is controlled by the nature of the source, the chemistry of the metal, and the mineralogy of the groundwater and surrounding soils. For the same reason monitored natural attenuation is proposed, the natural attenuation processes occurring, some metals are not able to migrate very far in groundwater. Due to the chemistry and geology, the metal becomes bound to and mineralized into the soil itself.

Q: The Indiana Dunes is now a National Park, did EPA take the sensitivity of the land and species into consideration? Were any threatened or endangered species considered?

A: Yes, EPA made investigation, risk assessment and proposed cleanup decisions based almost solely on the National Park's sensitive status. EPA collaborated with the National Park Service and scientists at the dunes. The investigation was designed to evaluate all potentially contaminated environmental media (water, soil, sediment), the plants and animals in contact with that media, and other species within the food chain. Studies were conducted directly on the National Park plants as well as the amphibians because they are especially sensitive receptors. The risk assessment evaluation conducted by EPA (see Statement of Basis Attachment C) used highly conservative assumptions because of the special status of the National Park.

As part of the investigation and risk assessment, EPA evaluated potential risks to the Piping plover. The Piping plover is a small shorebird that spends the spring and summer in the United States and migrates south for the winter. In the Great Lakes area, the Piping plover is an endangered species. Endangered species are animals and plants that are in danger of becoming extinct. Sampling was conducted in the area where the plover might nest and feed, near the lake. Based on the sampling conducted, the risk assessment concluded there was no adverse risk to the plover.

Q: When would this work start and how long will it last?

A: The exact start date depends on several prior steps. EPA must first receive and consider all public comments and incorporate our responses to the Final Decision/Response to Comments document. Then, NIPSCO will complete a "pilot study" at SWMU 15 to gather specific pieces of information needed to fully execute the remedy. It's estimated the remedy could be implemented in 2021 and will take 12 months over two construction seasons.

Q: How much truck traffic will the excavation portion of the cleanup require? What will the truck route be?

A: According to the constructability evaluation (Appendix N in the 2019 Final CMS Report) it is estimated that a maximum of 58 trucks per day would be feasible given access to local highways; however, the selected landfill has not been decided. If NIPSCO's Schahfer landfill could accommodate the CCR, then the shortest route would be to exit Bailly and turn left onto Route 12 travelling east to get onto Route 49 south. This section of Route 12 passes north of (although not directly adjacent to) residential areas that are up on the moraine. The alternative route to Schahfer would be to turn right out of Bailly onto Route 12 west, to Route 249, which leads to either Route 94 east or Route 80 east, which leads back to Route 49 south to Schahfer. For commercial disposal facilities south and west of Bailly the trucks would likely travel to Routes 94 or 80 as described above. Please see the map below for orientation. The facility is marked with a star.

Q: Is SWMU 15 or SWMU 14 subject to EPA's 2015 CCR Rule?

A: No. CCR landfills that are "active" (receiving CCR) are subject to the CCR Rule. CCR landfills that do not receive any CCR on or after the effective date of the rule (October 19, 2015) are considered "inactive" and are not subject to the requirements of the final CCR rule.

Q: What will SWMU 15 look like when the work is complete?

A: It is anticipated that SWMU 15 will be at a lower elevation once the cleanup is completed compared to its current elevation. This will result in a more natural, continuous look with the adjacent National Park property. There will be a restoration plan associated with the forthcoming Corrective Measures Implementation Work Plan that NIPSCO will submit to EPA. EPA will consult with the National Park Service on this restoration plan. The final grading and vegetation for the site will be designed to limit precipitation infiltration by encouraging storm water management.

Q: Will there be long-term monitoring? Will there be a contingency plan if the groundwater does not improve?

A: Yes, there will be long-term monitoring and a contingency plan. A minimum of 5 years of Monitored Natural Attenuation monitoring will be completed before considering a contingency plan. The contingency plan will be designed in consultation with the National Park Service. The forthcoming Corrective Measures Implementation Work Plan will include a decision logic for the evaluation of the source control efficacy before engaging in a contingency plan. Long-term monitoring is projected to take place for 30 years.

Q: What is the estimated cost of this cleanup and who pays for it?

A: The estimated cost for all the work proposed in Area C is about \$22 million. The work at SWMU 15 accounts for \$20 million of that cost. NIPSCO will pay for the cleanup directly. The EPA RCRA Corrective Action program cannot, by law, use tax-payer dollars on any investigation or cleanup. EPA oversees the responsible party and makes sure the work is completed in accordance with EPA policy and guidance.

Q: How will air quality be protected or monitored during the excavation of the CCR?

A: Dust suppression will take place during construction by spraying water on the material as it's excavated. This measure will be required by the Health & Safety Plan NIPSCO will develop. It is expected that the CCR will be fairly moist even above the water table due to the height of the capillary fringe for the fine-grained nature of ash. According to the Geotechnical Report (Appendix F to the 2019 Final CMS Report), moisture content of the CCR ranges from 90.7 to 100+% for the 10 samples measured, most if not all having come from the capillary fringe or below the water table. Trucks will be covered during transit and dust monitoring will be required by the Health & Safety Plan.

Q: Is NIPSCO permanently closing the coal fired power plant?

A: Yes. NIPSCO closed the Bailly facility in 2018.

Q: Will there be any environmental consequences to leaving the stabilized CCR in place? How long will the solidified mass last?

A: The intended environmental consequence of turning the CCR into a solid mass is to significantly reduce the permeability of the CCR. Meaning, surrounding groundwater will no longer be able to flow through the CCR, pick up metals and carry them into the National Park. The groundwater will encounter the solid mass and move around it. Solidification/stabilization works to both bind the material into a solid mass and "fix" the contaminants in place chemically. ISS has been used for over 30 years in the environmental industry with reliability of the long-term effectiveness. According to the Interstate Technology & Regulatory Council (ITRC: www.itrcweb.org), ISS has proven to be effective over long periods of time and has been evaluated through several research studies. A research group led by the University of Greenwich, the University of New Hampshire, and INERTEC (France) conducted a study of 10 ISS remedies to assess their long-term effectiveness. The remedies had been implemented between 1989 and 2006. The study concluded that all the sites were still performing well and meeting their remediation goals, even after multiple decades. The ITRC also acknowledges, for comparison, that disposal of radioactive material often relies on a cement-based solidification due to its permanence.

EPA is concerned about the long-term effectiveness of any remedy that leaves contamination in place. Therefore, our program has a "long-term stewardship" component to the proposed remedy and plans for at least 30 years of monitoring.

Q: Will the cleanup impact any visitor activities at the National Park?

A: It is possible the construction at SWMU 15 will impact access to the trail immediately adjacent to the unit. That would be a segment of the Cowles Bog Trail. EPA and NIPSCO will coordinate with the National Park Service on the construction plans and determine how best to address the nearby trail.

Q: Will NIPSCO be monitoring the remedy and for how long?

A: NIPSCO will be monitoring the remedy for at least 30 years. A "long-term stewardship" plan will be required, and that plan will establish the details of monitoring the site into the future.

Q: Are Areas A and B already cleaned up?

A: Yes. Areas A and B were cleaned up under the Corrective Action program in accordance with a 2012 Final Decision/Response to Comments. The closure of the facility and the CCR ponds in Area B will be under the oversight of the State of Indiana, Indiana Department of Environmental Management (IDEM).

Q: Who should I contact if I have questions on activities taking place at the site?

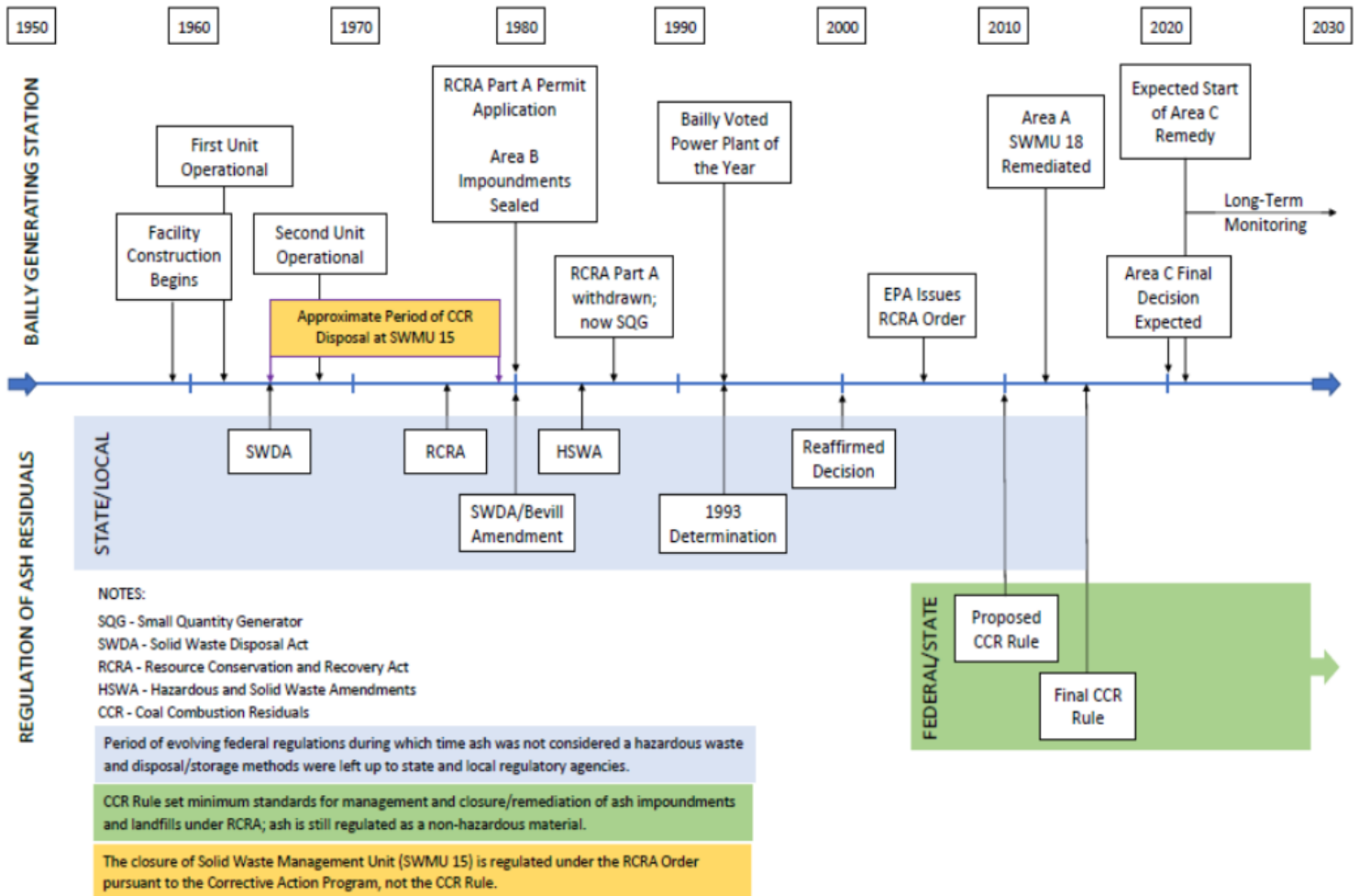
A: You can contact the EPA Project Manager, Michelle Kaysen, or the NIPSCO Project Manager, Dan Sullivan. You can also contact EPA's Community Involvement Coordinator, Kirstin Safakas.

Michelle Kaysen
EPA Project Manager
RCRA Corrective Action Program
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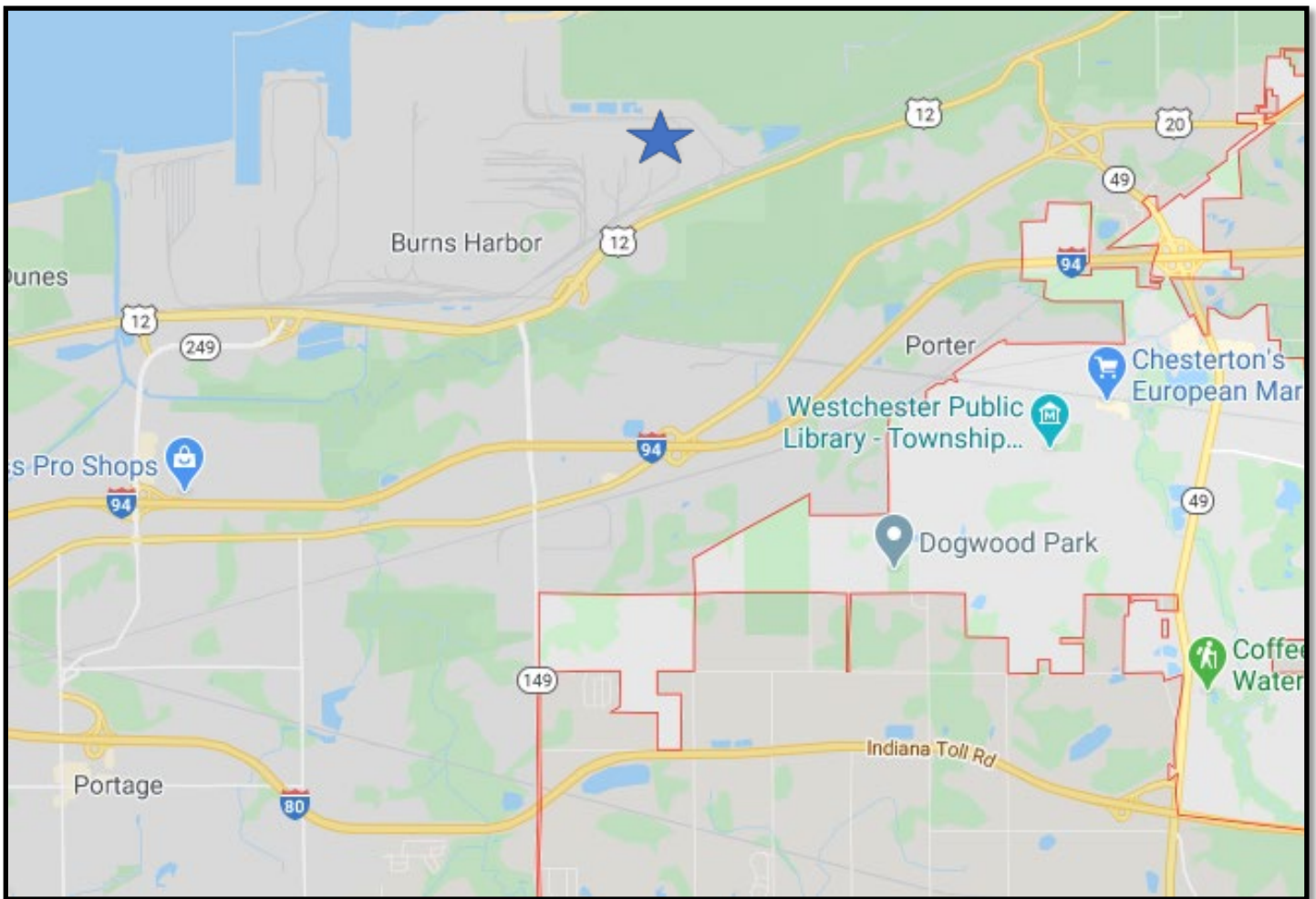
Dan Sullivan
NIPSCO Project Manager
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Timeline of NIPSCO Disposal History and CCR Regulatory History



NIPSCO Bailly Nearby Highways Available for Possible Truck Routes



ACRONYMS

AOC	Area of Concern
BERA	Baseline Ecological Risk Assessment
BGS	Below Ground Surface
CAO	Corrective Action Objective
CCR	Coal Combustion Residuals aka Coal Ash
CMS	Corrective Measures Study
COPC	Constituent of Potential Concern
CSM	Conceptual Site Model
ESL	Ecological Screening Level
EPA	U.S. Environmental Protection Agency
GLI	Great Lakes Initiative
HHRA	Human Health Risk Assessment
HI	Hazard Index
IC	Institutional Control
ICIAP	Institutional Control Implementation and Assurance Plan
IDEM	Indiana Department of Environmental Management
IDNL	Indiana Dunes National Lakeshore
IDNP	Indiana Dunes National Park formerly known as IDNL
ISS	In-Situ Solidification/Stabilization
LEAF	Leaching Environmental Assessment Framework
LTS Plan	Long-Term Stewardship (LTS) Plan
MCL	Maximum Contaminant Level (Drinking Water)
MCS	Media Contaminant Standard
MNA	Monitored Natural Attenuation
NIPSCO	Northern Indiana Public Service Company
NPS	National Park Service
RCRA	Resource Conservation and Recovery Act
RISC	Risk Integrated System of Closure (IDEM)
RSL	Regional Screening Level
RFI	RCRA Facility Investigation
SB	Statement of Basis
SPLP	Synthetic Precipitation Leaching Procedure
SWMU	Solid Waste Management Unit
U.S.C.	United States Code
WQS	Water Quality Standards