Stormwater Pollution Prevention Plan (SWPPP)

For Construction Activities At:

Borrego Solar Array 136 Main Street Solar Array Newbury, Massachusetts

SWPPP Prepared For:

Borrego Solar Systems, Inc. 55 Technology Drive, Suite 102 Lowell, MA 01851 (978) 221-3086

SWPPP Prepared By:

Waterstone Engineering, PLLC. 9 Gretas Way Stratham, NH 03885

SWPPP Preparation Date:

12/11/2019

Estimated Project Dates:

Project Start Date: 01/02/2020

Project Completion Date: 01/02/2021



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SECTION 1: CONTACT INFORMATION/RESPONSIBLE PARTIES

1.1 Operator(s) / Subcontractor(s)

Instructions (see definition of "operator" at CGP Part 1.1.1):

- Identify the operator(s) who will be engaged in construction activities at the site. Indicate respective responsibilities, where appropriate. Also include the 24-hour emergency contact.
- List subcontractors expected to work on-site. Notify subcontractors of stormwater requirements applicable to their work.
- Consider using Subcontractor Agreements such as the type included as a sample in Appendix G of the Template.

Operator(s):

Borrego Solar Systems, Inc. Attn: Jean Shih, Steve Long 55 Technology Drive, Suite 102 Lowell, MA 01851 (978) 221-3086

Subcontractor(s):

G&R Construction, Inc. Attn: Bob Morel 253 Centre Street Quincy, MA 02169 781-589-9272

Emergency 24-Hour Contact:

Borrego Solar Systems, Inc. Attn: Jean Shih, Asst. Project Manager 603-820-2719

SECTION 5: POLLUTION PREVENTION STANDARDS

5.1 Potential Sources of Pollution

Instructions (see CGP Part 7.2.3.g):

- Identify and describe all pollutant-generating activities at your site (e.g., paving operations; concrete, paint, and stucco washout and waste disposal; solid waste storage and disposal).
- For each pollutant-generating activity, include an inventory of pollutants or pollutant constituents associated with that activity (e.g., sediment, fertilizers, and/or pesticides, paints, solvents, fuels), which could be exposed to rainfall or snowmelt, and could be discharged from your construction site. You must take into account where potential spills and leaks could occur that contribute pollutants to stormwater discharges, and any known hazardous or toxic substances, such as PCBs and asbestos, that will be disturbed or removed during construction.

Construction Site Pollutants

The following is a list of materials or substances are expected to be present onsite during construction. It shall not be considered inclusive as the Contractor has the discretion to introduce other materials at any time in order to ensure the success of the project.

- Petroleum based products
- Sanitary wastes
- Solid and construction wastes

5.2 Spill Prevention and Response

Instructions (see CGP Parts 2.3.6 and 7.2.6.vii):

- Describe procedures you will use to prevent and respond to leaks, spills, and other releases. You must implement the following at a minimum:
 - Procedures for expeditiously stopping, containing, and cleaning up spills, leaks, and other releases. Identify the name or title of the employee(s) responsible for detection and response of spills or leaks; and
 - ✓ Procedures for notification of appropriate facility personnel, emergency response agencies, and regulatory agencies where a leak, spill, or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity consistent with Part 2.3.6 and established under either 40 CFR Part 110, 40 CFR Part 117, or 40 CFR Part 302, occurs during a 24-hour period. Contact information must be in locations that are readily accessible and available.
- Some projects/site may be required to develop a Spill Prevention Control and Countermeasure (SPCC) plan under a separate regulatory program (40 CFR 112). If you are required to develop an SPCC plan, or you already have one, you should include references to the relevant requirements from your plan.

The following are the material management practices that shall be used to reduce the risk of spills or other accidental exposure of materials and substances to stormwater runoff. The Contractor's Superintendent shall be responsible for ensuring that the project is in strict compliance with these procedures at all times.

Fertilizer and pesticides are Prohibited:

Fertilizer and pesticide use within the solar array and within the borders of the rights of way is prohibited. Long-term landscaping and maintenance activities will prohibit the use of fertilizers and pesticides, however in the event that these items are deemed necessary, a professional landscaper will be consulted and recommendations presented to the town Conservation Commission for approval.

Winter road maintenance and Chloride Prohibition

Winter road maintenance will be limited solely to plowing roadways to provide access to maintenance personnel and fire department as needed. Snow stockpiling will be limited to the laydown areas and outside of designated wetlands.

Chloride and deicing chemical usage will be prohibited within the easements, roadway, and solar array. Road usage is minimized for winter use and deicing will not be conducted.

Source Control Provisions

As recommended by Standard 4 of MADEP Stormwater Handbook: Stormwater Management Standards, Volume 1 (2008), O&M Plans should include provisions for source control appropriate to the scale of the project in order to minimize the volume of stormwater coming into contact with regulated substances. The proposed Newbury Solar Array Project is not an area with "higher potential pollutant loads," as outlined in Standard 4 of MADEP Stormwater Handbook: Stormwater Management Standards and therefore does not necessitate a separate Source Control Plan. Instead, section 2.12 of the O&M Plan serves to outline source control activities to address the management of industrial materials, maintenance products, and ice management at the Site. Any industrial materials that would be regulated substances will be stored offsite or within closed areas and not exposed to the potential for runoff. These materials may include but are not limited to gasoline for maintenance equipment, and paints.

Good Housekeeping

The following good housekeeping practices shall be followed onsite during construction:

• An effort shall be made to store only enough products required to do the job.

• All materials stored onsite shall be stored in a neat, orderly manner and, if possible, under a roof or in a containment area. At a minimum, all containers shall be stored with their lids on when not in use. Drip pans shall be provided under all dispensers.

- Products shall be kept in their original containers with the original manufacturer's label in legible condition.
- Substances shall not be mixed with one another unless recommended by the manufacturer.
- Whenever possible, all of a product shall be used up before disposing of the container.
- Manufacturer's recommendations for proper use and disposal shall be followed.

• The Contractor's Superintendent shall be responsible for daily inspections to ensure proper use and disposal of materials.

Maintenance

Clean up spills and dispose of cleanup materials immediately. Inspect equipment and storage containers regularly to identify leaks or signs of deterioration.

5.3 Fueling and Maintenance of Equipment or Vehicles

Instructions (see CGP Parts 2.3.1 and 7.2.6):

 Describe equipment/vehicle fueling and maintenance practices that will be implemented to eliminate the discharge of spilled or leaked chemicals (e.g., providing secondary containment (examples: spill berms, decks, spill containment pallets) and cover where appropriate, and/or having spill kits readily available.)

General

The following procedures shall be followed fo provide an effective means of eliminating the discharge of spilled or leaked chemicals, including fuel, from the area where these activities will take place.

Specific Pollution Prevention Practices

Fueling and Maintenance of Equipment or Vehicles

Description: Petroleum storage management shall be accomplished before fueling of vehicles is allowed.

Equipment Fueling and Maintenance

• Designate special impervious areas (i.e. pavement, concrete, polypropylene, etc.) that are not connected to any drainage system for vehicle fueling and repair. Inspect construction vehicles daily, and repair any leaks immediately. Dispose of all used oil, antifreeze, solvents and other automotive-related chemicals according to manufacturer instructions. These wastes require special handling and disposal. Used oil, antifreeze, and some solvents can be recycled

at designated facilities, but other chemicals must be disposed of at a hazardous waste disposal site	
Installation	12/16/2019
Maintenance	The fueling areas will be inspected each day by the on-site superintendent and
Requirements	maintained as needed. Clean up spills and dispose of cleanup materials immediately. Inspect equipment and storage containers regularly to identify leaks or signs of deterioration.
Design	Please refer to Appendix B: Section 2.12 of the O&M Plan
Specifications	

5.4 Washing of Equipment and Vehicles

Instructions (see CGP Parts 2.3.2 and 7.2.6):

- Describe equipment/vehicle washing practices that will be used to minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other types of wash waters (e.g., locating activities away from waters of the U.S. and stormwater inlets or conveyances and directing wash waters to a sediment basin or sediment trap, using filtration devices, such as filter bags or sand filters, or using other similarly effective controls).
- Describe how you will prevent the discharge of soaps, detergents, or solvents by
 providing either (1) cover (examples: plastic sheeting or temporary roofs) to prevent
 these detergents from coming into contact with rainwater, or (2) a similarly effective
 means designed to prevent the discharge of pollutants from these areas.

General

No equipment washing is anticipated.

Specific Pollution Prevention Practices

N/A		
Description: N//	Description: N/A	
Installation	INSERT APPROXIMATE DATE OF INSTALLATION	
Maintenance	N/A	
Requirements		
Design	N/A	
Specifications		

5.5 Storage, Handling, and Disposal of Building Products, Materials, and Wastes

Instructions (see CGP Parts 2.3.3 and 7.2.6):

 For any of the types of building products, materials, and wastes below in Sections 5.5.1-5.5.6 below that you expect to use or store at your site, provide the information on how you will comply with the corresponding CGP provision and the specific practices that you will be employ.

5.5.1 Building Products

(Note: Examples include asphalt sealants, copper flashing, roofing materials, adhesives, concrete admixtures, and gravel and mulch stockpiles.)

General

The following procedures shall be followed to provide an effective means of storing, handling, and disposal of construction products, materials, and wastes.

Specific Pollution Prevention Practices

Solid and Const	Solid and Construction Wastes Pollution Prevention		
Description:			
Solid and Const	Solid and Construction Wastes		
stored in an app provided by a li	 All trash, construction debris, and waste materials from the site shall be collected and stored in an appropriately covered roll-off container and/or securely contained metal dumpster provided by a licensed local solid waste management company. All dumpsters and roll-off containers shall comply with all local and state solid waste 		
All dump more often if ne No cons	osters and roll-off containers shall be emptied a minimum of once per week (or ecessary) and hauled to a State approved landfill. truction waste materials shall be buried on site.		
	osters and roll-off containers shall be located at least 50 feet from any storm inlet, surface water, or wetland.		
 package. Use c During the more frequent p 	 Clean up spills immediately. For hazardous materials, follow cleanup instructions on the package. Use an absorbent material such as sawdust or kitty litter to contain the spill. During the demolition phase of construction, provide extra containers and schedule more frequent pickups. 		
Contact a loca • Once th	 Collect, remove, and dispose of all construction site wastes at authorized disposal areas. Contact a local environmental agency to identify these disposal sites Once their location(s) have been determined, the contractor shall identify the 		
location(s) in the			
Installation Maintenance Requirements	12/16/2019 Areas will be inspected daily by the on-site superintendent and maintained as needed. Clean up spills and dispose of cleanup materials immediately. Inspect equipment and storage containers regularly to identify leaks or signs of deterioration.		
Design Specifications	N/A		

[Repeat as needed.]

5.5.2 Pesticides, Herbicides, Insecticides, Fertilizers, and Landscape Materials

General

INSERT GENERAL DESCRIPTION OF HOW YOU WILL COMPLY WITH CGP PART 2.3.3.b

Specific Pollution Prevention Practices

INSERT NAME OF POLLUTION PREVENTION PRACTICE	
Description: INSERT DESCRIPTION OF PRACTICE TO BE INSTALLED	
Installation	INSERT APPROXIMATE DATE OF INSTALLATION
Maintenance	INSERT MAINTENANCE REQUIREMENTS FOR THE POLLUTION PREVENTION
Requirements	PRACTICE

Design	IF APPLICABLE INCLUDE COPIES OF DESIGN SPECIFICATIONS HERE
Specifications	

[Repeat as needed.]

5.5.3 Diesel Fuel, Oil, Hydraulic Fluids, Other Petroleum Products, and Other Chemicals

General

INSERT GENERAL DESCRIPTION OF HOW YOU WILL COMPLY WITH CGP PART 2.3.3.c

Specific Pollution Prevention Practices

INSERT NAME OF POLLUTION PREVENTION PRACTICE		
Description: INS	Description: INSERT DESCRIPTION OF PRACTICE TO BE INSTALLED	
Installation	INSERT APPROXIMATE DATE OF INSTALLATION	
Maintenance	INSERT MAINTENANCE REQUIREMENTS FOR THE POLLUTION PREVENTION	
Requirements	PRACTICE	
Design	IF APPLICABLE INCLUDE COPIES OF DESIGN SPECIFICATIONS HERE	
Specifications		

[Repeat as needed.]

5.5.4 Hazardous or Toxic Waste

(Note: Examples include paints, solvents, petroleum-based products, wood preservatives, additives, curing compounds, acids.)

General

• INSERT GENERAL DESCRIPTION OF HOW YOU WILL COMPLY WITH CGP PART 2.3.3.d

Specific Pollution Prevention Practices

INSERT NAME OF POLLUTION PREVENTION PRACTICE	
Description: INS	ERT DESCRIPTION OF PRACTICE TO BE INSTALLED
Installation	INSERT APPROXIMATE DATE OF INSTALLATION
Maintenance	INSERT MAINTENANCE REQUIREMENTS FOR THE POLLUTION PREVENTION
Requirements	PRACTICE
Design	IF APPLICABLE INCLUDE COPIES OF DESIGN SPECIFICATIONS HERE
Specifications	

[Repeat as needed.]

5.5.5 Construction and Domestic Waste

(Note: Examples include packaging materials, scrap construction materials, masonry products, timber, pipe and electrical cuttings, plastics, styrofoam, concrete, and other trash or building materials.)

General

INSERT GENERAL DESCRIPTION OF HOW YOU WILL COMPLY WITH CGP PART 2.3.3.e

Specific Pollution Prevention Practices

INSERT NAME OF POLLUTION PREVENTION PRACTICE	
Description: INSERT DESCRIPTION OF PRACTICE TO BE INSTALLED	
Installation	INSERT APPROXIMATE DATE OF INSTALLATION

Maintenance	INSERT MAINTENANCE REQUIREMENTS FOR THE POLLUTION PREVENTION
Requirements	PRACTICE
Design	IF APPLICABLE INCLUDE COPIES OF DESIGN SPECIFICATIONS HERE
Specifications	

[Repeat as needed.]

5.5.6 Sanitary Waste

General

• INSERT GENERAL DESCRIPTION OF HOW YOU WILL COMPLY WITH CGP PART 2.3.3.f

Specific Pollution Prevention Practices

INSERT NAME O	INSERT NAME OF POLLUTION PREVENTION PRACTICE	
Description: INS	Description: INSERT DESCRIPTION OF PRACTICE TO BE INSTALLED	
Installation	INSERT APPROXIMATE DATE OF INSTALLATION	
Maintenance	INSERT MAINTENANCE REQUIREMENTS FOR THE POLLUTION PREVENTION	
Requirements	PRACTICE	
Design	IF APPLICABLE INCLUDE COPIES OF DESIGN SPECIFICATIONS HERE	
Specifications		

[Repeat as needed.]

5.6 Washing of Applicators and Containers used for Paint, Concrete or Other Materials

Instructions (see CGP Parts 2.3.4 and 7.2.6):		
 Describe how you will comply with the CGP Part 2.3.4 requirement for washir applications and containers. 	Ŋ	

General

INSERT GENERAL DESCRIPTION OF HOW YOU WILL COMPLY WITH CGP PART 2.3.4

Specific Pollution Prevention Practices

INSERT NAME OF POLLUTION PREVENTION PRACTICE		
Description: INSERT DESCRIPTION OF PRACTICE TO BE INSTALLED		
Installation	INSERT APPROXIMATE DATE OF INSTALLATION	
Maintenance	INSERT MAINTENANCE REQUIREMENTS FOR THE POLLUTION PREVENTION	
Requirements	PRACTICE	
Design	IF APPLICABLE INCLUDE COPIES OF DESIGN SPECIFICATIONS HERE	
Specifications		

[Repeat as needed.]

5.7 Fertilizers

Instructions (CGP Parts 2.3.5 and 7.2.6.ix):

Describe how you will comply with the CGP Part 2.3.5 requirement for the application of fertilizers.

General

Fertilizers, pesticides, and winter maintenance with chlorides are prohibited.

Specific Pollution Prevention Practices

Prohibition of Fertilizers, Pesticides, and	Winter Maintenance with Chlorides.
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Description:

Fertilizer and pesticides are Prohibited:

Fertilizer and pesticide use within the solar array and within the borders of the rights of way is prohibited. Long-term landscaping and maintenance activities will prohibit the use of fertilizers and pesticides, however in the event that these items are deemed necessary, a professional landscaper will be consulted and recommendations presented to the town Conservation Commission for approval.

Winter road maintenance and Chloride Prohibition

Winter road maintenance will be limited solely to plowing roadways to provide access to maintenance personnel and fire department as needed. Snow stockpiling will be limited to the laydown areas and outside of designated wetlands.

Chloride and deicing chemical usage will be prohibited within the easements, roadway, and solar array. Road usage is minimized for winter use and deicing will not be conducted.

Installation	12/16/2019
Maintenance	Prohibition is ongoing and daily inspections will be enforced.
Requirements	
Design	Please refer to Appendix B: O&M Plan Section 2.8 and 2.9
Specifications	

[Repeat as needed for individual fertilizer practices.]

5.8 Other Pollution Prevention Practices

Instructions:

Describe any additional pollution prevention practices that do not fit into the above categories.

General

N/A

Specific Pollution Prevention Practices

N/A

Description: N/A	
Installation	INSERT APPROXIMATE DATE OF INSTALLATION
Maintenance	N/A
Requirements	
Design	N/A
Specifications	

[Repeat as needed.]