



Groundskeeping & Maintenance Plan

HyAxiom Fuel Cell Construction Project 600 Iranistan Ave., Bridgeport, CT

Location: Bridgeport, CT

Project Focus: Site Safety, Sediment and Erosion Control, Dust Control, Dewatering,

Vegetation Management

1. Site Safety

- Signage and Barricades: Install clear warning signs, barriers, and fencing to limit access to authorized personnel. Signage should include safety hazards, restricted zones, and emergency contact information.
- Personal Protective Equipment (PPE): Ensure that all workers on-site are equipped with the appropriate PPE, including hard hats, safety goggles, reflective vests, steeltoed boots, and hearing protection.
- Emergency Protocols: Set up emergency access routes for fire trucks and other emergency services. Ensure that first aid kits are readily available and designate first aid responders.
- Training: Conduct safety briefings and ensure all workers are trained on the specific hazards associated with fuel cell construction and general site safety protocols.

2. Sediment and Erosion Control

- Silt Fences: Install silt fences along the perimeter of the construction site to prevent sediment from leaving the site during rainstorms. Ensure that the fences are maintained and repaired as needed.
- Erosion Control Blankets: Use erosion control blankets on disturbed soil areas to reduce surface water flow and minimize soil erosion during periods of heavy rain.





• Sediment Traps and Basins: Install sediment traps and basins in low-lying areas to capture water runoff and sediments before they can flow off-site or into storm drains.

 Monitoring and Maintenance: Regularly inspect all erosion and sediment control measures, especially after rainfall, to ensure they remain intact and functional.

3. Dust Control

- Watering: Use water trucks to spray water on exposed soil surfaces to reduce dust.
 This will help control airborne particulate matter that may affect air quality and worker health.
- Dust Control Products: Apply dust control products, such as calcium chloride or magnesium chloride, to stabilize dust on unpaved surfaces.
- Covering Materials: Cover stockpiles of dirt, sand, or construction materials with tarps or mesh to prevent dust from becoming airborne.
- Monitoring: Monitor dust levels at the construction site and surrounding areas, ensuring compliance with local air quality regulations. Implement additional dust control measures if necessary, during high-wind conditions or during dry spells.

4. Dewatering

- Temporary Pumping Systems: Set up temporary pumping systems to manage groundwater and prevent water accumulation in the construction area. Ensure that pumping equipment is properly sized for expected water volumes.
- Water Treatment: Treat any water being discharged to ensure compliance with local regulations. This may involve filtering or settling out suspended solids before releasing water back into nearby storm drains or water bodies.
- Monitoring Groundwater Levels: Monitor groundwater levels throughout construction to detect any potential issues with rising groundwater or unexpected water flows. Keep a record of all dewatering activities for compliance purposes.
- Discharge Points: Ensure that dewatering discharges are directed away from sensitive environmental areas and that water quality is assessed regularly to avoid contamination.





5. Vegetation Management

- Clearing and Grading: Limit land disturbance and vegetation removal to the areas necessary for construction. Ensure that native vegetation outside the construction footprint is preserved to prevent unnecessary habitat destruction.
- Soil Stabilization Post-Construction: Once construction is completed, plant vegetation (native grasses, shrubs, or trees) in disturbed areas to prevent erosion and restore the local ecosystem.
- Invasive Species Control: Identify and manage invasive plant species that could harm local flora. Implement appropriate control measures such as herbicide application, hand removal, or other environmentally sensitive techniques.
- Revegetation of Exposed Areas: After construction is completed, focus on replanting disturbed areas with native grasses and plants to prevent erosion and improve the aesthetic and ecological integrity of the site.

6. Stormwater Management

- Stormwater Runoff: Design and maintain a stormwater management system that minimizes the impact of runoff during construction. This includes using retention ponds, swales, and stormwater drains to direct water flow.
- Inspections: Conduct regular inspections of stormwater infrastructure, particularly during heavy rain events, to ensure the systems are functioning correctly.
- Permanent Site Features: Once construction is complete, install permanent stormwater management solutions like bio-retention areas or permeable pavements, as appropriate, to manage runoff and protect the local watershed.

7. Waste Management

 Waste Separation: Set up designated bins for the separation and recycling of materials such as wood, metal, plastic, and construction waste.





- Hazardous Waste Disposal: Properly dispose of hazardous materials such as oils, chemicals, and batteries in accordance with local environmental guidelines.
- Cleanup and Site Inspection: Perform regular site clean-ups to ensure all waste materials are removed promptly and stored in appropriate containers. (See Emergency Spill Plan for more information guidelines)

8. Regular Site Inspections and Reporting

- Daily Inspections: Conduct daily inspections to ensure that all environmental protection measures are in place and properly functioning. This includes checking erosion controls, dust suppression, dewatering, and other protective measures.
- Monthly Reports: Create monthly reports summarizing site conditions, any maintenance required, and compliance with environmental regulations. Keep records of all inspections and actions taken.
- Coordination with Local Authorities: Stay in communication with local environmental agencies to ensure compliance with the relevant construction codes, environmental protection standards, and any stormwater or erosion permits.

9. Existing Soils – Testing and Handling Procedures

- Initial Assessment: Prior to excavation, soil samples will be collected and tested to determine if contamination is present. Testing will include but not be limited to heavy metals, petroleum products, and volatile organic compounds (VOCs).
- Laboratory Testing: A licensed environmental laboratory will analyze samples following state and federal standards. Testing results will determine how soils are to be classified for handling and disposal.
- Soil Segregation and Stockpiling: Based on results, soils will be separated onsite as either clean fill or regulated material.
- Export and Disposal: Soils identified as contaminated or regulated will be transported to approved facilities. Export destinations will be selected based on soil classification and facility acceptance criteria.





 Documentation and Manifests: All soil transported off-site will be accompanied by appropriate waste manifests and tracking documentation per CT DEEP and federal EPA requirements. Copies of manifests will be maintained on file for regulatory review and final project closeout.

10. Post-Construction Procedures and Activities

- Final Site Cleanup: All construction materials, debris, temporary structures, and waste containers will be removed from the site.
- As-Built Inspections: Conduct final inspections to ensure that all site work is complete and conforms to the approved plans and specifications.
- Restoration: Restore any areas disturbed during construction, including planting of vegetation, smoothing of grades, and installation of permanent erosion control measures.
- Monitoring: Continue monitoring stormwater, vegetation, and any post-construction environmental controls as required by permits or local regulations.
- Documentation and Closeout: Compile all project documentation including inspection records, soil manifests, and final environmental reports for submission to the relevant local or state agencies.

9. Conclusion

This plan provides a comprehensive approach to groundskeeping and site maintenance throughout the fuel cell construction project in Bridgeport, CT. Prioritizing safety, environmental protection, and proactive management will help minimize the impact of construction on the surrounding area, ensuring a successful and sustainable project.

Regular updates and collaboration with local authorities will ensure that the project adheres to all necessary regulations and environmental standards.