



Staff Memorandum and Consultant’s Evaluation of Environmental Remediation Options

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Memorandum Structure

Town staff has posted project background and information on the project [website](#)¹ since 2013. See the [Coal Ash Remediation Planning](#)² project page for additional information about recent meetings and [frequently asked questions](#)³.

This memorandum provides the most recent information related to the decisions before the Council this evening.

1. Timeline
2. Evaluation of remediation and regulatory options
3. Evaluation of fiscal impacts based on remediation options
4. Evaluation of site redevelopment option
5. Decision points
6. Recommendation

1. Timeline

2013	2015-17	2018	2018	TBD
•Phase 1 & 2 Environmental Site Assessment	•Phase 1 and Phase 2 Remedial Investigations	•Remedial Cost Options/ Brownfields Exploration	•Council Update & Decision Points October 10th	•Remedial Action Plan*

*A remedial action plan will be generated in concert with the North Carolina Department of Environmental Quality (DEQ) once a future use and regulatory path is determined by Council.

¹ <https://www.townofchapelhill.org/town-hall/news-events/current-issues/coal-ash-disposal-site-remediation-project>

² <https://www.futureof828.org/>

³ <https://www.futureof828.org/faq/>

2. Evaluation of Remediation and Regulatory Options

The information in this section of the memorandum was developed by Hart & Hickman, the Town's Environmental Engineer, in coordination with Kimley-Horn, the Town's Brownfields Oversight consultant.

This section serves as a summary of environmental remediation options considered for the property at 828 Martin Luther King Jr, Boulevard (the "Site" or "Property"). The remediation options focus on addressing documented environmental conditions on the Site while allowing for safe reuse of the Property. The documented environmental conditions on the Site consist of historical placement of coal combustion products (CCPs) for structural fill, soil that is mixed with CCPs, and limited metal-impacted groundwater resulting from the historical CCP placement. No impacts to Bolin Creek have been identified above naturally occurring background conditions or regulatory screening levels. The remediation options considered to address the CCPs and impacted soil (which will also result in reductions of groundwater impacts) consist of the following:

- Full removal of the CCPs and impacted soil
- A combination of removal of CCP material along the Bolin Creek Trail, construction of a retention wall along the embankment where CCPs are exposed or near ground surface to control future erosion of the CCPs, and ensuring the uplands portions of the Site are covered with adequate fill above the CCPs or impervious surfaces.

During the last public meeting regarding the Site (August 27, 2018), a stakeholder asked that the Town evaluate containment as an additional option for remediation. The containment option would involve excavating the CCPs, placing a barrier under the CCPs, and then placing a cap over the replaced CCPs. Based on our preliminary evaluation, we do not recommend this option due to limited area of the Site, the need to handle the material multiple times during removal and construction of a barrier at the base of the CCPs and replacement of the CCP, and overall costs.

In coordination with DEQ, groundwater impacts will be addressed through a future monitoring program after completion of the selected remedial alternative.

There are two regulatory programs that are available to engage the DEQ and address the environmental conditions:

- Brownfields Program
- Voluntary Cleanup Program

The following tables summarize information relative to the two remediation alternatives and two regulatory programs. The first table, "Evaluation of Remediation Options", provides environmental, social, and economic considerations for each remediation option.

The second table, "Evaluation of Regulatory Track Options", summarizes regulatory requirements, action items, and liability considerations for different regulatory programs that may apply to remediation of the Site. Both remediation options noted above may be implemented under either regulatory program.

See the attachments labeled "Remedial Options Summary" and "Regulatory Timeline" for more details and a list of the regulatory milestones to date.

Evaluation of Remediation Options

<i>Options</i>	<i>Environmental considerations</i>	<i>Social considerations</i>	<i>Economic considerations</i>
<p>1. Remove CCPs and contaminated soil</p>	<ul style="list-style-type: none"> ◆ Town removes CCPs and impacted soils and disposes of this material in a state-approved landfill. ◆ Town backfills the Site with clean fill from another location. ◆ Town to monitor water quality after CCPs and soil removal for a period of time and limits use of groundwater on the Site through a newly recorded deed for the property. ◆ Property safe for reuse. <p><i>(see also: Hart & Hickman Remedial Options Summary)</i></p>	<ul style="list-style-type: none"> ◆ Estimated total truck trips through community for removal and backfill activities is 20,000. <p><i>(Hart & Hickman calculation based on estimated amount of material of 60,700 cubic yards of CCPs and 19,000 cubic yards of overlying soil)</i></p> <ul style="list-style-type: none"> ◆ Disturbance of CCPs increases risks to residents due to truck trips through community. ◆ Removal transfers CCPs and impacted soil to another community. 	<ul style="list-style-type: none"> ◆ Total cost of \$13.4MM to \$15.9MM for removal and relocation of CCPs and impacted soil. <p><i>(see also: Hart & Hickman August 20, 2018 letter)</i></p> <ul style="list-style-type: none"> ◆ Total cost of \$13.4MM to \$15.9MM will impact capital improvement program. <p><i>(see also: Hart & Hickman August 20, 2018 letter)</i></p>
<p>2. Limited removal and CCPs along trail, construction of retaining wall, and capping of upland portion of Site</p>	<ul style="list-style-type: none"> ◆ Town removes CCPs along Bolin Creek Trail closest to creek and disposes of it, constructs retaining wall to preclude CCP erosion and limit exposure to CCPs along embankment, and ensures adequate cover of CCPs in upland portion of the Site. ◆ Town to monitor water quality after CCPs and soil removal for a period of time and limits use of groundwater on the Site through a newly recorded deed for the property. ◆ Property safe for reuse. <p><i>(see also: Hart & Hickman August 20, 2018 letter)</i></p>	<ul style="list-style-type: none"> ◆ Estimated total truck trips through community for this option is approximately 1,400 to 2,500, mostly for importing clean soil for placement behind the retaining wall. <p><i>(Hart & Hickman calculation based on estimated amount of material of 700 cubic yards for CCP removal and 7,000-14,000 cubic yards of import soil)</i></p> <ul style="list-style-type: none"> ◆ Risk of exposure to residents is reduced with less disturbance of CCPs. ◆ Transfers limited amount of CCPs and contaminated material to another community. 	<ul style="list-style-type: none"> ◆ Total cost of \$1.6MM to \$3.5MM for this remediation alternative. ◆ Ongoing monitoring/maintenance costs for Town after removal. ◆ Total cost of \$1.6MM to \$3.5MM will impact capital improvement program.

Evaluation of Regulatory Track Options

<i>Track/Agency</i>	<i>Cleanup Levels</i>	<i>Steps</i>	<i>Liability considerations</i>
<p>1. Brownfields Program</p> <p>Regulatory Agency: DEQ Brownfields Program through Brownfields Agreement</p>	<p>DEQ Preliminary Soil Remediation Goals or use of calculated risk-based goals using actual site data and exposure conditions.</p>	<ol style="list-style-type: none"> 1. Submit application 2. Obtain letter of eligibility 3. Conduct additional assessment (if requested) 4. Negotiate Brownfields Agreement 5. DEQ provides Notice of Brownfields Property 6. Plat Map for Brownfields Agreement 7. Town sells upland portion of site to developer and retains creekside portion of the Site 8. Developer implements remedial action provisions of Brownfields agreement to ensure safe reuse of Site 	<p>Liability protection available for persons not creating or contributing to contamination. Liability protection is provided through covenant not to sue and may be transferred to new owners. Liability protection will extend to the Town, tenants, and lenders.</p>
<p>2. Voluntary Cleanup Program</p> <p>Regulatory Agency: DEQ Inactive Hazardous Sites Branch through Administrative Agreement</p>	<p>DEQ Preliminary Soil Remediation Goals or use of calculated risk-based goals using actual site data and exposure conditions.</p>	<ol style="list-style-type: none"> 1. Execute Administrative Agreement with DEQ 2. Prepare Remedial Action Plan (likely to include options identified above) 3. Implement selected Remedial Action 	<p>No liability protection available from DEQ.</p>

3. Fiscal Impacts of Remediation Options

The Town's Environmental Engineer, Hart & Hickman, has provided the following cost estimates for the two remediation options:

1. Remove CCP and contaminated soil: \$13.4MM to \$15.9MM
2. Limited removal and CCP along trail, construction of retaining wall, and \$1.6MM to \$3.5MM

When considering fiscal impacts associated with any project, there are three main questions to answer:

- (1) What are the Town's funding priorities?
- (2) What are the Town's options for borrowing money?
- (3) What is the Town's capacity for taking on additional debt?

New resources will need to be identified and budgeted in order to fund remediation option 1 or 2. Borrowing additional funds for remediation will impact the current set of funded and unfunded capital project priorities, and depending on the financing mechanism, borrowing may also require voter approval (e.g., General Obligation Bond). In order to assess debt capacity, the cost of remediation must also be considered among the collective set of funded and unfunded priorities. For background and context, the attached "Fiscal Impacts" report from the Business Management Department provides some additional information about the Town's capital program, debt capacity and funding options.

4. Evaluation of Site Redevelopment Option

Background on Agreement with Belmont Sayre

For the purposes of discussing a possible economic development opportunity, the Council met in closed session to discuss [Belmont Sayre's](#)⁴ interest in redeveloping the Site through the DEQ Brownfields Program. A total of four closed-session meetings were held from October 2017 to April 2018. Town staff, the Town's environmental engineering consultant, Steve Hart of Hart & Hickman, and the Town's environmental attorney, Keith Johnson of Poyner Spruill, were also in attendance.

Belmont Sayre is a development firm with extensive experience in Brownfields redevelopment. Local project examples include: American Tobacco Historic District, Chatham Manufacturing Company and the Contemporary Art Museum of Raleigh. In response to Belmont Sayre's interest, the Town Council agreed to take a dual path, allowing Belmont Sayre to have first right of refusal on redeveloping the property while simultaneously exploring a Town-led Brownfields agreement process. The Council's interest was to maintain the option of working with Belmont Sayre and concurrently to have staff go forward with the exploration of the Brownfields option, leaving open the possibility of an RFP process as well.

The first right of refusal agreement with Belmont Sayre expires on November 8th, at which time the Council may decide to negotiate with Belmont Sayre for the purchase of the

⁴ <http://www.belmontsayre.com/>

property, pursue an open RFP process for other offers, or retain Town ownership of the property. If the option to transfer the property is selected by Council, the Town would retain ownership of the area along the creek (approximately 2.32 acres of the 10.24 acre site).

Site Redevelopment

A Brownfields application cannot be accepted by DEQ without a future use to guide risk management decisions regarding contamination at a property. Should the Council wish to move forward with the Brownfields path and if selling the property becomes of interest, the Brownfields program creates a more marketable parcel of land to potential developers. Should the Council wish to retain the property, the Brownfields agreement still provides liability protection to the Town as a non-responsible party⁵.

Staff worked from May to August with land planning consultant Benchmark Planning to create a series of possible redevelopment scenarios for the Site that would guide a Brownfields application, should the Council select this path. Staff held public input sessions over the summer to seek community input about the [different scenarios](#)⁶. Feedback from the June meetings informed revisions to the [scenario shown in August](#)⁷. See the attachment entitled "[Themes of Public Comments and Feedback](#)" for more details.

5. Decision Point Details:

- a) **Apply** for Brownfields eligibility determination (non-binding)
- b) **Options for next steps** for public information and feedback
- c) **When to return to Council**

a) Brownfields Eligibility Determination Details

For the purposes of learning whether a Brownfields agreement is appropriate, the Town can apply under the "Ready for Reuse"⁸ option and pay an initial fee to DEQ of \$7,500 once a Letter of Eligibility (LOE) is issued. This process takes approximately 30 days. The Town would pay a second fee of \$7,500 to DEQ at the end of the Brownfields agreement process only if the Town continues forward with an agreement that is approved by all parties. The Brownfields program is voluntary and therefore the agreement process can be terminated at any time, although fees already paid to DEQ are non-refundable. The application for a determination also includes:

- Owner information
- Site information

⁵ Non-responsible means the Town did not place the contaminants on the property

⁶ <https://www.townofchapelhill.org/home/showdocument?id=39995>

⁷ <https://www.futureof828.org/engage/>

⁸ Ready for Reuse is a Brownfields agreement that aids in the marketing of a brownfields property to potential buyers and developers. The other primary program, which is geared toward prospective developers, is called "Redevelopment Now."

- Brownfields forms (e.g., affidavit, proposed agreement form, preliminary survey and environmental reports about the Site)
- General form of a future land use

Submitting an application would complete the final step of determining whether the Brownfields program is a viable option for this Site. If the Town submits an application for eligibility, the Council would still maintain the flexibility to determine the desired level of remediation and the future use of the property.

b) Possible Additional Public Meetings

At the last public information meeting in August, some who attended expressed a concern about having the Town proceed with a land use decision prior to taking more time to understand the environmental conditions of the Site as they relate to possible remediation options. While the public information meetings in June and August both included discussion of the environmental conditions and possible remediation options, more time and attention to this matter could be a helpful next step.

Additionally, because the questions and discussion at the August meeting largely focused on the environmental conditions and remediation, there is also an opportunity for more input on the draft redevelopment scenarios for the Site. For those reasons, should the Council want the Manager to hold additional public meetings, we would recommend the following public meetings:

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|---|--|
| • Focus: Environmental Conditions/Remediation | Week of October 22 nd or 29 th * |
| • Focus: Redevelopment Scenario | Week of October 22 nd or 29 th * |
| • Environmental Stewardship Advisory Board | November 13 th |

*Meeting date subject to consultant and room availability

c) When to Return to Council

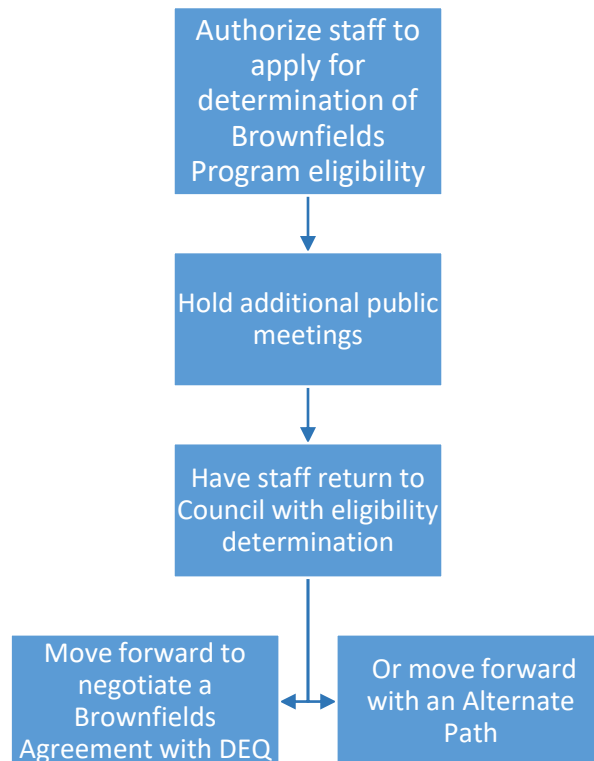
Following the public meetings, we propose to return to Council on December 5th with updated information about the application for eligibility and public meetings.

6. Recommendation

That the Council authorize the Manager to:

1. Apply for a Brownfields eligibility determination (non-binding) through the North Carolina Department of Environmental Quality.
2. Hold three additional public meetings, each dedicated to one of the following: a public information meeting about environmental conditions and remediation, a public information meeting about redevelopment scenarios, and a meeting of the Environmental Stewardship Advisory Board.
3. Once a Letter of Eligibility (LOE) has been issued by NC DEQ, return to Council to share updates about the public meetings and ask the Council to decide whether to proceed with negotiating a Brownfields agreement or to determine an alternate path.

Decision Tree



For the detailed process steps within each of the two regulatory programs (Brownfields or Voluntary Cleanup), see the table entitled Evaluation of Regulatory Track Options above.