July 9, 2024

Jenna Giguere, Esq.
Rhode Island Department of Environmental Management
Office of Legal Services
235 Promenade Street, Suite 425
Providence, Rhode Island 02908

RE: Response to Request for Additional Detail - Conceptual Remedy for On-Site Encapsulation of Regulated Soil at RIRM Site
434 Allen's Avenue
Providence, Rhode Island
Plat Map 47 / Lot 601 & Plat Map 55, Lot 10
RIDEM File No. SR-28-0143

Dear Ms. Giguere:

This correspondence is in response to your June 20, 2024 letter to Rhode Island Recycled Metals wherein you requested additional information relative to the preferred remedial alternative of on-site encapsulation of regulated soils at the above-referenced Site. The Department's comments are italicized below. LSE and RIRM's responses are underlined.

1. *Area #1 – "existing narrow concrete slab at the southwest corner of the Site." Provide detailed dimensions of the thickness of this existing concrete slab.*

The "existing narrow concrete slab at the southwest corner of the Site" we assume to mean at the entrance to the facility. This area has four inches of asphalt from the entrance at Allens Avenue to the scale, which has concrete ramps on both ends. This area is approximately 25' wide at the gate and 110' from Allens Avenue to the front of the scale's ramp.

2. *Area #1 – "new concrete pads…will consist of 4 inches of concrete." Provide justification of how this proposed cap thickness will withstand any heavy equipment use, including detailing the types and approximate weights of equipment needed for future operations in this area.*

The concrete pads are designed primarily for storage of metals and to provide a clean working area for customers. The processing equipment that will be on the pads will be lighter equipment to manage and stage the piles, rather than heavy machinery to process. Customer vehicles/trucks will discharge their materials to these pads. Then, skid steers and front-end loaders will push the material into piles to keep the area clean for the rubber-wheeled vehicles. Heavier equipment, such as a material handler (on rubber wheels rather than steel tracks) may position on the pad, but most likely would remain to the side of the concrete pads along with any heavier equipment such as excavators with a shear or grapple. We do not foresee more than a thousand tons of light iron material on the pad at a single time, with less on the heavy metal and non-ferrous pads. A skid steer weighs approx. 3 tons, a front-end loader 13 tons, and a material handler 45 tons.

3. *Area #1 – "three to four inches of compacted ground asphalt tailings over crushed stone on top of an impervious liner." Provide justification of how the proposed cap thickness and materials will withstand any heavy equipment use, including detailing the types and approximate weights of equipment needed for future operations in this area.*

The heavy equipment will be staged primarily on the crushed stone and ground asphalt areas, around the concrete pads. The machinery will reach onto the concrete pads in order to prepare and load material. An excavator on tracks weights approx. 50 tons plus the weight of shear or grapple. A material handler weighs approx. 45 tons. Tractor trailers that will remove the material from site weigh approx. 40 tons. The tractor trailers will be traversing the site most often to take material from the pads and drive westerly across the site to Allens Avenue. The heaviest machinery will be engaged in vessel dismantling, which area will be characterized by one foot of crushed stone. This larger excavator weighs approx. 125 tons plus the weight of the shear. Furthermore, it is expected that periodic inspection and maintenance of the ground asphalt-covered areas will be required. Therefore, as noted in the Department's June 20, 2024 SIR Comment Letter, the revised Environmental Land Use Restriction (ELUR) will include a soil management plan to specify the frequency of cap inspections as well as maintenance and repair procedures.

4. *Area #2 – How will marine salvage fluids (fuels, lubricants, antifreeze, etc.) be managed to ensure that the proposed passive infiltration does not pose a future risk to groundwater quality or the bay?*

Prior to vessel dismantling, any recoverable fluids would be removed from the vessel, or hazardous materials, if present, would be remediated accordingly. The vessels would be brought onto land to cut large sections off, at which point these sections would be moved to the concrete pads in Area #1 for further processing, including any sections where substances may remain, such as in the engine compartment. Dumpsters and other containers will be staged alongside the vessel for safe storage and containment of any sections as required.

In addition to answers to the above questions, the Department requires submission of a revised version of the "Site Plan Showing Details of Planned Engineering Controls Associated with Stormwater Infrastructure" that comports with the below requirements:

1. The Drawing must be clearer, all notes must be legible.
2. Provide the scale.
3. Show Area #1 and Area #2 on the Drawing.

The PDF prepared by Independence Engineering for the proposed stormwater controls and engineered controls is attached which clearly shows the requested detail.

Finally, please note that the revised Environmental Land Use Restriction (ELUR) will also be required to specify the frequency of cap inspections as well as maintenance and repair procedures.

See the response to Comment #3, above.

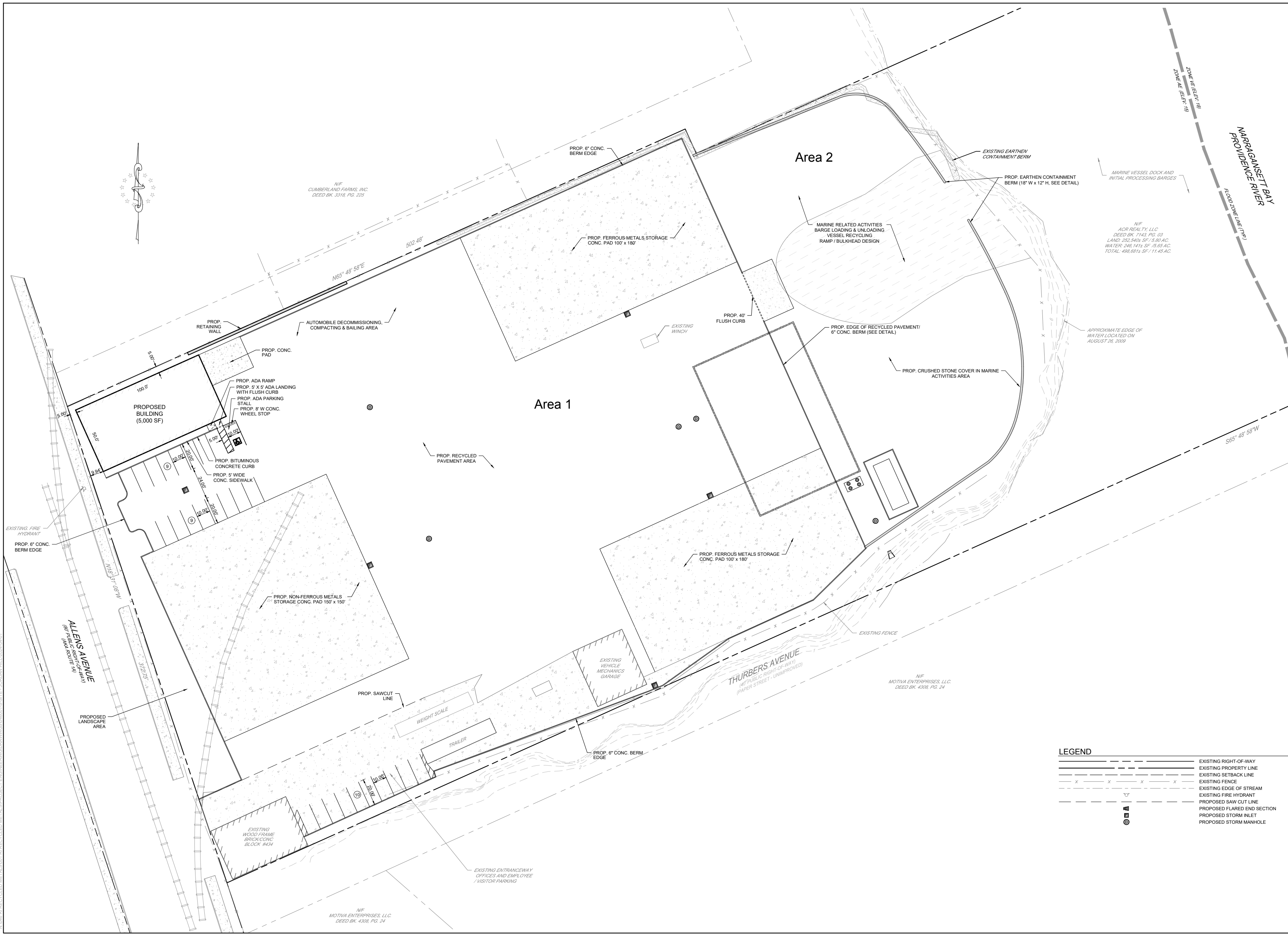
If you have any additional questions regarding the preferred remedy for the Site, please feel free to contact the undersigned.

Sincerely,

David J. Hazebrouck, P.G., LSP, LEP
Principal

Attachments

C: Richard Nicholson, Nicholson & Associates, LLC
Jared Sevinor, RIRM


Area 1
Area 2
N/F
CUMBERLAND FARMS, INC.
DEED BK. 3318, PG. 225
N65° 48' 58"E
502.48'
PROP. 6" CONC. BERM EDGE
PROP. FERROUS METALS STORAGE CONC. PAD 100' x 180'
PROP. RETAINING WALL
AUTOMOBILE DECOMMISSIONING, COMPACTING & BAILING AREA
PROP. CONC. PAD
PROPOSED BUILDING (5,000 SF)
PROP. ADA RAMP
PROP. 5' X 5' ADA LANDING WITH FLUSH CURB
PROP. ADA PARKING STALL
PROP. 8' W CONC. WHEEL STOP
PROP. BITUMINOUS CONCRETE CURB
PROP. 5' WIDE CONC. SIDEWALK
PROP. RECYCLED PAVEMENT AREA
EXISTING, FIRE HYDRANT
PROP. 6" CONC. BERM EDGE
PROP. NON-FERROUS METALS STORAGE CONC. PAD 150' x 150'
ALLENS AVENUE
(80' PUBLIC RIGHT-OF-WAY)
(AKA ROUTE 1A)
PROPOSED LANDSCAPE AREA
PROP. SAWCUT LINE
WEIGHT SCALE
TRAILER
EXISTING WOOD FRAME BRICK/CONC BLOCK #434
EXISTING ENTRANCEWAY OFFICES AND EMPLOYEE / VISITOR PARKING
N/F
MOTIVA ENTERPRISES, LLC.
DEED BK. 4308, PG. 24
PROP. 6" CONC. BERM EDGE
EXISTING VEHICLE MECHANICS GARAGE
THURBERS AVENUE
(40' PUBLIC RIGHT-OF-WAY)
(PAPER STREET - UNIMPROVED)
PROP. FERROUS METALS STORAGE CONC. PAD 100' x 180'
EXISTING FENCE
N/F
MOTIVA ENTERPRISES, LLC.
DEED BK. 4308, PG. 24
S65° 48' 58"W
PROP. 40' FLUSH CURB
EXISTING WINCH
PROP. EDGE OF RECYCLED PAVEMENT/ 6" CONC. BERM (SEE DETAIL)
PROP. CRUSHED STONE COVER IN MARINE ACTIVITIES AREA
MARINE RELATED ACTIVITIES
BARGE LOADING & UNLOADING
VESSEL RECYCLING
RAMP / BULKHEAD DESIGN
EXISTING EARTHEN CONTAINMENT BERM
PROP. EARTHEN CONTAINMENT BERM (18" W x 12" H, SEE DETAIL)
MARINE VESSEL DOCK AND INITIAL PROCESSING BARGES
N/F
ACR REALTY, LLC
DEED BK. 7143, PG. 03
LAND: 252,540± SF / 5.80 AC.
WATER: 246,141± SF / 5.65 AC.
TOTAL: 498,681± SF / 11.45 AC.
APPROXIMATE EDGE OF WATER LOCATED ON AUGUST 26, 2009
NARRAGANSETT BAY
PROVIDENCE RIVER
ZONE VE (ELEV. 18)
ZONE AE (ELEV. 18)
FLOOD ZONE LINE (TYP.)
0 15 30
GRAPHIC SCALE: 1" = 30'
LEGEND
EXISTING RIGHT-OF-WAY
EXISTING PROPERTY LINE
EXISTING SETBACK LINE
EXISTING FENCE
EXISTING EDGE OF STREAM
EXISTING FIRE HYDRANT
PROPOSED SAW CUT LINE
PROPOSED FLARED END SECTION
PROPOSED STORM INLET
PROPOSED STORM MANHOLE

REV	DATE	DESCRIPTION	BY

Independence ENGINEERING LLC
161 EAST GROVE STREET, SUITE 3
MIDDLEBOROUGH, MASSACHUSETTS 02346
(508) 245-2608
INDEPENDENCE@INDEPENDENCE.ENGINEERING
NEW JERSEY ★ PENNSYLVANIA ★ MASSACHUSETTS

PERMITTING PLANS 75% SUBMISSION

SITE PLAN

FOR

RHODE ISLAND RECYCLED METALS
434 ALLENS AVENUE
CITY OF PROVIDENCE, RHODE ISLAND 02905

PROJECT	
046-001	
DATE	
04/01/2024	
SCALE	DRAWN
1" = 30'	MAS
DESIGNED	CHECKED
SMO	NES

NEIL E. SANDER
No. 8979
REGISTERED PROFESSIONAL ENGINEER
CIVIL
04/01/2024

C400

SHEET	OF
4	11