OC Waste & Recycling Bowerman Power Renewable Natural Gas Plant Project

MITIGATION MONITORING AND REPORTING PROGRAM

Prepared For:

OC Waste & Recycling

601 N. Ross Street, 5th Floor Santa Ana, CA 92701

Public Resources Code, Section 21081.6 (Assembly Bill 3180) requires that mitigation measures identified in environmental review documents prepared in accordance with California Environmental Quality Act (CEQA) are implemented after a project is approved. Therefore, this Mitigation Monitoring and Reporting Program (MMRP) has been prepared to ensure compliance with the adopted mitigation measures during the Bowerman Power Renewable Natural Gas Plant Project (Project). The OC Waste & Recycling (OCWR) is the agency responsible for assuring the implementation by Bowerman Power LFG, LLC (Bowerman Power) of the mitigation measures identified in the Initial Study/Mitigated Negative Declaration.

This MMRP provides OCWR with a convenient mechanism for quickly reviewing all the mitigation measures including the ability to focus on select information such as timing. The MMRP includes the following information for each mitigation measure:

- The phase of the project during which the required mitigation measure must be implemented;
- The phase of the project during which the required mitigation measure must be monitored; and
- The monitoring agency.

The MMRP includes a checklist to be used during the mitigation monitoring period. The checklist will verify the name of the monitor, the date of the monitoring activity, and any related remarks for each mitigation measure.

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Permit Name /	Mitigation Measure	ion Measure Implementation		Compliance Verification			
Regulatory Condition	, and the second	Implementation Phase	Party	Monitoring Phase	Monitoring Agency	Initial	Date
NCCP/HCP	BIO-1: To address potential Project impacts to intermediate mariposa lily (<i>Calochortus weedii</i> var. <i>intermedius</i>), an in-lieu fee shall be paid via minor amendment to the NCCP/HCP, as approved by USFWS and CDFW. The in-lieu fee will contribute to a management and monitoring program for rare plants in the Nature Reserve of Orange County.	Pre-Construction	Bowerman Power	Pre-Construction	OCWR		
	Silt fencing or flagging shall be installed under the guidance of a biological monitor along the limits of coastal sage scrub areas that are immediately outside of the grading/impact limits. The silt fencing/flagging shall be used to minimize impacts to sensitive natural resources including special-status plant species and native plant communities outside and immediately adjacent to the grading limits. Construction activities and personnel will be						

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	restricted within these adjacent coastal sage scrub areas and a biological monitor will be present during the silt fence/flagging installation and removal.						
Special Status Species	BIO-2: Impacts to coastal sage scrub habitat shall occur outside the breeding and nesting season of the coastal California gnatcatcher (February 15 through July 15) to the extent practicable. A pre-construction survey shall be conducted within the Project site to determine the presence/absence of coastal California gnatcatcher and coastal cactus wren prior to clearing or grading activities. The survey shall include a 100-foot buffer around the grading limits. Any coastal California gnatcatcher or coastal cactus wren observations shall be recorded and marked on the construction/grading	Pre-Construction, Construction	Bowerman Power	Pre-Construction, Construction	OCWR		
	plans. All coastal sage scrub habitat outside of the Project impact area shall be fenced or marked with flagging materials prior to the commencement of grading. No construction access, parking, or storage of equipment or materials shall be allowed within these areas. A qualified biologist shall conduct and document a preconstruction meeting to educate construction staff (including supervisors, equipment operators, and other site employees) on all mitigation measures required for the						
	Project. A qualified biologist shall monitor the clearing of coastal sage scrub and oak woodland. USFWS/CDFW shall be notified at least 7 calendar days (preferably 14 calendar days) prior to clearing habitat occupied by Target/Identified Species, if observed. The qualified biologist shall ensure that clearing activities and earthmoving equipment do not harm coastal California gnatcatchers or coastal cactus wren. The biologist shall						

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	also ensure that these activities do not harm other species that may occur, including western spadefoot, orange-throated whiptail, red-diamond rattlesnake, and coast patch-nosed snake.						
	The access road(s) shall be sprayed with water on occasion to reduce dust accumulation on the leaves of coastal sage scrub species, as overseen by the biological monitor.						
Special Status Species	BIO-3: Avoid ground-disturbing and vegetation removal activities during the nesting bird season (February 15 to September 15). If these activities must occur during the nesting season, a pre-construction nesting bird survey shall be conducted by a qualified biologist on and within 300 feet of the Project construction area. The survey shall be conducted no more than 10 days prior to initiation of ground-disturbance, vegetation clearing, or construction activities and repeated between delays of greater than 10 days during the nesting season. If an active nest is found, an appropriate no-disturbance buffer for the species shall be visibly established in the field by a qualified biologist (e.g., flagging, staking, caution tape). No ground-disturbing or vegetation removal activities shall occur within the buffer until the nesting season has ended or the nest is vacated and juveniles have fledged, as determined by the qualified biologist. At the discretion of a qualified biologist, limited encroachment into the buffer may occur for non-listed bird species but no disturbance of active nests or nesting activities is allowed per the Migratory Bird Treaty Act.	Pre-Construction, Construction	Bowerman Power	Pre-Construction, Construction	OCWR		
Archaeological Resources	CUL -1: Environmental Training – Prior to construction of the Project, a Secretary of Interior-qualified archaeologist shall be retained by Bowerman Power to serve as the Project Archaeologist. Cultural resource awareness training shall be provided by the Project Archaeologist that	Pre-Construction, Construction	Bowerman Power	Pre-Construction, Construction	OCWR		

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	includes all applicable laws and penalties pertaining to disturbing cultural resources, a brief discussion of the prehistoric and historic regional context and archaeological sensitivity of the area, types of cultural resources found in the area, and instruction that Project workers shall halt construction if a cultural resource is inadvertently discovered during construction, and Project personnel contact information in the event of an inadvertent discovery.						
Archaeological Resources	CUL -2: Archaeological Monitoring – A qualified Archaeological monitor acceptable to the OCWR shall be retained by Bowerman Power prior to Project-related ground disturbance. The selection of the qualified professional(s) shall be subject to OCWR acceptance based on generally accepted professional qualifications and certifications, as applicable. A qualified Archaeological Monitor shall have at least a BS or BA degree in anthropology, archaeology, historic archaeology, or a related field and previous monitoring experience. The monitors shall conduct on-site daily archaeological monitoring of construction ground disturbance. The Archaeological monitor shall provide daily documentation of construction activity and any findings. The Archaeological monitor shall prepare a daily monitoring log and submit it daily to the Project Archaeologist via email, briefly describing the field conditions, construction progress and activities, non-compliance activities, and record any finds of archaeological material. A final report summarizing the monitoring activities shall be prepared by the Project Archaeologist.	Pre-Construction, Construction	Bowerman Power	Pre-Construction, Construction	OCWR		
Archaeological Resources	CUL -3: Monitoring and Inadvertent Discovery Plan – Prior to the start of construction, a Secretary of Interior-qualified Project Archaeologist (retained by Bowerman Power) shall prepare a Monitoring and Inadvertent Discovery Plan (Plan) for the Project. The Plan shall be submitted to OCWR for	Pre-Construction, Construction	Bowerman Power	Pre-Construction, Construction	OCWR		

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	review and approval prior to the start of construction. The Plan shall include at a minimum:							
	Overview of mitigation measures and responsibility for compliance;							
	Project description of construction activities and maps;							
	Description of relevant laws and regulations;							
	Brief cultural context information and types and description of cultural resources that could be inadvertently discovered;							
	Description of how monitoring shall occur;							
	 The roles and responsibility of the Archaeological Monitor (e.g., authority to halt construction for an inadvertent discovery, daily monitoring, daily reporting, etc.) and Project Archaeologist (e.g., oversee monitors, response to inadvertent discovery, final reporting, etc.); 							
	Description of protocols in the event of an inadvertent discovery (i.e., halt work) and notification procedures and contact list; and							
	Description of final monitoring report.							
	Stop work protocols shall be implemented in the event of an inadvertent discovery of cultural resources. If a cultural resource is encountered within the new SoCalGas pipeline route, halt work protocols shall include notifying the SoCalGas Project Archaeologist Ryan Glenn or SoCalGas Archaeologist Tricia Dodds and OCWR Environmental Engineering Specialist, Weena Dalby. See contact information below. Cultural resources shall not be relocated without consultation with a SoCalGas Archaeologist.							

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Paleontological Resources	GEO-1: Worker Education Program. The project proponent shall retain a qualified paleontologist, defined as a paleontologist meeting the Society for Vertebrate Paleontology's Professional Standards (SVP 2010), to carry out all mitigation measures related to paleontological resources. The qualified paleontologist shall conduct the following: a. Prior to the start of any ground disturbing activities, the qualified paleontologist shall conduct a Paleontological Resources Awareness Training program for all construction personnel working on the project site. A Paleontological Resources Awareness Training Guide approved by the qualified paleontologist shall be provided to all personnel. A copy of the Paleontological Resources Awareness Training Guide shall be submitted to the OCWR. The training guide may be presented in video form. b. Paleontological Resources Awareness Training may be conducted in conjunction with other awareness training requirements. c. The training shall include an overview of potential paleontological resources that could be encountered during ground disturbing activities to facilitate worker recognition, avoidance, and subsequent immediate notification to the qualified paleontologist for further evaluation and action, as appropriate; and penalties for unauthorized artifact collecting or intentional disturbance of paleontological resources. d. The project operator shall ensure all new employees who have not participated in earlier Paleontological Resources Sensitivity Trainings shall meet the provisions specified above.	Pre-Construction, Construction	Bowerman Power	Pre-Construction, Construction	OCWR		

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	e. The Paleontological Resources Awareness Training Guides shall be kept available for all personnel to review and be familiar with as necessary.						
Paleontological Resources	GEO-2: Project Monitoring. A qualified paleontologist or designated monitor shall be onsite initially to spot-check excavations below a depth of one foot below the ground surface in areas of undetermined paleontological potential. If it is determined that sediments consist of older alluvium, then full-time paleontological monitoring shall ensue within that area. If sediments are determined to consist of Holocene Quaternary alluvium, paleontological monitoring shall not be required unless an excavation depth of 15 feet below the ground surface is reached in the area. The use of post-driving or rotary drilling shall not require monitoring. a. The duration and timing of monitoring shall be determined by the qualified paleontologist in consultation with OCWR and shall be based on a review of geologic maps and grading plans. b. During the course of monitoring, if the paleontologist can demonstrate based on observations of subsurface conditions that the level of monitoring should be reduced, the paleontologist, in consultation with OCWR, may adjust the level of monitoring to circumstances, as warranted. c. Paleontological monitoring shall include inspection of exposed rock units during active excavations within sensitive geologic sediments. The qualified paleontologist shall have authority to temporarily divert excavation operations away from exposed fossils to collect associated data and recover the fossil specimens if deemed necessary. d. Following the completion of construction, the	Construction	Bowerman Power	Construction	OCWR		
	d. Following the completion of construction, the paleontologist shall prepare a report documenting the						

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	absence or discovery of fossil resources onsite. If fossils are found, the report shall summarize the results of the inspection program, identify those fossils encountered, recovery and curation efforts, and the methods used in these efforts, as well as describe the fossils collected and their significance. A copy of the report shall be provided to OCWR and to an appropriate repository such as the Natural History Museum of Los Angeles County.						
Paleontological Resources	GEO-3: Inadvertent Discoveries of Paleontological Resources — If construction staff or others observe previously unidentified paleontological resources during ground disturbing activities, they shall halt work within a 200-foot radius of the find(s), delineate the area of the find with flagging tape or rope (may also include dirt spoils from the find area), and immediately notify a qualified paleontologist. Construction shall halt within the flagged or roped-off area. The paleontologist shall assess the resource as soon as possible and determine appropriate next steps in coordination with OCWR. Such finds shall be formally recorded and evaluated. The resource shall be protected from further disturbance or looting pending evaluation.	Construction	OCWR	Construction	OCWR		
Tribal Cultural Resources	TCR – 1: Should evidence of human remains be discovered during project construction, the Orange County Coroner (OCC) shall be immediately notified of the discovery. Evidence of human remains requires mandatory compliance with the provisions of State Health and Safety Code Section 7050.5, which restricts further disturbance in the vicinity of the discovery, defined herein as a 50-foot radius, until the OCC has made a determination within two business days of the origin and disposition pursuant to Public Resources Code Section 5097.98. If the remains are determined to be Native American, the OCC shall notify the Native American Heritage Commission (NAHC) within 24 hours that remains have been discovered. The NAHC shall	Construction	Bowerman Power	Construction	OCWR		

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	determine the identity of the Most Likely Descendant (MLD). The MLD shall complete the inspection of the remains within 48 hours of notification by the NAHC. In addition, per CR-02, SoCalGas Project Archaeologist Ryan Glenn (425) 213-2349 (cell) and RGlenn1@scgcontractor.com or SoCalGas Archaeologist Tricia Dodds (213) 290-7449 (cell) and TDodds@socalgas.com shall be notified of the discovery.						
Tribal Cultural Resources	TCR – 2: If unanticipated tribal cultural resources or deposits are discovered during earth-moving activities, the following measures shall be implemented: All work shall halt within a 200-foot radius of the discovery. a qualified professional archaeologist shall assess the significance of the find (if a tribal cultural monitor is not present). If the resources are Native American in origin, the OCWR shall coordinate with the Tribe regarding evaluation, treatment, curation and preservation of these resources. The archaeologist shall have the authority to modify the no-work radius as appropriate, using professional judgment in consultation with OCWR. Work shall not continue within the no-work radius until the archaeologist conducts sufficient research, evidence and data collection to establish that the resource is either: (1) not cultural in origin; or (2) not potentially eligible for listing on the California Register of Historical Resources.	Construction	OCWR	Construction	OCWR		
Tribal Cultural Resources	TCR – 3: Tribal Cultural Resource Monitor: Prior to the issuance of any grading permit in which soil would be disturbed, Montauk shall provide evidence in the form of an executed Agreement to OCWR that they have retained a qualified Native American tribal monitor to provide third-party monitoring during excavation and grading activities and to recover and catalogue tribal resources as necessary.	Pre-Construction, Construction	Bowerman Power	Pre-Construction, Construction	OCWR		

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	The tribal monitor shall be from or approved by the Kizh Nation. The agreement shall include (i) professional qualifications for the tribal cultural resource monitor(s); (ii) detailed scope of services to be provided including but not						
	limited to pre-construction education, observation, evaluation, protection, salvage, notification, and/or curation requirements, as applicable, with final						
	documentation/monitoring report to OCWR, as applicable; (iii) contact information; (iv) communication protocols between Contractor and Tribal Cultural Resource Monitor;						
	(v) acknowledgment that if the Kizh Nation monitor is not available, Montauk or their contractor as designee may contract with another qualified tribal monitor acceptable						
	to the OCWR. The selection of the qualified professional(s) shall be subject to OCWR acceptance based on generally						
	accepted professional qualifications and certifications, as applicable. The cover sheet of the grading plans shall include a note to identify that third party tribal monitoring						
	is required during excavation and grading activities in accordance the with the OCWR Agreement.						