

EXHIBIT G

GAF Property (excepted from PADEP approved Final Plan)

5.0 POST REMEDIATION CARE PLAN

Attainment of the Act 2 Site Specific Standard relies on both engineering and institutional controls. The objective of this Post Remediation Care Plan (PRCP) is to ensure the continued attainment with the Site Specific Standard in the future.

In accordance with the Act 2 regulations, following PADEP approval of this Final Report, an Environmental Covenant (EC) will be executed between the ECCCA and PADEP and then recorded with the deed for the property. The EC will include activity and use limitations (AULs) and compliance reporting requirements. Those items are described below in Section 5.1 followed by vapor mitigation and soil management plans in Sections 5.2 and 5.3, respectively.

5.1 ENVIRONMENTAL COVENANT

The EC will be prepared in a similar format to the PADEP “Model Environmental Covenant” shown in **Appendix H** (attached). The EC will be submitted to PADEP for approval within 30 days following approval of this Final Report. Following PADEP approval of the EC, it will be recorded with the property deed and proof of filing with the deed office will be provided to PADEP. The AULs and compliance monitoring and reporting requirements to be included in the EC are described below.

5.1.1 Activity and Use Limitations

The EC will contain the following language pertaining to AULs:

“The Property is subject to the following activity and use limitations, which the then current owner of the Property, and its tenants, agents, employees and other persons under its control, shall abide by:

- The groundwater beneath the Site shall not be used for any purpose;
- Subsurface structures such as basements shall not be constructed on Site;
- New enclosed structures shall be constructed with vapor mitigation measures as indicated in the Post Remediation Care Plan presented in the Act 2 Final Report;
- The cover system shall be maintained as described in the Post Remediation Care Plan presented in the Act 2 Final Report.
- Modifications to the NAPL cut off wall, sea wall or ditch piping must not affect their functionality as components of the Site remediation.

5.1.2 Compliance Reporting

The EC will contain the following language relating to compliance reporting:

“Starting in the first January following recordation of this Environmental Covenant and biennially after that for two subsequent events, or after written request by the Department following the Department’s approval of this Environmental Covenant, the then current owner of the Property shall submit, to the Department, written documentation presenting the results of compliance monitoring described in the Act 2 Final Report and stating whether or not the activity and use limitations in this Environmental Covenant are being abided by.

In addition, within 1 month after any of the following events, the then current owner of the Property shall submit, to the Department, written documentation of:

- Observed presence of NAPL in monitoring well MW-12 (or replacement);
- Noncompliance with the activity and use limitations in this Environmental Covenant;
- Transfer of the Property;
- Changes in use of the Property; or
- Filing of applications for building permits for the Property and any proposals for any site work, if the building or proposed site work will affect the contamination on the Property subject to this Environmental Covenant.”

5.2 PASSIVE INDOOR VAPOR MITIGATION

New enclosed structures shall be designed and constructed in general accordance with Section 2.2 of the approved Act 2 Cleanup Plan that relates to passive vapor mitigation (**Appendix B**) (attached).

Any future building slabs shall be considered part of the vapor mitigation system in that they keep the vapor from entering the buildings directly. Absent another mitigating vapor intrusion system, the owner should ensure that there are no punctures or openings in the slabs, and that any openings such as pipes, electrical wires or other building elements are sealed with rubber gaskets, spray foam, or in some other way to prevent air from beneath the slabs from entering the living space.

5.3 COMPLIANCE MONITORING

Compliance monitoring will be performed annually to confirm that NAPL is not migrating from the Site and that the integrity of the cover system is maintained as described below.

5.3.1 Biennial NAPL Monitoring

Monitoring well MW-12 (**Figure 3**) (attached) will be considered the compliance well and gauged biennially for presence of NAPL to confirm the continued efficacy of the NAPL SCB cut-off wall. Monitoring will be performed using a suitable electronic measuring device (e.g., oil/water interface probe) or a bailer or other means that allows the collection of a representative sample of the water column for visual observation.

The first monitoring event will occur by the first January following the recordation of the EC. In accordance with the EC, PADEP will be notified within 1 month of NAPL identification in MW-12. If no NAPL is observed, two subsequent biennial monitoring events will be conducted. Monitoring will be discontinued if NAPL is not observed during any of the monitoring events. The results of the monitoring will be included in the Compliance Report required by the EC.

5.3.2 Cover System Monitoring and Maintenance

The cover system functions by restricting human access to impacted materials located beneath the cover. Currently, the cover system is comprised primarily of 1 foot of clean soil and to a lesser extent by concrete aggregate and paving. It is anticipated that in the future, much of the Site will contain various structures and roadways as depicted in the existing NPDES permit.

The owner will inspect the cover system annually, or as required by any subsequent permit. The table below identifies the general items to be inspected

Inspection Item	Likely Corrective Measure
Vegetative cover	Revegetate as needed
Soil Cover Erosion	Replace with clean soil to ensure the 1 foot cover thickness and reseed
Pavement	Replace pavement that exposes underlying Site soil.
Storm Water Management Structures	Remove obstructions to allow free drainage and repair any erosion damage

Repairs to the cover system will be made promptly and the corrective action will be documented for inclusion in the Compliance Report. Only certified clean fill as defined by the PADEP Management of Fill Policy will be used to repair the soil cover system. A copy of the PADEP Management of Fill Policy and Clean Fill Certification form is provided in **Appendix H**.

5.4 SOIL MANAGEMENT PLAN

Site soils beneath the cover system may contain asphalt shingles, tar paper that may contain asbestos, tar, and other materials such as drums or tanks that could be considered solid waste if excavated. Therefore, future excavation into and below the cover must be carefully planned and documented to ensure that:

- 1) The integrity of the remedial measures is maintained;
- 2) Construction workers are protected; and
- 3) Site soil is properly managed and disposed of.

The purpose of this Soil Management Plan is to provide general guidelines to be considered when planning for and conducting excavation activities at the Site. In accordance with the proposed EC Compliance Reporting requirements described above in Section 5.1.2, PADEP must be notified within 1 month following the application for building permits or any proposals for activities that “will affect the contamination at the property”. Currently, all material beneath the cover system is considered to be potentially “contaminated”. Therefore, PADEP must be notified of planned excavation activities beneath the cover and that notification must describe the plans relating to a specific activity for ensuring worker safety and managing the excavated material. Notification must be 15 days prior to initiating any activity that will disturb the soil cover and underlying potentially contaminated materials.

In addition to the required PADEP notification, it is important to understand that the existing general NPDES permit for the developed Site expires on September 25, 2018. Therefore, close coordination with the ECCD is also necessary.

5.4.1 Key Considerations

It is expected that excavation will occur using a variety of methods for a variety of reasons, including:

- 1) Construction of caissons through the unsaturated and saturated zone using large diameter augers;
- 2) Construction of building footers and foundations using heavy construction equipment; and
- 3) Installation of subsurface utilities.

Prospective contractors performing work that may disturb the soil cover and underlying Site Materials need to consider the following:

- 1) Work below the cover system may encounter hazardous substances. Workers who may encounter hazardous substances must meet the training and medical monitoring requirements as defined in OSHA 1910.120 as appropriate for their specific activity. A site-specific health and safety plan should be developed to address work activity hazards and protection of the workers, including air monitoring and other media monitoring as appropriate.
- 2) Measures must be employed to ensure that materials from below the cover system do not impact the clean cover material in the vicinity of the work area;
- 3) Excavated material from below the cover may be used as backfill provided that the marker layer and 1 foot of clean soil cover and/or hard surface are re-established when the work is completed. Excavated material that includes liquid waste, tar, drums, NAPL or tanks must be properly characterized and disposed off-Site;
- 4) Excess material that can't be placed under the cover requires waste characterization and off-Site disposal. No material removed from beneath the marker mat may remain uncovered.
- 5) Fill materials brought on Site must meet the definition of "clean fill" as presented in the PADEP Management of Fill Policy (**Appendix H**) (attached).
- 6) Groundwater at the Site contains a variety of VOCs, SVOCs and metals in concentrations exceeding the PADEP MSCs. In addition, NAPL is known to exist in the approximate area of the Site shown on **Figure 3** (Attached). Excavation below the water table must include plans for managing and off-Site disposal of liquids.
- 7) A slag/cement/bentonite cutoff wall exists along a portion of the eastern site boundary. Horizontal penetrations above the water table are permitted (e.g., for utility installation) provided that the integrity of the barrier wall is maintained and that any horizontal penetrations through the barrier wall are appropriately sealed, preferably with materials used to construct the wall, e.g., cement/bentonite grout. Vertical penetrations (e.g., caissons) must be avoided.
- 8) A general NPDES storm water permit exists for the fully developed site. That permit expires on September 25, 2018. Close coordination with the ECCD is necessary during design and execution of excavation to determine what type of modifications to the existing permit, if any, are necessary.

The following section presents the generally anticipated sequence of events during excavation below the cover system.

5.4.2 Excavation

The PADEP must be notified prior to excavation into the soil below the cover system as required by the EC. The notification will include specific plans for ensuring worker safety; managing excavated materials; and; restoring the clean cover system. Excavation below the cover system is expected to generally proceed in the following manner:

- 1) Obtain necessary permits, establish erosion and sediment controls, and implement health and safety measures as required.
- 2) Remove and stockpile the top 1 foot of clean cover and marker layer.
- 3) Excavate into the potentially impacted material and stage on Site, separate from the clean cover. Depending on the size of the excavation, the excavated material could be placed on polyethylene sheeting or the clean cover could be over excavated such that the excavated material is placed directly on other “sub cover” soils. Further containment measures are necessary for excavation below the water table.
- 4) Backfill the excavation with the stockpiled soil from below the cover. Replace the marker layer and stockpiled clean cover such that the 1 foot thickness of clean cover is restored or the material is beneath a hard surface (e.g., roadway, floor slab, etc.).
- 5) Obtain disposal facility approval and dispose of excess impacted soil off-Site at a properly permitted disposal facility. The disposal facility will provide specific instructions for sampling and analysis of the material for characterization.

The Site owner must maintain documentation relating to the location of the excavation and the disposition of the excess material, including waste disposal manifests. A summary of the excavation activities will be included in the annual Compliance Report as required by the EC.