

From: Dante, Grady (DEP) <grady.dante@state.ma.us>
Sent: Monday, April 11, 2022 4:11 PM

MassDEP Bureau of Air and Waste has completed the review of revised Amendment 1 and Attachment 1 for the Non-Traditional Work Plan (NTWP) for 776 Summer Street, Boston, Massachusetts. MassDEP hereby approves the NTWP amendment with the following conditions:

1. NorthStar Contracting Group, Inc. shall file an ANF001 utilizing approval number NNT22007 and waiver number NAW2204035.
2. MassDEP requires pre-abatement and post-abatement inspections. Work shall not start until the MassDEP pre-inspection has been conducted. Provide advance notice to schedule the required inspections. Scheduling of such inspections will be determined by MassDEP availability.
3. All requirements of the NTWP must be onsite, set-up, and in place at the time of the MassDEP pre-inspection.
4. MassDEP shall be notified immediately if the perimeter air monitoring results reach or exceed 0.010 f/cc. All air monitoring results shall be emailed on a daily basis to:
NERO.Asbestos@mass.gov
5. If visible emissions are observed work must cease and MassDEP shall be notified immediately.
6. Any changes to the approved plan shall be submitted via an addendum to this NTWP for prior review and approval by MassDEP.
7. The primary hauler of the ACWM shall be Red Technologies of Portland, CT. The primary disposal facility for the ACWM shall be Frank Road Portable Recycling Solutions located in Grove City, OH.
8. Copies of asbestos Waste Shipment Records shall be provided to MassDEP on the day the waste leaves the site of origin for disposal.
9. The final clearance documentation shall be provided to MassDEP.

By performing work pursuant to this Approval, the owner/operator and their contractors, subcontractors and consultants acknowledge and agree that failure to strictly comply with the work plan and conditions contained in this Approval may result in immediate revocation of this Approval and that all parties may be subject to enforcement action by MassDEP.

The applicant shall ensure that each party involved in this project receives a copy of the work plan and this Approval. A copy of the application, work plan and Approval shall be kept at the facility for the duration of the project.

Should unforeseen facility conditions require changes to any of the procedures in the work plan or this Approval, the applicant may request an amendment or addendum to the Approval. Any request for changes shall be made to MassDEP in writing. None of the added or amended conditions shall be utilized at the facility until the request has been reviewed and approved by MassDEP in writing. Should you have any questions please contact me or John MacAuley.

Grady Dante, CHMM, MSc.
Asbestos Section Chief
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**NON-TRADITIONAL WORK PLAN – AMENDMENT 1
SOUTH BOSTON POWER PLANT
776 SUMMER STREET
BOSTON, MASSACHUSETTS 02127**



Prepared For:

NorthStar Contracting Group, Inc.
Mr. Craig Pearson
Director of Operations
401-S 2nd Street
Everett, MA 02149

HRP 776 Summer Street, LLC.
776 Summer Street
Boston, MA 02127

Hillmann Project Number: M3-11785

February 16, 2022
Revised March 15, 2022

Certification of Work Plan

The purpose of this work plan is to present Amendment 1 to MassDEP Plan NNT22007 waiver number NAW2201119. This work plan has been prepared for use by NorthStar Contracting Group, Inc. (NorthStar) for multiple decontamination and abatement tasks which are considered non-traditional across the site located at 776 Summer Street, Boston, MA. Hillmann shall not be held responsible or liable for the execution of this work plan. Execution of this work plan shall be the responsibility of HRP 776 Summer Street, LLC., Suffolk Construction, NorthStar Contracting Group, and TRC Corporation.

All work referenced in the original NTWP is still active.

Prepared By:



Jonathan Nicoll
Asbestos Designer AD900372

Introduction

On behalf of HRP 776 Summer Street. LLC. (the “Owner”), Mr. Jonathan Nicoll is submitting the following Amendment 1 to MassDEP Plan NNT22007 waiver number NAW2201119 for review and approval for the planned demolition and abatement at the former South Boston Power Plant. This amendment is being submitted for the removal of ACM’s as described in the table below as well as decontamination of select areas that may have been contaminated by friable asbestos containing materials (ACM) across the site. NorthStar is preparing to commence an asbestos abatement program utilizing a combination of traditional and non-traditional methods for the cleanup and removal of ACM on the interior and exterior of select buildings.

The non-traditional work practices described herein will not result in the discharge of visible emissions of asbestos to the outside air, will keep ACM adequately wet, comply with all other applicable requirements of 310 CMR 7.15, will not pose significant risk to public health, safety, or the environment, and is otherwise consistent with the requirements of applicable federal, state, and local laws and regulations.

This portion of the project is considered non-traditional because work activities are not considered standard practice in compliance with the following regulations:

- ❖ 310 CMR 7.15(7)(c)(5)(6)
- ❖ 310 CMR 7.15(7)(e)
- ❖ 310 CMR 7.15(14)(4)(b)

This Amendment will address the removal and disposal of the following identified ACM:

Building 1A – 1898 Building	
Material	Quantity
Cement Board	30,000 SF
White Braided Wire Insulation	10,000 LF
White Cloth Liner	200 SF
Vibration Cloth	50 SF
Black Fiber Board	500 SF
Cloth Wire Wrapping	8,100 LF
Cement Switch Dividers	20 SF
Cement Wire Conduit	45,000 LF
Cable Wrap	35,000 LF
Gaskets	200 EA
Pipe Insulation	100 LF
Pipe Elbow Insulation	500 EA
White Caulking (Exterior)	20 LF
Cement Signs (Exterior)	6 SF
Gray Caulking (Exterior)	24 LF
Galbestos Roofing (Exterior)	300 SF
Corrugated Metal Panel with Coating (Exterior)	100 SF
White Window/Door Caulking	20 LF

Building 1B – Switch Houses 3 and 4	
Material	Quantity
Black Cement Panels / Doors	80,000 SF
Cement Panels (Gray)	80,000 SF
Cable Wrap	50,000 LF
Cable Wrap	221 Units
Roof Edge / Flashing (Exterior)	650 LF
Building 2A, 2B, 2C – Turbine Buildings	
Material	Quantity
Pipe Insulation	500 LF
Gaskets	915 EA
Gray Transite Panels	3 SF
Switch Gear Electrical Panel Boxes	150 SF
Electrical Wire	1,500 LF
Building 1C – Switch House 2	
Material	Quantity
Cloth Wrap on Ground Bars	8,000 SF
Braided Wire Wrap	35,000 LF
Cement Wire Conduit	3,000 LF
Cement Conduit	4,000 LF
Transite Board	12,000 SF
Pipe Insulation	100 LF
Adhesive on 12"x12 Tan Floor Tile	300 SF
White Paper Insulation	2,000 SF
Cement Panels on Circuit Boxes	12,000 SF
Gray Electrical Wire Insulation	20,000 LF
Putty Inside Breaker Boxes	1,000 SF
Cloth Wrap on Cables	2,000 LF
Gaskets	20 EA
9"x9" Green/Brown Floor Tile and associated Mastic	600 SF
Cement Board Panels	40 SF
White Material between Metal Wall Panels	3,500 SF
Tan Conduit Putty	20 SF
Black Electrical Wire Insulation	20,000 LF
Fiber Paper	50 SF
Black Coating on Brick Wall (Exterior)	600 SF
White Caulking on Concrete Panels (Exterior)	200 SF
Black Tar on Brick Wall / Flashing (Exterior)	1,000 SF
Building 4 – Boiler Building 3 – Lower Level South	
Material	Quantity
Drainpipe Insulation	500 SF
White Elbow Insulation	NQ
Braided Insulation on Plastic Wrapped Cable	1,000 LF
Tank Insulation	400 SF
Layered Breaching Insulation on 24" Pipe and Debris	1,000 SF
White Caulking on Parapet Wall (Exterior)	600 LF

Building 4 – Boiler Building 3 – Boiler Area 1	
Material	Quantity
Insulation on 16" pipe	1,250 LF
Cement Switch Board	125 SF
Breaching Insulation	25,000 SF
Tank Insulation	100 SF
White Paper Insulation	60 SF
Pipe Insulation under 6"	4,000 LF
Rope Gasket on Boiler Doors	600 LF
Cement Conduit	500 LF
Electrical Wire	1,500 LF
Debris Inside Boilers	85,000 CF
Boiler Insulation (4 small boilers)	20,000 SF
Flange Gaskets	1,000 EA
Building 4 – Boiler Building 3 – Boiler Area 2	
Material	Quantity
Insulation on 16" pipe	1,250 LF
Cement Switch Board	125 SF
Breaching Insulation	25,000 SF
Tank Insulation	100 SF
White Paper Insulation	60 SF
Pipe Insulation under 6"	4,000 LF
Rope Gasket on Boiler Doors	600 LF
Cement Conduit	500 LF
Electrical Wire	1,500 LF
Debris Inside Boilers	85,000 CF
Boiler Insulation (4 small boilers)	20,000 SF
Flange Gaskets	1,000 EA
Building 4 – Boiler Building 3 – Boiler Area 3	
Material	Material
Insulation on 16" pipe	1,250 LF
Cement Switch Board	125 SF
Breaching Insulation	25,000 SF
Tank Insulation	100 SF
White Paper Insulation	60 SF
Pipe Insulation under 6"	4,000 LF
Rope Gasket on Boiler Doors	600 LF
Cement Conduit	500 LF
Electrical Wire	1,500 LF
Debris Inside Boilers	85,000 CF
Boiler Insulation (4 small boilers)	20,000 SF
Flange Gaskets	1,000 EA
Building 4 – Boiler Building 3 – Boiler Area 4	
Material	Material
Insulation on 36" pipe & Debris on Ground	1,000 SF
Insulation on 16" pipe	1,250 LF
Cement Switch Board	125 SF

Breaching Insulation	25,000 SF
Tank Insulation	100 SF
White Paper Insulation	60 SF
Pipe Insulation under 6"	4,000 LF
Rope Gasket on Boiler Doors	600 LF
Cement Conduit	500 LF
Electrical Wire	1,500 LF
Debris Inside Boilers	85,000 CF
Boiler Insulation (large boilers)	33,000 SF
Flange Gaskets	1,000 EA

- *NorthStar will be responsible for providing progress updates to MassDEP weekly.*

Site Specific Removal Plan

The following sections describe the work area isolation methods, worker protection, decontamination, packaging, and transportation procedures NorthStar will employ while implementing the Approved Plan.

Work areas will be abated in a sequence which will allow areas to be cleaned as needed for decon/load out areas for the next area.

NorthStar will submit a work area and weekly schedule updates every Monday morning to MassDEP. Any required pre or post abatement inspections will continue to be requested 24 hours in advance.

Pre-Abatement and General Work Practices - Decontamination and Interior Abatement

1. Prior to commencement of any activity, each identified work area shall be isolated in accordance with the requirements of 310 CMR 7.15(7)(c)(4) to prevent emissions to the ambient air. The work area shall be isolated by sealing all openings, including but not limited to, windows, doors, cracks, vents, conduits, ventilation openings, drains, grills, and trench grates with six mil thick plastic sheeting and secured by zip tape and duct tape. Walls, floors, and ceilings will not be covered as they are considered contaminated and will be part of the decontamination. Any opening large enough for a worker to pass through shall be sealed with solid construction materials, such as plywood over studding, which shall constitute the outermost boundary of the asbestos work area. All cracks, seams and openings in such solid construction materials shall be caulked or otherwise sealed, so as to prevent the movement of asbestos fibers out of the work area.
2. Where applicable, Life Safety work will be performed prior to any abatement or decontamination. This will primarily include the installation of temporary lighting.
3. A three-stage decontamination facility will be erected at the entrance to each work area to facilitate the decontamination. Asbestos warning signs shall be posted at all potential entry points.
4. Decontamination unit wastewater associated with the work described in this Amendment shall be filtered through a 5-micron filter and be disposed as ACWM.
5. HEPA-filtered fan units shall be used to supply negative pressure which will be exhausted outside the containment. A minimum of four (4) air changes per hour will be provided. Negative pressure shall be maintained continuously throughout the abatement process until the final visual and

clearance testing is complete. Negative air calculations including volume of area to be abated, capacity of unit running at 75% efficiency with 4 air changes per hour will be monitored and recorded.

6. All personnel will have the proper asbestos training, medical clearance, and licensing, and don the proper personal protective equipment (PPE). Required PPE for this project will include Tyvek (or equivalent brand) suits, half-face air-purifying respirators, hard hats, safety glasses, gloves, high visibility vests, and safety-toe boots. Workers shall enter / exit the work area through the worker decontamination facility.
7. Employees will have on site a copy of their asbestos training certifications, medical clearance records, respiratory fit-tests, and current MA asbestos license.
8. Personal OSHA Air Monitoring shall be conducted during this operation by NorthStar.
9. Water hoses will be utilized and sourced from hydrants located on the east side of the site. Water shall be used to wet the ACM and control dust during all abatement operations.
10. The General Contractor has procured a temporary electrical service through Eversource and an on-site electrical contractor, the work has commenced, and the temporary service will be installed and operating prior to the Start of the Abatement.
11. After completion of the abatement and decontamination activities, all equipment, supplies, and materials shall be removed from the work area once they have been thoroughly cleaned and are free of asbestos debris.
12. In the event that additional abatement will occur in decontaminated areas, NorthStar will cover all critical barriers and seal with four (4) layers of poly sheeting, in addition to a hard barrier where required. After the initial decontamination is complete, the top two (2) layers of contaminated poly sheeting will be removed and disposed of as ACWM. If the area will be re-contained for abatement as part of a later phase, the remaining two (2) layers of clean poly sheeting will still remain.

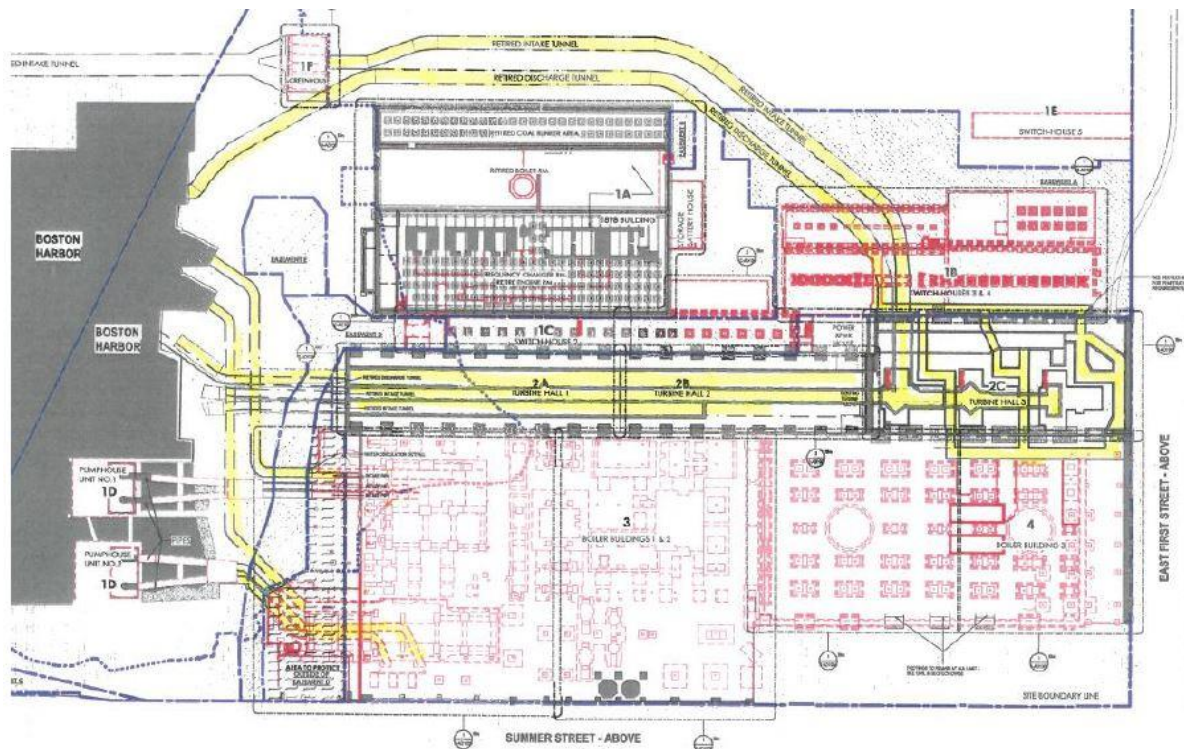
Water Management Plan

NorthStar has fully investigated the intake and discharge piping / tunnels and provide the following.

The tunnels are buried deep below the buildings and have been plugged either by closing the gate valves or by physical plugging. This is confirmed by the fact that since NorthStar has been on site for the last 4 months, at no time did any pits, tunnels, chases have water intrusions by way of the Harbor. This would have been visibly seen during the ebb and flow of the tides and this has not happened. It is verification that the intakes and discharge tunnels do not communicate any longer with the Harbor.

Furthermore, the below drawing confirms that the tunnels are only under the turbine buildings, except for where they run under switch houses 3 and 4. Those two tunnels are buried well underground, are not accessible from the switch houses, and are covered by concrete slab and soil. The intake and discharge tunnels are denoted in yellow.

Lastly, the intake and discharge tunnels are never exposed to an asbestos containment. The tunnels are either covered by soil and concrete slab, covered by concrete slab, or not within an asbestos work area.



There are utility pits, pipe chases, and depressed equipment areas within NorthStar's denoted asbestos containments. In each instance, if any water (ground or rain) exists, it will be filtered through a 5 micron filter and used as part of the abatement process. NorthStar will wet the ACM and keep it wet with this water. Any remaining waters will be cleaned up, packaged, and disposed of as asbestos waste as part of the fine cleaning process. All of these areas will be cleaned and are part of the work area visual inspection and final air clearance sampling.

Negative Pressure Enclosure Systems

All negative pressure enclosure systems will comply with 29 CFR 1926.1101, 310 CMR 7.15U and 454 CMR 28.00. To determine the number of AFD's required, NorthStar will ascertain the volume, in cubic feet, of the work area by multiplying the floor area by the ceiling height. The total air circulation requirement for the work area, in cubic feet per minute (CFM), will then be determined by dividing the above volume by the number fifteen (15), which is 4 changes per hour. Negative air calculations including volume of area to be abated, capacity of unit running at 75% efficiency with 4 air changes per hour will be monitored and recorded.

A manometer shall be used to document the pressure differential for all regulated abatement work areas. A minimum of -0.02 column inches of water pressure differential, relative to pressure outside the regulated abatement work area shall be maintained. Once installed, HEPA system will be inspected every two hours per work shift. If manometer readings detect a pressure differential issue due to reduction in volumetric flow rates caused by friction, additional HEPA units will be added prior to a reading below -0.02 column inches of water pressure differential.

$$\frac{\text{Volume of work area (cu. Ft.)}}{15} = \text{Air Circulation Requirement (CFM)}$$

The number of Air Filtering Devices needed to achieve this rate will then be determined by dividing the air circulation requirement (CFM) by the working capacity of the AFD(s) used.

$$\frac{\text{Air Circulation Requirement (CFM)}}{\text{Capacity of AFD with loaded filters (CFM)}} = \text{Number of AFD's needed}$$

At a minimum, one (1) additional AFD will be setup as a backup in case of equipment failure or if a machine needs to be maintenance.

BUILDING	FLOOR	LENGTH	WIDTH	HEIGHT	Volume - CF	Air Changes per hour	CF/HR	CF/MIN	HEPA CFM 75%	# of 2000 cfm HEPA units
BUILDING 1A - 1898 Building										
Frequency Charger Building	Lower Level	245	82	11	220,990	4	883,960	14,733	1500	10
Frequency Charger Building	Main Level	125	15	20	37,500	4	150,000	2,500	1500	2
BUILDING 1B - Switch Houses 3 and 4										
South Section	Lower Level	120	55	12	79,200	4	316,800	5,280	1500	4
South Section	Ground	120	55	12	79,200	4	316,800	5,280	1500	4
South Section	Level 2	120	55	12	79,200	4	316,800	5,280	1500	4
South Section	Level 3	120	55	12	79,200	4	316,800	5,280	1500	4
North Section	Lower Level	140	55	12	92,400	4	369,600	6,160	1500	5
North Section	Ground	140	55	12	92,400	4	369,600	6,160	1500	5
North Section	Level 2	140	55	12	92,400	4	369,600	6,160	1500	5
North Section	Level 3	140	55	12	92,400	4	369,600	6,160	1500	5
East Section	Lower Level	122	45	13	71,370	4	285,480	4,758	1500	4
BUILDING 1C - Switch House 2										
Throughout	lower level	290	30	10	87,000	4	348,000	5,800	1500	4
Throughout	level 1	290	30	10	87,000	4	348,000	5,800	1500	4
Throughout	level 2	290	30	10	87,000	4	348,000	5,800	1500	4
Throughout	level 3	136	30	30	122,400	4	489,600	8,160	1500	6
Throughout	2 Story South Section	65	30	25	48,750	4	195,000	3,250	1500	3
BUILDING 4 - Boiler Building 3										
Ground Floor - South	lower level	150	82	18	221,400	4	885,600	14,760	1500	10
Ground Floor - South Load Out Area 1	lower level	50	25	18	22,500	4	90,000	1,500	1500	1
Ground Floor - South Load Out Area 2	lower level	60	50	18	54,000	4	216,000	3,600	1500	3
Upper Levels North - Area 1	upper levels	130	75	75	731,250	4	2,925,000	48,750	1500	33
Upper Levels North - Area 2	upper levels	130	75	75	731,250	4	2,925,000	48,750	1500	33
Upper Levels North - Area 3	upper levels	130	75	75	731,250	4	2,925,000	48,750	1500	33
Upper Levels South - Area 4	upper levels	130	70	90	819,000	4	3,276,000	54,600	1500	37
BUILDINGS 2A, 2B, and 2C - Turbine Buildings										
Typical Small Work Area	Level 1	10	10	10	1,000	4	4,000	67	750	1

*** NorthStar's Supervisor will inspect all HEPA machines every two (2) hours daily. Copy's of HEPA inspection logs will be submitted to MassDEP daily.**

Pre-Abatement and General Work Practices – Roof Flashing, Caulking, Transite, and Gaskets

1. A regulated area shall be established around the portion of the area being worked on utilizing asbestos barrier tape and asbestos warning signs. This barrier tape will be located at ground level and around the waste trailers.
2. A three-stage decontamination facility will be erected and contiguous to any regulated work area. The decontamination facility will consist of two separate, adjacent rooms separated by a shower with curtained entrances, constructed in accordance with applicable regulations (water collection, heating, and filtration).
3. All personnel will have the proper asbestos training, medical clearance, and licensing, and don the proper personal protective equipment (PPE). Required PPE for this project will include Tyvek (or equivalent brand) suits, half-face air-purifying respirators, hard hats, safety glasses, gloved, high visibility vests, and safety-toe boots. Workers shall enter the work area through the worker decontamination facility.
4. Employees will have on site a copy of their asbestos training certifications, medical clearance records, respiratory fit-tests, and current MA asbestos license.
5. Personal OSHA Air Monitoring shall be conducted during this operation by NorthStar.
6. Water hose shall be used to wet the ACM and control dust during all removal, breaking, and loading operations. Water will be sourced from local hydrants on the site. At least one hose will be used on each active work area to prevent any visual dust generated by abatement activity. Hose nozzles will be adjusted so that a mist of water is generated, as opposed to a stream. All water will be contained during wetting or decontamination activities. Wastewater will not be discharged into a sanitary sewer. All water generated during abatement will be passed through a 5 micron filter before being ultimately disposed as ACWM.
 - a. In the event of freezing weather conditions, NorthStar will implement heat trace lines coming from the water source. Heat will also be provided into the containments from outside of the work areas. If needed, environmentally friendly RV antifreeze will be added to the water.
7. After completion, all equipment, supplies, and materials shall be removed from the work area once they have been thoroughly cleaned and are free of asbestos debris.
8. During all exterior ACM removal, a MA DLS certified Asbestos Project Monitor from TRC shall be on-site to perform daily ambient air monitoring along the work area boundaries at four locations, preferably near active the work area(s). The sample locations will preferably be along the perimeter of the site and may change each day based on where the majority of active work area(s) happen to be. Two sets of air samples will be collected per shift and analyzed daily using high volume pumps. Ambient air monitoring will be performed by TRC following the NIOSH 7400 PCM Method. Analysis of the air samples shall be on site so that corrections in the work practices can be made immediately if warranted. In addition to the perimeter monitoring noted above, similar ambient air sampling (4 locations, two sets

of air samples each shift) will be performed around each active exterior work area. These sample locations may be adjusted during the work based on the existing conditions for each work area.

9. The Contractor will provide a sufficient number of GFCI protected electrical outlets and extension cords to allow the Asbestos Project Monitor to collect all required perimeter area air samples.

10. If the air monitoring results reach or exceed the MA DLS clean air criteria of 0.010 fibers per cubic centimeter (f/cc) of air, then all work shall be stopped. MassDEP shall be notified within 2 hours by TRC and the work methods shall be evaluated. Work will not proceed until MassDEP approves changes in work methods or approves restarting of the work if it is determined that no changes to work methods are needed.

11. All air samples shall be collected in the breathing zone, at a minimum of fifty-four inches (54") and a maximum of seventy-two inches (72") above the ground level. All air filter cassettes shall be changed periodically to prevent particulate overloading. Air monitoring series which repeatedly reveal samples that are overloaded with particulate and cannot be analyzed shall be in noncompliance.

12. TRC will conduct a visual inspection of each exterior work area for remaining visible debris to ensure that no remnant ACWM/debris remains. Each non-porous item will be visually inspected by TRC and removed from the work area for scrapping, recycling, disposal as C&D waste, or for re-use by Owner. The Contractor shall perform additional removal and decontamination as requested by TRC until the area and any items to be removed from the work area as non-ACWM have been approved.

13. MassDEP must be notified a minimum of 24 hours prior to the initiation of each phase (or work area) and a minimum of 24 hours prior to the completion of the work of each phase (or work area) to allow them the opportunity to conduct a post-inspection at the end of the project or phase.

14. At the end of each shift, a copy of all air samples will be emailed to MassDEP at nero.asbestos@state.ma.us.

Decontamination and associated Traditional Abatement – Buildings 1A, 1B, 1C, 2A, 2B, 2C, and 4

1. The work area demarcation, crew training, sampling, water use, and other steps included in the "Pre-Abatement and General Work Practices - Decontamination and Interior Abatement" section of this plan will all remain in place and be adjusted for this task.
2. Walls, floors, and ceilings will not be covered with poly sheeting as they are considered contaminated and will be included in the following decontamination procedures.
3. All debris in the containment area must be disposed of as ACM/ACWM. All ACWM generated from within the negative pressure containment shall be removed utilizing wet-methods and disposed of as asbestos waste. All waste shall be double-bagged in six-mil labeled polyethylene asbestos disposal bags or wrapped and sealed in double six-mil polyethylene sheeting or Gaylord boxes or equivalent and include a generator label.
4. All porous items (building materials, fiberglass insulation, etc.) inside of the containment are considered contaminated and will be disposed of as ACWM.
5. Non-porous contents will be wiped down and HEPA vacuumed and removed through the waste load out unit to be disposed of as clean demo debris. Alternatively, non-porous items that

cannot be feasibly cleaned will be disposed of as ACWM. Non-porous contents will be subject to visual inspection by the Asbestos Supervisor and Project Monitor prior to disposal.

6. Once steps 1-4 have been completed, NorthStar will proceed with traditional abatement of the identified interior ACM's described in the table within the introduction section of this Amendment. Traditional abatement methods are described below:

- a. The boilers and breeching will be abated in a top-down fashion. Where applicable, the outer skin will be mechanically unfastened or cut free. Metal components will be cleaned, inspected, and removed. Breaching and boiler insulation will be wetted, manually removed, and bagged. All the bagged material will be properly packaged (double bagged or put into lined gaylord boxes) and removed from the containment for disposal.*

The methods of removal will be traditional abatement methods ensuring all materials are properly wetted, placed in bags, and sealed. This will occur in a top-down fashion with gross removal followed by fine cleaning.

The concrete encased conduit/cable wrap will be opened utilizing mechanical hammering and cutting methods. NorthStar will evaluate the cables as they become exposed to determine if the asbestos can be unwrapped or stripped of the outer ACM covering. In all cases, the asbestos wrap will be properly wetted, packaged, and disposed as ACWM.

All stripped metals will be cleaned within the existing containments, inspected, and placed into salvage containers for ultimate recycling. If the wire remains unstripped this wiring inclusive of the wrap/covering will be properly wetted, wrapped, packaged and disposed as ACWM.

7. Once step 5 has been completed, all surfaces within each full containment shall be thoroughly cleaned to achieve the clearance criteria of no visible debris, as determined by the Asbestos Supervisor and Project Monitor.
8. Bagged ACWM will be cleaned as they exit the decontamination unit. No visible dust or debris should be observed on the bags as they exit the decontamination unit. All ACWM will be transported to a fully enclosed and locked dumpster on site. Waste will be transported in accordance with the requirements found in 310 CMR 7.15(16).
9. MassDEP will be contacted at least 24 hours prior to removal of the full containment area or completion of the clean-up work to be provided the opportunity to conduct a final visual inspection of the asbestos abatement work. Surfaces will then be locked down with an approved encapsulant. Final clearance air samples will then be collected, analyzed and (upon passing) copies sent to MassDEP. After receiving approval from MassDEP, asbestos signs and the polyethylene ceiling may be removed. Upon approval of MassDEP, the containment structure will be dismantled. All polyethylene sheeting and any remaining debris shall be placed in six-mil asbestos waste bags (double-bagged) and disposed of as ACM waste.

Roof Flashing Abatement – Buildings 1A, 1B, 1C

1. The work area demarcation, crew training, sampling, water use, and other steps included in the “Pre-Abatement and General Work Practices – Roofing, Caulking, and Gaskets section of this plan will all remain in place and be adjusted for this task.
2. Asbestos roofing protocols will be implemented per 310 CMR 7.15 (10). Moveable objects will be removed, non-moveable objects will be covered, and the work area will be isolated. Critical barrier, minimum six-mil thickness plastic sheeting, will be installed for all openings in the regulated work area and adjacent spaces.
3. Asphaltic roof flashing materials shall be removed intact to the greatest extent feasible. Asphaltic roof flashing materials that are not intact or will be rendered non-intact shall be adequately wet during removal. NorthStar will primarily utilize hand scrapers, manual methods, and chemicals.
4. If cutting machines are to be used, they must be equipped with HEPA vacuums to capture dust produced by the cutting process. If HEPA vacuums cannot be used, work shall only proceed inside of a work area for which containment sufficient to prevent visible emissions of fugitive dust to the ambient air has been established.
5. Where cutting machines are used, NorthStar shall render the materials adequately wet throughout the process.
6. Intact asphaltic roof flashing shall be lowered to the ground prior to the end of each work shift. Non-intact asphaltic roof flashing shall be kept adequately always wet while on the roof. Intact and non-intact asphaltic roof flashing shall be placed in an impermeable gaylord waste bag or wrapped in plastic sheeting and lowered to the ground prior to the end of each shift. Bulk loading will not be allowed.
7. Once all asphaltic roof flashing has been removed, loaded out, and cleaned as described above, each area will be visually inspected in its entirety by the Project Monitor and the Asbestos Supervisor, and the MassDEP will be notified 24 hours in advance of the completion so they could inspect each area as well, if desired. If chemical methods are to be used, NorthStar will visually inspect the remaining concrete roof deck for staining prior to crushing or recycling.

White Exterior Building, Window, and Door Caulking- Buildings 1A, 1C, and 4

1. The work area demarcation, crew training, sampling, water use, and other steps included in the “Pre-Abatement and General Work Practices – Roofing, Caulking, and Gaskets section of this plan will all remain in place and be adjusted for this task.
2. If necessary, NorthStar will utilize long reach excavator (LRD), scaffolding, and man lifts for this task depending on access and safety concerns.
3. Tarpaulin or plastic sheeting shall be spread on the ground adjacent to the caulking. Plastic sheeting shall extend away from the edge of either side of the work area a sufficient distance to catch any

debris generated by the work operation. Tarpaulin or sheeting shall be cleaned of accumulated debris no later than the end of each work shift.

4. If the entire window or door sash is to be removed during abatement, window and door openings shall be sealed on the inside of the building with six-mil thickness polyethylene sheeting in a manner sufficient to prevent leakage of dust or debris to interior spaces.
5. Asbestos containing caulking compounds shall be adequately wet with amended water prior to removal or repair. All pieces or particles of caulking compound shall be removed utilizing hand tools and a HEPA vacuum and/or using a wet wipe collection method.
6. The work area, including ground covers and equipment, shall be cleaned of visible debris at the end of each workday.
7. Once all caulking has been removed, loaded out, and cleaned as described above, each area will be visually inspected in its entirety by the Project Monitor and the Asbestos Supervisor, and the MassDEP will be notified 24 hours in advance of the completion so they could inspect each area as well, if desired.

Galbestos, Corrugated Metal Panel with Coating, and Transite – Building 1A and 1C in Transformer Yard

1. The work area demarcation, crew training, sampling, water use, and other steps included in the “Pre-Abatement and General Work Practices - Roofing, Caulking, Transite, and Gaskets section of this plan will all remain in place and be adjusted for this task.
2. Removal protocols per 310 CMR 7.15(12) will be implemented. Moveable objects will be removed, non-moveable objects will be covered, and the work area will be isolated. Critical barriers, minimum six-mil thickness plastic sheeting, will be installed for all openings in the regulated work area and adjacent spaces.
3. Exterior galbestos and transite panels will be removed intact, not broken, sanded, or drilled during removal or subsequent handling. Any breakage, sanding, sawing, or drilling will be performed in a negative pressure enclosure. Asbestos fiber releases to the outdoors will not be permitted.
4. Six-mil thickness plastic sheeting shall be spread on the ground under the areas where the exterior galbestos and transite panels are being removed. Plastic sheeting shall extend away from the edge of the building and to either side of the work area a sufficient distance to catch any debris generated by the work operation. Plastic sheeting shall be cleaned of accumulated debris no later than the end of each work shift. For exterior galbestos and transite panels that will be removed according to this method at significant elevations, the on-site project monitor will determine if the drop cloth under the work area is of sufficient size.
5. Fasteners securing exterior galbestos and transite siding panels shall be unscrewed, cut, or pulled to allow intact panel removal. Exterior galbestos and transite panels shall be removed whole and intact to the greatest extent feasible. Methods likely to break panels shall not be used.

6. Each galbestos and transite panel shall be adequately wetted with amended water prior to removal and during handling.
7. Panels shall be carefully lowered to the ground in a manner to avoid breakage.
8. Exterior galbestos and transite panels will be wrapped and sealed in 2 layers of six mil thickness poly sheeting. Broken panels and debris will be placed in reinforced bags then sealed in six mil plastic labeled bags or gaylord boxes.
9. Once all exterior galbestos and transite panels have been removed, loaded out, and cleaned as described above, each area will be visually inspected in its entirety by the Project Monitor and the Asbestos Supervisor, and the MassDEP will be notified 24 hours in advance of the completion so they could inspect each area as well, if desired.

Waste Management, Hauler, and Disposal Facilities

As per original NTWP.

Ambient Environmental Monitoring

As per original NTWP.

At the end of each shift, the results of all air samples collected at the site and analyzed by TRC will be emailed to MassDEP at nero.asbestos@state.ma.us.

All other requirements of the approved NTWP remain unchanged.



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ATTACHMENTS

Site Diagrams