

February 25, 2021

Mr. Joseph T. Martella II Environmental Engineer III Rhode Island Department of Environmental Management Office of Land Revitalization and Sustainable Materials Management 235 Promenade Street Providence, Rhode Island 02908-5767

RE: Responses to RIDEM Comments
20 West Extension Street (AP 32; L: 267)
16 Waites Wharf (AP 32; L: 248)
Waites Wharf (AP 32; L: 272)
Newport, Rhode Island
SAGE Project No. S3432

Dear Mr. Martella:

SAGE Environmental, Inc. (SAGE), on behalf of the owner of the above referenced properties (collectively referred to herein as "Site"), has prepared this submission to provide responses to comments received and summarized in a letter prepared by the Rhode Island Department of Environmental Management (RIDEM) dated August 31, 2020. Please note the aforementioned comments were generated following submission of a Site Investigation Report (SIR) which relates to a portion of the Site (Lots 248, 267 and 272 on Assessor Map 32). The remaining parcels were previously evaluated and obtained a Letter of Compliance (LOC) in March 1996; however, given the proposed redevelopment of the collective Site, RIDEM has asked that comments for parcels not related to the SIR be addressed herein. As such, SAGE provides responses to comments herein for those letters attached to the RIDEM *Request for Response to Public Comments*, dated August 31, 2020.

Email From Charles Donohue – June 23, 2020

During its review of the Site history and subsurface investigation (completed by SAGE and reported by others in the past), SAGE has not found evidence of a manufactured gas plant (MGP) waste deposits, typically in the form of coal tar, at the Site. Please note MGP waste is different from typical urban fill containing coal ash which is found ubiquitously within the northeast especially along filled areas in Newport. Common constituents found in urban fill include heavy metals (commonly arsenic and lead), as well as petroleum (commonly in Rhode Island referred to analytically as total petroleum hydrocarbons (TPH)), and poly-nuclear aromatic hydrocarbons (PAHs). Ubiquitous PAHs found in urban fill come from the burning of wood or coal (commonly referred to as pyrogenic PAHs) include: Acenaphthylene, Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(ghi)pervlene, Benzo(k)fluoranthene, Chrysene, Dibenz(a,h)anthracene, Fluoranthene, Fluorene, Indeno(1,2,3cd)pyrene, and Pyrene. Other PAHs which are commonly associated with petroleum (referred to as petrogenic PAHs) include: 2-Methylnaphthalene, Acenaphthene, Naphthalene, and Phenanthrene.

Cyanide was evaluated for and not found during the most recent SAGE investigations nor during the investigations on the other Site parcels conducted by others.

The Residential Direct Exposure Criteria are not the appropriate criteria to be applied to the Site. The applicable criteria are the Industrial/Commercial Direct Exposure Criteria. References to contaminants exceeding the Residential Direct Exposure Criteria, such as vinyl chloride and cyanide, are inappropriate. The proposed alternative, however, includes remediation of the contaminants in exceedance of the Industrial/Commercial Direct Exposure Criteria and the remediation will also lessen the extent of contamination that exceeds the Residential Direct Exposure Criteria without being required to do so.

The SIR referred to in the comment email was in fact referring to three (3) parcels (Lots 248, 267 and 272 on Assessor Map 32) as the remainder of the Site has already gone through the RIDEM program and received a LOC. As such, the SIR would not cover the other Site parcels as one has already been performed. Capping of other locations along the Newport Harbor with similar impacts has been conducted, and the remedial approach is not foreign to such a situation and the most recent was Hammetts Wharf (former location of the Newport Yachting Center). The comment indicates that only 10% of Waites Wharf has been tested, and requests that additional testing take place for the various lots. Plat 32 Lots 155 and 268 were investigated considerably in the early 1990's and complied with all regulatory requirements, including removal or closure of 4 USTs used historically on Site. Plat 32, Lots 267, 248, and 272 are the subjects of the current remediation process. Plat 32, Lots 155 and 268 were the subject of previous remediation in the 1990's. At that time, the exceedances were addressed by remediation approved by RIDEM.

RIDEM specifically requested information on evaluations of predicted sea level rise and potential future flooding in the area of the Site, and information related to the durability and resiliency of the proposed remediation in light of these challenges. The remedial design incorporates components aimed at preventing these issues. Any capping approaches designed as part of the redevelopment will incorporate a resiliency component to mitigate potential for erosion or damage associated with sea level rise of storm surge. Please note the current preliminary design includes placement of an entirely new sheet pile sea wall around the perimeter of the Site. The Site civil design does include consideration of such factors.

It is also prudent to discuss the surrounding neighborhood's issues with flooding. The Coddington Landing Condominiums experience additional problems when flooding occurs because the buildings were not built according to the base flood elevations required in the 1980's, let alone today's standards. A CRMC Assent Stipulation required that no mechanical equipment (boilers, etc.) except for trash compactors could be kept below the base flood elevation. This stipulation was included as a result of the Condominiums securing approval to build the structures in a way that deviated from the R.I. Building Code requirements. A June 11, 1981 letter from the Newport Building Code Board of Appeals to Newport Quays, Inc. noted the unanimous approval of the Quays III petition "to allow the construction of the lowest floor elevation 7'0" below the base flood elevation, with the condition that no mechanical equipment, except trash compactors, be located below the base flood elevation." This was decided in the June 9, 1981 meeting. The Building Code requirement at the time was that all residential buildings, including basements, must be built at or above the base flood level, which was 10.8' Mean Sea Level at this site (which was the projected 100-year base flood level). This stipulation was put into place specifically because of the flooding that would affect the basement level of the Condominiums. As such, the Condominiums did not account for base flood level protections even in 1981, let alone the protections necessary today for both flooding and the compounding effects of sea level rise.



Note, it has never been proposed that demolition will include the removal of foundations or earth work without an approved Remedial Action Work Plan (RAWP) with RIDEM. No Site work will occur, including earth work associated with demolished structure foundation removal, without a RAWP which will also include an environment monitoring plan and soil management plan. If and when the owner obtains municipal approval for its proposed redevelopment, the owner shall proceed through RIDEM's Site Remediation program. No redevelopment work shall occur prior to receiving all necessary from RIDEM for the Site.

Email From Charles Donohue – July 2, 2020

The response to the June 23 email appears to address the comments posed herein. Note additional comments relative to the public moment period have been left for RIDEM response.

Email From Chandler Hovey – July 10, 2020

SAGE does not have a response to the posed comments as they are not pertinent to the RIDEM process.

Letter From Richard and Connie Bischoff – July 10, 2020

The response to the June 23 email appears to address the comments posed herein.

Email From Betsy McStay – July 13, 2020

SAGE does not have a response to the posed comments as they are not pertinent to the RIDEM process.

Email From Charles Donohue – July 14, 2020

The opening comment posed in the email has been addressed above with the response to the June 23 email. However, SAGE provides additional responses below, organized in the manner presented in the email.

Could More Site Inspection Reports Be Done?

Please note the SIR referred to includes three (3) parcels within the project area. The remaining project area was not included, as it has already gone through the RIDEM program and achieved a LOC in March 1996. The parcels included in the LOC are known to contain soil impacts which, at the time of the LOC issuance, were allowed to remain without the use of a cap or the filing of an Environmental Land Use Restriction (ELUR). This approach was somewhat commonplace at the time the LOC was issued. The RIDEM LOC is valid and it is inappropriate to compare the standards used in 1993 to the current standards. As such, no remediation of the LOC parcels is required. However, given the time when the LOC was issued, understanding that redevelopment may occur, and a desire to better manage the LOC parcels beyond that which is required. If and when the owner obtains municipal approval for its proposed redevelopment, the owner shall proceed through RIDEM's Site Remediation program. No redevelopment work shall occur prior to receiving all necessary from RIDEM for the Site.

Are we at Risk?

As noted above, the LOC parcels are in compliance with the RIDEM regulations, and additional response



actions are not required at this time. However, the other parcels investigated and included in the SIR will require further environmental actions in accordance with current policy. These include capping to prevent direct soil contact and filing of an ELUR to restrict future use/activities and ensure capped surfaces are maintained and inspected annually. Additionally, although not required at the LOC parcels, it is being proposed that the same level of control be placed upon the LOC parcels to further bolster the environmental controls, resiliency, and protection thus improving vastly what is present now.

Cost vs Harm

Please note the many of the chemicals found present a risk through direct soil contact. As such, the proposed capping eliminates such a pathway. Furthermore, resiliency controls are proposed as part of the redevelopment, independent of the environmental conditions, with a focus upon protecting against storm surge, erosion, and damage from sea level rise.

Safest Method

As noted above, capping was selected to prevent exposure to soils which is the mechanism for risk. In some cases, removal of soil can be conducted because (1) it is financially feasible and (2) it is feasible to execute. Given the dynamics of the Site location and its sheer size, excavation and removal of all soil is not feasible. To provide a general order of magnitude alone for soil transportation and disposal (T&D), SAGE took the entire project area which equates to approximately 110,000 square feet. At a depth of 12 feet, that would be 49,000 cubic yards. Using a general yards to tons multiplier of 1.5, that volume of soil would be approximately 73,500 tons. At approximately \$150/ton, the cost alone for T&D would be over \$11 million. Furthermore, the average trailer dump truck can carry approximately 25 yards of soil which would equate to approximately 1,960 trucks.

Who is Responsible for Removing the Toxic Wastes?

The proposed plan of Site-wide capping and overall resiliency improvements of the area has been developed to control and mitigate risk.

Who can Pay for Toxic Soil Removal?

Please note SAGE has not found conditions at the Site which are related to that found at the noted Tiverton location. SAGE will leave to RIDEM to respond to the remaining comments relative to responsibility and expense.

The Technical and Financial Feasibility of the Additional Alternative (Removal of All Contaminated Soils)

Comment questions why the other alternative was perhaps not technically or financially feasible. This is, as the SIR points out, due to the condition of the shale ledge underlaying the Site, which is heavily weathered. "Bedrock at the Site consists of graded beds of feldspathic siltstone and sandstone, carbonate conglomerate and ash-flow lapilli tuff. During subsurface investigations, heavily weathered ledge which appeared to consist of shale was encountered at a depth ranging between 10 and 12-feet BSG." SIR § 2.5.1. As disturbances to this ledge would be hazardous to the integrity of the Site, soils closer to the ledge should remain to prevent further impacts to the ledge.



Letter From Greg and Susan Zacharias – July 14, 2020

SAGE feels the comment responses provided above address those posed in this letter. SAGE requests that RIDEM provide any additional comments beyond that provided herein.

Email From Kate W. Haakonsen – July 16, 2020

SAGE feels the comment responses provided above address those posed in this email. SAGE requests that RIDEM provide any additional comments beyond that provided herein.

Letter From William and Carolyn Firth – July 18, 2020

SAGE feels the comment responses provided above address those posed in this letter. SAGE requests that RIDEM provide any additional comments beyond that provided herein.

• Letter From Emily Sheehan – No Date

SAGE feels the comment responses provided above address those posed in this letter. SAGE requests that RIDEM provides any additional comments beyond that provided herein.

Email From Charles Donohue – July 17, 2020

SAGE feels the comment responses provided above address those posed in this email. SAGE request that RIDEM provide any additional comments beyond that provided herein.

Letter From Charles Donohue – Received by DEM July 17, 2020

SAGE feels the comment responses provided above address those posed in this letter. SAGE requests that RIDEM provide any additional comments beyond that provided herein.

Letter From Hugh Mellor II – July 21, 2020

SAGE feels the comment responses provided above address those posed in this letter. SAGE requests that RIDEM provide any additional comments beyond that provided herein.

Email From E.A. Mike Maroney – July 21, 2020

SAGE feels the comment responses provided above address those posed in this letter. SAGE requests that RIDEM provide any additional comments beyond that provided herein. Furthermore, SAGE is of the opinion that conditions upon the parcels closed in the 90s with a LOC have not changed. Furthermore, conditions required in the LOC appear to have been upheld.

• Email From Charles Donohue – July 21, 2020

SAGE feels the comment responses provided above address those posed in this letter. SAGE requests that RIDEM provide any additional comments beyond that provided herein.



Letter From Linda Rawlings – July 15, 2020

SAGE feels the comment responses provided above address those posed in this letter. SAGE requests that RIDEM provide any additional comments beyond that provided herein. Note, that during any redevelopment actions, environmental monitoring would be performed to monitor for dust under a Health and Safety Plan (HASP).

Letter From Rita Steele – Unknown Date

SAGE feels the comment responses provided above address those posed in this letter. SAGE requests that RIDEM provide any additional comments beyond that provided herein.

Letter From Patricia Thibodeau Ph.D. – Unknown Date

SAGE feels the comment responses provided above address those posed in this letter. SAGE requests that RIDEM provide any additional comments beyond that provided herein.

• Email From Henry Risman – July 25, 2020

SAGE feels the comment responses provided above address those posed in this email. SAGE requests that RIDEM provide any additional comments beyond that provided herein.

Letter From Richard W. Hyde, Jr. – Received by RIDEM July 29, 2020

SAGE feels the comment responses provided above address those posed in this letter. SAGE requests that RIDEM provide any additional comments beyond that provided herein.

• Email From Charles Donahue – August 8, 2020

SAGE feels the comment responses provided above address those posed in this email. SAGE requests that RIDEM provide any additional comments beyond that provided herein. Please note, SAGE is of the opinion the past work conducted relative to the 1990s LOC issuance remains valid.

Should you have any additional questions regarding the responses provided herein, please do not hesitate to contact the undersigned.

Sincerely,

SAGE Environmental, Inc.

Jacob H. Butterworth acob H. Butterworth, MS, LSP

Vice President

JHB/car

