Additional Information Related to the Seeley Wastewater Reclamation Facility Improvements Application for Certification (08-AFC-5)

Imperial Valley Solar, LLC

Submitted to:
Bureau of Land Management
1661 S. 4th Street, El Centro, CA 92243

Submitted to:
California Energy Commission
1516 9th Street , MS 15, Sacramento, CA 95814-5504

Submitted by:
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4800 N. Scottsdale Road, Suite 5500, Scottsdale, AZ 85251

URS With Support From:
URS Corporation

February 2010

URS

February 26, 2010

Mr. Christopher Meyer
Project Manager
Attn: Docket No. 08-AFC-5
California Energy Commission
1516 Ninth Street
Sacramento, CA 95814-5512

Subject: Imperial Valley Solar (formerly Solar Two) (08-AFC-5)
Additional Information Related to the Seeley Wastewater Reclamation Facility Improvements
URS Project No. 27657103.00200

Dear Mr. Meyer:

On behalf of Imperial Valley Solar (formerly Solar Two), LLC, URS Corporation Americas (URS) hereby submits Additional Information Related to the Seeley Wastewater Reclamation Facility Improvements.

I certify under penalty of perjury that the foregoing is true, correct, and complete to the best of my knowledge. I also certify that I am authorized to submit on behalf of Imperial Valley Solar, LLC.

Sincerely,

Angela Leiba
Project Manager

AL: ml

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Tables

Figures

AFC	Application for Certification
afy	acre feet per year
BLM	Bureau of Land Management
CAA	Clean Air Act
CARB	California Air Resources Board
CCR	California Code of Regulations
CEC	California Energy Commission
CH_4	methane
CO_2	carbon dioxide
CSO	Construction Safety Orders
CURE	California Unions for Reliable Energy
DPM	Diesel Particulate Matter
EIR	Environmental Impact Report
EPA	Environmental Protection Agency
ESO	Electrical Safety Orders
GHG	greenhouse gas
GISA	General Industry Safety Orders
gpd	gallons-per-day
HFC	hydrfluorocarbons
HFE	hydrofluorinated ethers
IID	Imperial Irrigation District
ICAPCD	Imperial County Air Pollution Control District
LORS	Laws, Ordinances, Regulations, and Standards
MND	Mitigated Negative Declaration
mph	miles per hour
N_2O	nitrous oxide
NF3	nitrogen trifluoride
PFC	perfluorocarbons
PPE	personal protective equipment
PSD	Prevention of Significant Deterioration
RWQCB	Regional Water Quality Control Board
SA	Staff Assessment
SB	Senate Bill
SF_6	sulfur hexafluoride
SWWRF	Seeley Wastewater Reclamation Facility
TAC	Toxic Air Contaminant

SECTION 1 DESCRIPTION OF SEELEY WASTEWATER RECLAMATION FACILITY IMPROVEMENTS

1.1 INTRODUCTION

Imperial Valley Solar, LLC (formerly SES Solar Two, LLC [Applicant]) filed an Application for Certification (AFC) with the California Energy Commission (CEC) and Bureau of Land Management (BLM) for its proposed Imperial Valley Solar (formerly SES Solar Two) Project (Imperial Valley Solar or Project) in June 30, 2008. The Application was deemed adequate on October 8, 2008. Since then, the Applicant has continued to work with agencies and the public to assess potential Project improvements. This report provides additional information about the upgrades to the Seeley Wastewater Reclamation Facility (SWWRF) that are related to the Imperial Valley Solar Project.

1.2 SEELEY WASTE WATER RECLAMATION FACILITY

1.2.1 Background

According to the original AFC filing, the Imperial Irrigation District (IID) would provide the water supply for the project from its Westside Main Canal raw canal water, which was to be treated to provide an appropriate quality of water for mirror washing and to meet the standards for on-site drinking water. The applicant estimated that approximately 33 acre-feet per year (afy) of water would be used annually for mirror washing and domestic use. There were no provisions in the AFC for a backup water supply.

In the first set of data requests, the CEC and BLM asked the Applicant for additional information on the reliability of the Imperial Valley Solar water supply from IID and the source of back-up water in the event that there are future interruptions in primary water. In considering the responses to these questions, an in-depth evaluation of the Imperial Valley Solar water supply options in terms of reliability, cost, and environmental impact was performed. After extensive research, in June 2009 Imperial Valley Solar provided a Supplement to the AFC to report the Applicant's new primary source of water: reclaimed water from the SWWRF.

The June 2009 Supplement analyzed the 12-mile waterline that will transport water from SWWRF to the Imperial Valley Solar site. Since the publication of that supplement, Seeley County Water District (SCWD) released a Draft Mitigated Negative Declaration (MND) for the SWWRF Improvements. These improvements are necessary to ensure that no discharges from the facility exceed established effluent limits in the future. The Imperial Valley Solar Project is anticipated to take up to 200,000 gallons-per-day (gpd) of the treated effluent. Other possible users of the tertiary-treated effluent include existing and new uses identified and evaluated in Imperial County's General Plan.

Rather than adopting the MND, SCWD is preparing an Environmental Impact Report (EIR). The CEC Staff Assessment (SA) for the Imperial Valley Solar Project assumed that the MND would be adopted. Because the MND was not adopted, this report provides an independent analysis of the potential impacts of the SWWRF improvements.

1.2.1.1 Location

The SCWD proposes an upgrade of an existing facility, located along the western boundary of the unincorporated community of Seeley in Imperial County, California. The existing plant is located immediately east of the New River, south of El Centro Street and west of New River Boulevard. The community of Seeley is located approximately eight miles west of El Centro, 10 miles north of the border between the United States and Mexico, and approximately 100 miles east of San Diego.

1.2.2 Seeley Waste Water Treatment Facility Upgrades Overview

After evaluating the currently available water supply options, the Applicant has concluded that the primary source of water for the Project will be furnished by the SWWRF. Imperial Valley Solar will finance upgrades to the existing treatment plant so its effluent meets Title 22 requirements for recycled water. In exchange, Imperial Valley Solar will have access to approximately 150,000 gpd and up to 200,000 gpd of reclaimed water for use in all construction and operation activities except for potable water.

SCWD serves customers in the town of Seeley, which is located in the unincorporated area of Imperial County, California, with certain utility services, including, without limitation, sewage collection and treatment services. Currently, sewage collected in Seeley's system is treated and, thereafter, flows into the New River.

SCWD has agreed to make available reclaimed water to Imperial Valley Solar (See Attachment A to the June 2009 Supplement– Will Serve Letter). An agreement between SCWD and Imperial Valley Solar was signed at the Seeley Board Meeting on May 18, 2009.

The District operates a wastewater treatment facility that is permitted for 250,000 gpd and capable of treating 250,000 gpd. The treatment plant currently houses a series of five treatment ponds, including two 0.l2-acre "reactor" ponds and three 0.14-acre sedimentation ponds

The treatment facility discharges effluent treated to secondary standards via an unlined channel to the New River. The facility operates under a New River discharge permit from the Regional Water Quality Control Board (RWQCB), Colorado River Basin which includes effluent limits for a number of pollutants, including Total Suspended Solids and Biochemical Oxygen Demand (Order No. R7-2007-0036, NPDES No. CA0105023). Over the past several years, discharge from the facility has exceeded these effluent limits, and the District has received notices of violations. The District proposes to carry out the project to upgrade the existing facility to Title 22 standards, with tertiary effluent suitable for unrestricted recycled uses. This upgrade is needed to help ensure that no discharges from the facility exceed established effluent limits in the future.

Tertiary treatment processes are those processes that remove additional suspended solids from the secondary effluent by filtration followed by disinfection. To achieve tertiary treatment, the project proposes to modify two of the existing treatment ponds to accommodate an activated sludge process, a microfiltration system and ultraviolet disinfection. Two existing treatment ponds would be converted to in-ground earthen basins lined with a synthetic flexible membrane and a floating cover for storage of at least 300,000 gallons of recycled water and the remaining pond would be abandoned. The treated

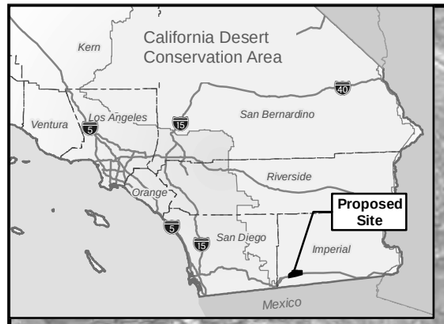
recycled water would flow to a pump station and then be discharged to the New River via the unlined channel. Onsite pump stations would convey process flows and product water. Piping between the various treatment processes will be undergrounded. There will be a new backup generator installed as part of the project and generators may be required temporarily during project construction.

Sludge wastes from the process would be dried on open-air drying beds and disposed of offsite at a landfill with sufficient capacity and permitted to accept geosolids. The sludge drying beds would consist of a 12-inch sand layer underlain with drain piping.

The treated effluent would be discharged via the unlined channel to the New River, unless and until approvals are issued that would allow disposal of the tertiary-treated effluent elsewhere. If the effluent is disposed elsewhere, it would likely be made available by the District at a point that would eliminate the discharge along the unlined channel into the New River. The Imperial Valley Solar Project is anticipated to take up to 200,000 gpd of the treated effluent. Other possible users of the tertiary-treated effluent include existing development and new development identified and evaluated in Imperial County's General Plan.

To access the water, Imperial Valley Solar will construct approximately 12 miles of pipeline from the Seeley facility to the Project water treatment plant along the Evan Hewes Highway. This waterline was analyzed in the Supplement to the AFC released in June 2009.

The current influent rate to the SWWRF is about 112,000 to 150,000 gpd (104 gpm or 168 afy). The proposed SWWRF upgrades along with a newly constructed pipe delivery system from Seeley to the Project and proposed onsite storage will be adequate to provide a reliable source of water for the Imperial Valley Solar Project.



Imperial Valley Solar Project Site

Proposed Waterline for Imperial Valley Solar

Seeley WWRF

Plaster City

Evan Hewes Highway

8

S80

LEGEND

- Project Boundary (6465 acres)
- Laydown Area
- Proposed Waterline (3.8 Miles On-site, 8 Miles Off-site)
  Waterline 10 foot ROW (10 acres Off-site)
- Seeley Waste Water Reclamation Facility

SOURCES: Project Boundary (Stantec 30% Design, Feb. 2009); Aerial Imagery (NAIP, 2005); Waterline (Nolte 1/2010).

OVERVIEW OF THE SEELEY WASTE WATER RECLAMATION FACILITY AND THE IMPERIAL VALLEY SOLAR PROJECT

URS

0.5 0 0.5 1 Miles

SCALE: 1" = 1 Mile (1:63,360)
SCALE CORRECT WHEN PRINTED AT 11X17

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PM: AL	PROJ. NO: 27657103.00100	1.1

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SECTION 2 ENVIRONMENTAL INFORMATION

2.1 INTRODUCTION

This section presents a discussion of the existing resources and site conditions, the existing information about the potential environmental consequences of the SWWRF upgrades, any identified mitigation measures, and a discussion of LORS compliance.

2.2 AIR QUALITY

This section presents a discussion of the potential impacts related to air quality during construction and operations of the SWWRF upgrades related to the Imperial Valley Solar Project.

The discussion below includes the affected environment, environmental consequences, cumulative impacts, mitigation measures, and applicable LORS. Public health is addressed separately in Section 2.16.

2.2.1 Affected Environment

The affected environment resulting from the upgrades at the SWWRF is unchanged from that presented in the AFC. Specifically, the climate and existing air quality discussions will not be affected by the upgrade to the SWWRF.

2.2.2 Environmental Consequences

This section describes the potential air quality impacts from the upgrade to the SWWRF. A discussion of the potential emission sources during construction and operation of the upgrade to the SWWRF is presented in this section. The SWWRF upgrade and associated activities will result in minor changes that will not cause significant construction or operations related impacts to air quality.

2.2.2.1 Project Construction Emissions

The primary emission sources during construction of the proposed SWWRF Improvements would include exhaust from heavy construction equipment and vehicles and fugitive dust generated in areas disturbed by grading, excavating, and erection of facility structures. The projected construction schedule is of a short duration of only a few months. Different areas within the proposed SWWRF site would be disturbed at different times over this period. Estimated land disturbance for construction activities is assumed to be five acres.

Fugitive dust emissions from the construction of the SWWRF would result from:

- Site grading/excavation activities at the construction site;
- Installation of new structures and water line; and,
- Onsite travel on unpaved surfaces.

Combustion emissions during construction would result from:

- Exhaust from the off-road construction equipments, including diesel construction equipment used for site grading, excavation, and construction of onsite structures, and water trucks used to control construction dust emissions;
- Exhaust from on-road construction vehicles, including pickup trucks and diesel trucks used to transport workers and materials around the construction site, and from diesel trucks used to deliver concrete, equipment, and construction supplies to the construction site; and,
- Exhaust from vehicles used by workers to commute to the construction site.

The analysis conducted by Dudek for the Draft MND for the SWWRF upgrades identified measures to minimize dust emissions, including use of soil stabilizers, a high wind dust control plan, implementing limits to disturbance areas during high winds, disturbed area stabilization, watering exposed surfaces and haul roads, covering stock piles, replacing vegetative ground cover in disturbed areas quickly, and reducing speeds on unpaved roads to less than 15 miles per hour (mph). These measures should be imposed as mitigation measures on the project to ensure less than significant impacts.

Construction equipment and vehicle exhaust emissions estimates based on equipment lists and construction scheduling information were not available at the time of submittal of this supplemental document. However, because of the short duration of the construction activities, the expected small construction equipment roster, and implementation of mitigation measures no significant impacts from the construction of the SWWRF are expected.

2.2.2.2 Project Operations Emissions

The only new source of air pollution associated with the upgrades to SWWRF would be one emergency diesel backup generator. The backup generator engine planned for the SWWRF would be no larger (and most likely smaller) than the generator planned for installation at the Imperial Valley Solar facility, which is rated at 335 horsepower. Generator testing is projected to follow the standard practice planned for the Imperial Valley Solar Project, at 15 minutes per week for a total of 13 hours per year. Operation at this level would result in emissions of all pollutants of less than 50 pounds per year. The maximum emission rate of each pollutant from a generator similar to the Imperial Valley Solar generator, are presented in Table 2.2-1. It is expected that the emissions from the generator associated with the SWWRF Project will be lower. As shown in Table 2.2-1 these emissions are substantially lower than the thresholds of significance for project operations from the Imperial County Air Pollution Control District (ICAPCD) CEQA Air Quality Handbook, thus no significant impacts are expected from the SWWRF Project. The AFC and subsequent responses to Data Requests showed that no significant impacts are expected from the operation of the Imperial Valley Solar Project, which included emissions from one diesel generator plus operations and maintenance equipment, thus no significant impacts from the operation of the SWWRF project are expected.

Table 2.2-1
Maximum Predicted Backup Diesel Generator Emission Rates

Pollutant	Daily Emissions (lb/day)	Annual Emissions (lb/yr)	ICAPCD Threshold of Significance Emissions (lb/day)
NO_x	0.79	41.03	55
CO	0.06	3.17	550
VOC	0.03	1.44	55
SO_x	0.02	1.15	150
PM_{10}	0.01	0.58	150

Notes: Based on emissions from the Solar Two generator which is tested 15 minutes per week for a total of 13 hours per year.

CO = carbon monoxide
lb/yr = pounds per year
NO_x = nitrogen oxide
PM_{10} = particulate matter less than 10 microns in diameter
SO_x = sulfur oxide
VOC = volatile organic compounds

2.2.2.3 Greenhouse Gas Emissions

In 2006, the California Assembly passed a law (AB32) directing the California Air Resources Board) CARB to develop regulations to achieve the goal of reducing statewide greenhouse gas (GHG) emissions to 1990 levels by 2020. Potential greenhouse gas emissions from the diesel generator associated with the upgrade to the SWWRF were calculated using the California Climate Action Registry protocol as in the AFC. The estimated annual greenhouse gas emissions from the diesel generator are 2.65 tonnes per year, although it is expected that the emissions from the generator associated with the SWWRF Project will be lower.

2.2.2.4 Odors

The upgrades to the SWWRF may have the potential to cause more odorous activities, due to the tertiary treatment of additional wastewater. Although since the existing facility already has odorous activities, generally small increases in odorous activities are not perceptible to most people. Thus it is expected that odors from the SWWRF Project will be similar to those from the existing facility with no potentially significant impacts.

2.2.3 Cumulative Impacts

Since the SWWRF is located approximately 13 miles from the Imperial Valley Solar Project, the potential air quality impacts from each portion of the project will not be additive. Thus no additional cumulative analysis will be conducted for the SWWRF project. The AFC and subsequent responses to Data Requests determined that no significant cumulative impacts are associated with the Imperial Valley Solar Project, and none are identified as a part of this analysis.

2.2.4 Mitigation Measures

The only additional mitigation measures that are recommended based on the SWWRF upgrades are the dust control mitigation measures to limit fugitive dust emissions.

2.2.5 LORS Compliance

The LORS presented in Section 5.2.5 of the Imperial Valley Solar Project AFC are applicable to the SWWRF upgrade Project. Newly proposed and adopted LORS are discussed below and where applicable the SWWRF Project will comply with these LORS. The Project will comply with all applicable LORS.

2.2.5.1 Federal

National Ambient Air Quality Standards

On January 22, 2010, the U.S. Environmental Protection Agency (EPA) announced a new hourly NO_2 standard of 100 parts per billion (ppb) based on the 3-year average of the 98th-percentile of the annual distribution of daily maximum 1-hour concentrations. The final rule for the new hourly NAAQS was published in the Federal Register on February 9, 2010, and will be effective on April 12, 2010.

On December 8, 2009 EPA issued a proposed rule for a new one-hour SO_2 standard within the range of 50–100 ppb, based on the three-year average of the annual 99th percentile (or 4th highest) of one-hour daily maximum concentrations. The new rule is expected to be effective in June 2010. The EPA also proposes to revoke both the existing 24-hour and annual primary SO_2 standards.

On January 19, 2010 EPA issued a proposed rule to lower the eight-hour primary standard, which was set at 0.075 ppm in the 2008 final rule, to a lower level within the range of 0.060 to 0.070 parts per million (ppm). The new rule is expected to be effective in August 2010.

Greenhouse Gas Regulations

On July 11, 2008, the U.S. EPA gave *Advance Notice of Proposed Rulemaking: Regulating Greenhouse Gas Emissions under the Clean Air Act* (CAA). It reviewed various CAA provisions that may be applicable to regulate GHGs and examined the issues that regulating GHGs under those provisions may raise. It also provided information regarding potential regulatory approaches and technologies for reducing GHG emissions and raised issues relevant to possible legislation and the potential for overlap between legislation and CAA regulation. The Congress instructed the U.S. EPA to publish a proposed mandatory greenhouse gas rule using its authority under the existing CAA in September 2008 and a final rule by June 2009.

The Proposed Mandatory Greenhouse Gas Reporting Rule public comment period ended June 9, 2009. The comment period was open for 60 days, following publication of the proposed rule in the *Federal Register*, April 10, 2009. In general, U.S. EPA proposes that suppliers of fossil fuels or industrial greenhouse gases, manufacturers of vehicles and engines, and facilities that emit 25,000 metric tons or more per year of GHG emissions submit annual reports to U.S. EPA. These reports will serve to inform

future policy decisions. The gases covered by the proposed rule are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFC), perfluorocarbons (PFC), sulfur hexafluoride (SF_6), and other fluorinated gases including nitrogen trifluoride (NF_3) and hydrofluorinated ethers (HFE).

On September 30, 2009 U.S. EPA published proposed rules addressing applicability thresholds for GHG emissions under Prevention of Significant Deterioration (PSD) and Title V permitting programs and to set a PSD significance level for GHG emissions. These proposed applicability levels (between 10,000 and 25,000 metric tons per year of carbon dioxide equivalents) would be phased in during the next six years. These rules (coined the GHG Mandatory Reporting Rule) became final on December 29, 2009. The first reports will be due to U.S. EPA in March of 2011.

2.2.5.2 State

Greenhouse Gas Regulations

On September 30, 2008, Governor Arnold Schwarzenegger signed Senate Bill (SB) 375 (Steinberg). SB 375 focuses on housing and transportation planning decisions to reduce fossil fuel consumption and conserve farmlands and habitat. This legislation is important to achieving AB 32 goals because greenhouse gas emissions associated with land use, which includes transportation, are the single largest source of emissions in California.

On October 24, 2008, CARB released the Preliminary Draft Staff Proposal: Recommended Approaches for Setting Interim Significant Thresholds for Greenhouse Gases under CEQA recommending GHG-related significance thresholds which lead agencies can use in the significance determination pursuant to OPR's request (CARB 2008). The preliminary interim thresholds are for two sectors: 1) industrial projects, and 2) residential and commercial projects.

On December 30, 2009, Natural Resources Agency released revised CEQA guidelines for implementation of CEQA, which include guidance for the assessment of GHG emissions. These Guideline amendments are slated to take effect in mid-March 2010. The amended CEQA Guidelines emphasize that lead agencies have the discretion to determine appropriate significance thresholds for evaluating GHG impacts that are supported by substantial evidence in the record.

2.2.6 References

Dudek, 2009. *Draft Mitigated Negative Declaration for the Seeley Wastewater Reclamation Facility Improvements*. Prepared for Seeley County Water District. Imperial Valley, California. December 2009.

Imperial County Air Pollution Control District (ICAPCD), CEQA Air Quality Handbook, Guidelines for the Implementation of the California Environmental Quality Act of 1970, as amended, November 2007.

2.3 GEOLOGIC HAZARDS AND RESOURCES

This section presents a discussion of the potential impacts related to geologic hazards and resources during construction and operations of the SWWRF upgrades related to the Imperial Valley Solar Project.

The discussion below includes the affected environment, environmental consequences, cumulative impacts, mitigation measures, and applicable LORS.

2.3.1 Affected Environment

The affected environment includes geologic hazards and resources related to the SWWRF, located at 1898 West Main Street in Seeley, California, approximately 13 miles east of the Imperial Valley Solar Project site.

2.3.2 Environmental Consequences

The analysis conducted by Dudek for the Draft MND (Dudek 2009) indicated that the proposed construction and operations of the SWWRF upgrades would not result in any potentially significant impacts to geologic hazards and resources as the SWWRF upgrades would not expose people or structures to rupture of a known earthquake fault, seismic ground shaking, seismic-related ground failure or landslides. The analysis conducted by Dudek for the Draft MND (Dudek 2009) indicated that the SWWRF upgrades would not result in substantial soil erosion or locate the project on unstable or expansive soils.

2.3.3 Cumulative Impacts

No additional cumulative impacts to geologic hazards and resources have been identified as part of this analysis beyond those identified in Section 2.3.3 of the AFC.

2.3.4 Mitigation Measures

Mitigation measures for geologic hazards and resources are described in Section 2.3.4 of the Project AFC. No additional mitigation measures are recommended based on this analysis for the upgrades to the SWWRF related to the Imperial Valley Solar Project.

2.3.5 LORS Compliance

The LORS presented in Section 5.3.6 of the Project AFC. No additional LORS apply to the upgrades to the SWWRF related to the Imperial Valley Solar Project. The Project will comply with all applicable LORS.

2.3.6 References

Dudek, 2009. *Draft Mitigated Negative Declaration for the Seeley Wastewater Reclamation Facility Improvements*. Prepared for Seeley County Water District. Imperial Valley, California. December 2009.

2.4 SOIL RESOURCES

This section presents a discussion of the potential impacts related to soil resources during construction and operations of the SWWRF upgrades related to the Imperial Valley Solar Project.

The discussion below includes the affected environment, environmental consequences, cumulative impacts, mitigation measures, and applicable LORS.

2.4.1 Affected Environment

The affected environment includes soil resources related to the SWWRF, located at 1898 West Main Street in Seeley, California, approximately 13 miles east of the Imperial Valley Solar Project site.

2.4.2 Environmental Consequences

The analysis conducted by Dudek for the Draft MND (Dudek 2009) indicated that the proposed SWWRF upgrades could result in a temporary increase in erosion and sedimentation from soil disturbance at the SWWRF site. Construction of the SWWRF upgrades would comply with National Pollutant Discharge Elimination System (NPDES) regulations, a Storm Water Pollution Prevention Plan (SWPPP) and use of Best Management Practices (BMPs). Adherence to these construction measures would ensure that impacts to soil resources would be less than significant.

2.4.3 Cumulative Impacts

No additional cumulative impacts to soil resources have been identified as part of this analysis beyond those identified in Section 2.4.3 of the AFC.

2.4.4 Mitigation Measures

Mitigation measures for soil resources are described in Section 2.4.4 of the Project AFC. With compliance with the NPDES regulations, the SWPPP and use of BMPs, no additional mitigation measures would be recommended for the upgrades to the SWWRF related to the Imperial Valley Solar Project.

2.4.5 LORS Compliance

The LORS presented in Section 5.4.6 of the Project AFC. No additional LORS are recommended for the upgrades to the SWWRF related to the Imperial Valley Solar Project. The Project will comply with all LORS.

2.4.6 References

Dudek, 2009. *Draft Mitigated Negative Declaration for the Seeley Wastewater Reclamation Facility Improvements*. Prepared for Seeley County Water District. Imperial Valley, California. December 2009.

2.5 WATER RESOURCES

From a water resources perspective, the main purpose of this analysis of use of the SWWRF recycled water supply focuses on updates to previously analyses and information provided in Section 5.5.1 of the AFC, the Reclaimed Water and Hydrogen System supplemental filing to the AFC dated June 2009, and additional supportive material provided for use of the SWWRF water supply, docketed October 30, 2009.

The purpose of this analysis is to update the currently provided information to evaluate potential impacts associated with implementation of SWWRF upgrades in relation to water resources and particularly the SWWRF outlet channel that is tributary to the New River (Wildcat Drain). Additionally, this analysis provides updated information regarding SWWRF permitted operational capacity and current effluent discharge rates. Note that under the current RWQCB Waste Discharge Requirements for SWWRF (RWQCB Order No. 2007-07-0036) the SWWRF is currently permitted for up to 250,000 gpd of secondary treated water. This is an increase from the previous permit (RWQCB Order No. R7-2002-0126) which provided a permitted capacity of 200,000 gpd of secondary treated water. Proposed improvements to the SWWRF include upgrades to move from secondary to tertiary level treatment.

2.5.1 Affected Environment

The SWWRF is located at 1898 West Main Street in Seeley, California, approximately 13 miles east of the Project site. Imperial Valley Solar will construct an approximate 12-mile pipeline from the SWWRF to the Imperial Valley Solar water treatment plant along Evan Hewes Highway. The SWWRF is currently seeking to upgrade from a secondary to tertiary level of treatment (per Title 22 requirements).

The affected environment described in the original AFC and subsequent supplemental information remains unchanged. However, it is noted that SWWRF discharges to a minor tributary to the New River, locally referred to as the Wildcat Drain. Additional discussion of the Wildcat Drain channel for the SWWRF discharge is provided in the Biological Resources section of this report.

2.5.2 Environmental Consequences

From a regional water resources perspective, environmental consequences for use of SWWRF recycled water as the sole water supply source for the Project remain unchanged from previously submitted data and analyses. Previous analyses indicated a minor amount of flow reduction to the New River as a result of SWWRF flow diversion to the New River and Salton Sea (0.15% reduction of flow to the New River and 0.05% reduction to the Salton Sea). Additionally, the 150 to 200 cfs average annual flow at the border does not account for additional agricultural return flows to the New River between the border and the SWWRF (located approximately 15 miles downstream of the international border) which would reduce the anticipated percentage reduction in flows to the Salton Sea (URS 2009).

Project components for use of SWWRF recycled water as the sole water supply source for the project includes a water pipeline along Evan Hewes Highway to SWWRF along with onsite distribution of the raw water supply. The proposed water pipeline and onsite distribution were previously analyzed in the supplemental analyses for use of the SWWRF recycled water published in June 2009.

Water Supply and Use

Based on existing, available information the current average influent rate to the SWWRF is about 112,000 to 150,000 gpd (78-104 gpm or 125-168 afy), which is capable of meeting the anticipated project operations phase water demand of approximately 30,000 gpd (33 afy). The proposed SWWRF upgrades along with a proposed pipe delivery system from SWWRF to the Project and proposed onsite storage will be adequate to provide a reliable source of water for the Imperial Valley Solar Project. There are not expected to be any reductions or temporary interruptions of water from the SWWRF. If an unforeseen interruption were to occur, Imperial Valley Solar would temporarily suspend mirror washing operations.

Based upon previously supplied analyses, use of the SWWRF treated effluent is not considered to be a potential impact to regional water supply in the area or existing beneficial uses downstream (specifically return flows to the Salton Sea) (URS 2009).

Water Quality

There are no anticipated changes in previously analyzed and provided information regarding water quality for the SWWRF upgrades. The analysis conducted by Dudek for the Draft MND indicated that the proposed SWWRF improvements would not result in any potentially significant impacts to water quality (Dudek 2009).

Storm Water Runoff and Flooding Hazards

There are no anticipated changes in previously analyzed and provided information regarding storm water runoff and flooding hazards associated with use of SWWRF recycled water The analysis conducted by Dudek for the Draft MND indicated that the proposed SWWRF improvements would not result in any potentially significant impacts to storm water runoff and flooding hazards (Dudek 2009).

2.5.3 Cumulative Impacts

In regard to the proposed recycled water supply source from SWWRF, potential cumulative impacts beyond those described in Project AFC Section 5.5 include reduction of surface water flows to Salton Sea. However, as stated previously in prior supplemental submittals— use of the SWWRF treated effluent is not considered to be a potential impact to water use or existing beneficial uses downstream (specifically return flows to the Salton Sea) due to the relatively minor amount of water to be used for Project purposes that may otherwise have the potential to flow to the Salton Sea. No other known proposed projects in the vicinity would reduce water supply to the channel.

2.5.4 Mitigation Measures

The mitigation measures and other discussion presented in Section 5.5 of the Project AFC are applicable. No additional mitigation measures are recommended based upon the SWWRF upgrades related to the Imperial Valley Solar Project.

With implementation of the mitigation measures outlined in Section 5.5 of the Project AFC, impacts to water resources as a result of construction and operation will be reduced to less than significant levels.

2.5.5 LORS Compliance

Minor changes were provided for the LORS compliance and Agency contact tables provided in the previous supplemental submitall regarding Regional Water Quality Control Board contacts. The Project will comply with all LORS.

Table 2.5-2
Summary of LORS – Water Resources

LORS	Requirements	Conformance Section	Administering Agency	Agency Contact
Federal Jurisdiction				
CWA §402; 33 USC §1342; 40 CFR Parts 110, 112, 116	Requires NPDES Permits for construction and industrial storm water discharges. Requires preparation of a SWPPP and Monitoring Program.	Coverage under NPDES industrial storm water permit maybe required. NOI for coverage under NPDES construction storm water permit will be filed before construction.	SWRCB and RWQCB	J. Carmona
CWA §311; 33 USC §1342; 40 CFR Parts 122-136	Requires reporting of any prohibited discharge of oil or hazardous substance.	Project will conform by proper management of oils and hazardous substances both during construction and operation. If an accidental release or unintended spill occurs it will promptly be reported.	RWQCB and DTSC	J. Carmona
CFR, Title 40, Parts 124, 144 to 147	Requires protection of underground water resources	Underground water resources will be protected due to the lined evaporation pond.	Environmental Protection Agency	
State Jurisdiction				
CWC §13552.6	Use of potable domestic water for cooling towers and air conditioning is unreasonable use if suitable recycled water is available.	Recycled water will be the sole source of water for the project. No cooling towers are proposed.	SWRCB and RWQCB	J. Carmona / J. Snyder
California Constitution Article 10 §2	Avoid the waste or unreasonable uses of water. Regulates methods of use and diversion of water.	Project includes appropriate water conservation measures, both during construction and operation.	SWRCB and RWQCB	J. Carmona
State Water Resources Control Board, Resolution No. 75-58	Addresses sources and use of cooling water supplies for power plants that depend on inland waters for cooling and in areas subject to general water shortages.	Recycled water will be the sole source of water for the project. No cooling towers are proposed.	SWRCB and RWQCB	J. Carmona (RWQCB), J. Kassel (SWRCB)

Table 2.5-2
Summary of LORS – Water Resources
(Continued)

LORS	Requirements	Conformance Section	Administering Agency	Agency Contact
Porter-Cologne Water Quality Act of 1972; CWC § 13000-14957, Division 7, Water Quality	Requires State and Regional Water Quality Control Boards to adopt water quality initiatives to protect state waters. Those criteria include identification of beneficial uses, narrative and numerical water quality standards.	Project will conform to applicable state water standards, both qualitative and quantitative, before and during operation. Applicable permits will be obtained from Regional Water Quality Control Board.	SWRCB and RWQCB	J. Carmona
Title 22, CCR	Addresses the use of recycled water for cooling equipment	Recycled water will be the sole source of water for the project. No cooling towers are proposed.	California Department of Health Services and RWQCB	J. Stone (DEH) / C. Raley (RWQCB)
The Safe Drinking Water and Toxic Enforcement Act of 1986 (proposition 65), Health and Safety Code 25241.5 *et seq.*	Prohibits the discharge or release of chemicals known to cause cancer or reproductive toxicity into drinking water sources.	Project will conform to all state water quality standards, both qualitative and quantitative. Project will not discharge into any drinking water source. If an unintended spill occurs, reporting of spill will be prompt.	California Department of Health Services	J. Crisologo
CWC Section 461	Encourages the conservation of water resources and the maximum reuse of wastewater, particularly in areas where water is in short supply.	Recycled water will be the sole source of water for the project. No cooling towers are proposed.	SWRCB and RWQCB	J. Carmona / J. Snyder
CWC Section 5002	Requires a "Notice of Extraction and Diversion of Water" to be filed with the State Water Resources Control Board on or before 1 March of the succeeding year.	Notice will be filed as required by state law.	SWRCB and RWQCB	C. Raley (RWQCB), J. Kassel (SWRCB)
CWC Section 13751	Requires a "Report of Completion" to be filed with the State Water Resources Control Board within 60 days of well construction.	A groundwater well is not proposed.	SWRCB and RWQCB	J. Snyder / J. Carmona

Table 2.5-2
Summary of LORS – Water Resources
(Continued)

LORS	Requirements	Conformance Section	Administering Agency	Agency Contact
California Public Resources Code §25523(a); 20 CCR §§1752, 1752.5, 2300 – 2309, and Chapter 2 Subchapter 5, Article 1, Appendix B, Part 1	The code provides for the inclusion of requirements in the CEC's decision on an AFC to assure protection of environmental quality and requires submission of information to the CEC concerning proposed water resources and water quality protection.	Project will comply with the requirements of the CEC to assure protection of water resources.	CEC and RWQCB	J. Snyder / J. Carmona (RWQCB)
CWC §§ 13271 – 13272; 23 CCR §§2250 – 2260	Reporting of releases of reportable quantities of hazardous substances or sewage and releases of specified quantities of oil or petroleum products.	No releases of hazardous substances are anticipated; however, Project will conform to all State water quality standards, both qualitative and quantitative. If an unintended spill occurs, reporting of spill will be prompt.	SWRCB and RWQCB	J. Snyder and J. Carmona (RWQCB)
CWC §13260 – 13269; 23 CCR Chapter 9	Requires the filing of a Report of Waste Discharge and provides for the issuance of WDRs with respect to the discharge of any waste that can affect the quality of the waters of the state.	An ROWD will be filed for the RO Unit discharge waste. The RO Unit will be constructed and monitored in accordance with RWQCB requirements.	SWRCB and RWQCB	J. Snyder and J. Carmona (RWQCB)
CEQA, Public Resources Code §21000 *et seq*.; CEQA Guidelines, 14 CCR §15000 *et seq*.; Appendix G	The CEQA Guidelines (Appendix G) contain definitions of projects that can be considered to cause significant effects to water resources.	Project will comply with the requirements of the CEC to assure protection of water resources.	CEC	
Title 27, CCR Division 2, §20375, SWRCB – Special Requirements for Surface Impoundments (C15: §2548)	This regulation governs the design requirements for surface impoundments.	The evaporation pond for wastewater disposal will be designed and operated in accordance with the requirements of this section.	SWRCB and RWQCB	J. Snyder and J. Carmona (RWQCB)
Local Jurisdiction				

Table 2.5-2
Summary of LORS – Water Resources
(Continued)

LORS	Requirements	Conformance Section	Administering Agency	Agency Contact
Imperial County Ordinance, Title 9, §91605.00 – 91605.06	These codes regulate flood hazard reduction.	The Project will be designed by a licensed engineer and meet all floodplain design standards.	Imperial County	P. Valenzuela
Imperial County Ordinance, Title 9, §90515.00 – 90515.11	The codes classify the Project as light industrial development and regulates its uses	The Project will conform to all code standards	Imperial County	P. Valenzuela
Imperial County APCD, Regulation VIII, Fugitive Dust Rules		The Project will conform to all code standards	Imperial County	

Source: URS Corporation, 2008.

Notes:

APCD = Air Pollution Control District
CEQA = California Environmental Quality Act
CFR = Code of Federal Regulations
CWA = Clean Water Act
CWC = California Water Code
LORS = laws, ordinances, regulations, and standards
NOI = Notice of Intent
NPDES = National Pollutant Discharge Elimination System
RWQCB = Regional Water Quality Control Board
SWRCB = State Water Resources Control Board
SWPPP = Storm Water Pollution Prevention Plan
USC = United States Code

Table 2.5-3
Agency Contact List for LORS—Water Resources

Agency	Contact	Title	Telephone
California Regional Water Quality Control Board, Colorado River Basin Region	John Carmona	NPDES, 401 Certification, Storm Water	760-346-7491
California Regional Water Quality Control Board, Colorado River Basin Region	Jennie Snyder	Chapter 15 and Non-Chapter 15	760-776-8962
State Water Resources Control Board	Jim Kassel	Water Rights	916-341-5446
California Department of Health Services	Jeff Stone	Recycled Water	805-566-9767
California Department of Health Services	Joseph Crisologo	Water Security	213-580-5723
Imperial County Planning/Building Development Department	Patricia A. Valenzuela	Planner II	760-482-4320
California Department of Water Resources, Division of Planning and Local Assistance, Southern District	Tim Ross		818-500-1645

Sources: Colorado River Basin RWQCB, 208; CDPH, 2008a; CDPH, 2008b (References per Section 5.5 of Project AFC).

2.5.6 References

California Unions for Reliable Energy (CURE) Data Requests Set One, Dated April 6, 2009, CEC Docket Number 08-AFC-05

Dudek, 2009. *Draft Mitigated Negative Declaration for the Seeley Wastewater Reclamation Facility Improvements*. Prepared for Seeley County Water District. Imperial Valley, California. December 2009.

Salton Sea Ecosystem Restoration Program Programmatic Environmental Impact Report, Chapter 5, Surface Water Resources, last accessed April 29, 2009 at: http://www.saltonsea.water.ca.gov/PEIR/draft/

State Water Resources Control Board website last accessed on April 29, 2009 at: http://www.swrcb.ca.gov/rwqcb7/water_issues/programs/salton_sea/watershed.shtml

URS. 2009. Letter Report Provided to Seeley County Water District. "SES Solar Two Imperial County California URS Project No. 27657105.00200." September 23, 2009.

2.6 BIOLOGICAL RESOURCES

This section presents a discussion of the potential impacts related to biological resources during construction and operations of the SWWRF upgrades related to the Imperial Valley Solar Project.

The discussion below includes the affected environment, environmental consequences, cumulative impacts, mitigation measures, and applicable LORS.

2.6.1 Affected Environment

The SWWRF is located at 1898 West Main Street in Seeley, California, approximately 13 miles east of the project site. According to the Draft MND for the SWWRF upgrades (Dudek 2009), the SWWRF site supports developed/disturbed land with limited to no vegetative growth, and discharges up to 0.15 cubic feet per second (cfs) of effluent to the New River through an unlined earthen channel that is approximately 800 feet long and 50 feet wide (0.92 acre). The federally listed Yuma clapper rail (*Rallus longirostris yumamensis*), has been reported in marsh vegetation elsewhere in Imperial County; and the nearest documented occurrence is about two miles north of the SWWRF near where the New River empties into the Salton Sea (Dudek 2009). Burrowing owl (*Athene cunicularia*) and vermillion flycatcher (*Pyrocephalus rubinus*) are also known from the general vicinity. The approximately 0.92 acre channel supports narrow-leaved cattail (*Typha latifolia*), salt cedar (*Tamarix* sp.), arrow weed (*Pluchea sericea*), and Emory's baccharis (*Baccharis emoryi*) but because of the small patch size of suitable habitat, it was considered sub-optimal for breeding use by Yuma clapper rail and other riparian bird species (Dudek 2009).

General reconnaissance surveys were conducted on the SWWRF site in May 2002 and July 2009, and no special-status species were detected. Wildlife species observed from previous surveys included yellow-rumped warbler (*Dendroica coronata*), song sparrow (*Melospiza melodia*), house finch (*Carpodacus mexicanus*), western kingbird (*Tyrannus verticalis*), killdeer (*Charadrius vociferus*), red-winged blackbird (*Agelaius phoeniceus*), and lesser nighthawk (*Chordeiles acutipennis*) (Dudek 2009).

2.6.2 Environmental Consequences

Evaluation of local flows into the Wildcat Drain (SWWRF effluent channel) will be analyzed from hydrological and biological perspectives. The hydrological study will describe the water budget and sources and quantity of surface water available to the emergent wetland that currently receives wastewater treatment effluent from the SWWRF.

The analysis conducted by Dudek for the Draft MND indicated that surface water is supplied to the wetland by agricultural return flows and underdrain flow from a separate drinking water treatment plant, and that this water will be adequate to maintain the wetland after water supply from the SWWRF is discontinued (Dudek 2009). The hydrological study is necessary to quantify how withholding water from the emergent wetland will affect the wetland habitat and any listed species that may occupy the affected habitat. If potentially significant impacts are identified based on this study, the mitigation measures identified in 2.6.4 will be required to reduce the impacts to levels of less than significant.

Focused surveys for sensitive bird species will be completed during the appropriate spring/summer survey periods to determine whether the emergent wetland is occupied by these sensitive species as part of the studies associated with the EIR for the SWWRF upgrades. If potentially significant impacts are identified based on the surveys, the mitigation measures identified in 2.6.4 will be required to reduce the impacts to levels of less than significant. The analysis conducted by Dudek for the Draft MND indicated that no sensitive species would be affected by the SWWRF improvements (Dudek 2009).

2.6.3 Cumulative Impacts

The analysis conducted by Dudek for the Draft MND indicated there are no additional cumulative effects due to the proposed SWWRF upgrades. If potentially significant impacts are identified based on the hydrologic study and/or surveys, the mitigation measures identified in 2.6.4 will be required to reduce the impacts to levels of less than significant.

2.6.4 Mitigation Measures

The analysis conducted by Dudek for the Draft MND indicated that adequate water will remain to maintain the wetland after water supply from the SWWRF is discontinued and that no special status species would be affected (Dudek 2009). No additional mitigation measures are currently proposed. If potentially significant impacts are identified based on the hydrologic study and/or surveys, the mitigation measures identified in 2.6.4 will be required to reduce the impacts to levels of less than significant.

Based on the hydrologic analysis and bird surveys to be conducted as a part of the studies associated with the SWWRF improvements, one of four potential scenarios of effects may occur. Table 2.6-1 summarizes each scenario, and the probable resulting environmental consequences and mitigation requirements.

Table 2.6-1
Potential Scenarios for Effects of Discontinuing SWWRF Flows to Emergent Wetland

Potential Scenarios for Effects of Discontinuation of SWWRF Flows to Emergent Wetland	Environmental Consequences	Mitigation or Avoidance Measures
Discontinuation of SWWTF water flow does not cause loss of wetland and wetland is not occupied by sensitive species	Emergent wetland is maintained and no impacts to listed bird species, as described in Draft MND (MND).	Avoidance of native habitat disturbance during bird breeding season. No other mitigation required.
Discontinuation of SWWTF water flow does not cause loss of wetland but wetland habitat is occupied by sensitive species	Emergent wetland is maintained; noise impacts to listed riparian bird species may occur during construction	Avoidance of native habitat disturbance during bird breeding season; Construction noise abatement measures during the bird breeding season.

Discontinuation of SWWTF water flow causes loss of wetland, but wetland is not occupied by sensitive species	Potential adverse effects on 0.92 acre of wetland.	Avoidance of native habitat disturbance during bird breeding season; Mitigation for adverse effects on wetland.
Discontinuation of SWWTF water flow causes loss of wetland AND wetland is occupied by sensitive species	Potential adverse effects on 0.92 acre of emergent wetland and loss of habitat for listed riparian species.	Avoidance of habitat disturbance during bird breeding season; Mitigation for adverse effects on wetland, and mitigation for impacts to listed species; Construction noise abatement measures during the bird breeding season.

2.6.5 LORS Compliance

The LORS presented in Section 5.6.11 of the Project AFC are applicable to the revised Project and no additional LORS are recommended. Similarly, the agency contact information presented in Section 5.6.11 of the Project AFC is unchanged and the SWWRF upgrades related to the Imperial Valley Solar Project do not affect the required permits or Project schedule presented in Section 5.6.11 of the Project AFC. The Project will comply with all LORS.

2.6.6 References

Dudek, 2009. *Draft Mitigated Negative Declaration for the Seeley Wastewater Reclamation Facility Improvements*. Prepared for Seeley County Water District. Imperial Valley, California. December 2009.

2.7 CULTURAL RESOURCES

This section presents a discussion of the potential impacts related to cultural resources during construction and operations of the SWWRF upgrades related to the Imperial Valley Solar Project.

The discussion below includes the affected environment, environmental consequences, cumulative impacts, mitigation measures, and applicable LORS.

2.7.1 Affected Environment

The affected environment includes the SWWRF, discussed below and a proposed waterline, which extends east of the original line and runs parallel to Evan Hewes Highway rather than the railroad right-of-way (ROW) that will connect to the SWWRF to provide recycled water to the Imperial Valley Solar Project site. The waterline was discussed in a supplemental analysis provided in June 2009.

The SWWRF is located at 1898 West Main Street in Seeley, California, approximately 13 miles east of the Project site. Imperial Valley Solar will construct an approximate 12-mile pipeline from the SWWRF to the Imperial Valley Solar water treatment plant along Evan Hewes Highway. The pipeline will be buried within the Evan Hewes Highway ROW approximately 30" below the existing grade. The line will enter the Imperial Valley Solar property at the exact location as the previously identified line (approximately 1,000 yards east of Plaster City and then run due south to the Raw Water Storage Tank).

2.7.2 Environmental Consequences

Based on information contained in the Draft MND for the SWWRF Improvements (Dudek 2009), a cultural resources pedestrian survey and a cultural record search were conducted for the Final MND/Environmental Assessment for the Proposed Seeley Water/Wastewater Master Plans (2003), and no significant cultural resources were identified within the project area.

2.7.2.1.1 Cultural Resources Survey Results

A records search was conducted February 18, 2009, for a quarter-mile radius around the centerline of the survey corridor for the waterline project, which included the existing SWWRF project site. The records search revealed 11 projects had been previously conducted and 21 cultural resource locations had been previously documented in the records search buffer area. Table 2.7-1 lists the previously performed investigations within the water line records search buffer, which includes the SWWRF project site as it is within the buffer of the record search area. Table 2.7-2 presents the cultural resources previously documented within the records search boundary. The record search for the waterline project covered a larger area than the SWWRF. No previously recorded cultural resources sites were documented within the boundaries of the SWWRF.

Table 2.7-1
Previously Performed Cultural Resource Investigations

Project Name	NABD #	Produced by	Produced for	Date
Archaeological Examination for the Seeley, California Wastewater Facilities Plan	1100070	Jay and Sherilee Von Werlhof Imperial Valley College Museum	Design Sciences	May 1976
Cultural Resource Investigations for 30 Proposed Asset Management Parcels in Imperial Valley, CA	1100301	Patrick Welsh	BLM	July 1983
Review of Alamosa PCS Site # 82502020 County of Imperial, CA	1100757	Environmental Biologists, Inc/SBA	Imperial County, CA	September 2000
Cultural Resource Assessment AT&T Wireless Services Facility No. IM004 Imperial County, CA	1100804	Curt Duke, LSA Associates	GeoTrans Inc.	March 2002
Cultural Resources Survey and Assessment of a Cellular Phone Tower Replacement and Associated Access Road Along Old US Highway 80 Near Dixieland, Imperial County, CA	1100820	Philip de Barros, Ph.D. Professional Archaeological Services	Phase One Inc.	May 2000
Section 106 Consultation Request Cell Site CA-7 New Site # 58 Seeley, Imperial County, CA	1100916	Joseph M. Nixon Ph.D. , Tierra Environmental Services	BRG Consulting Inc.	May 2002
Archaeological Examination of A Proposed County Waste Disposal Site near Calexico, CA	1100071	Jay and Sherilee Von Werlhof	Department of Public Land Works, Imperial County	May 1976
Phase 1 Archaeological Survey of the Proposed Imperial Site, New Mental Health Treatment Facility Project	1101071	Mark C. Robinson, Applied EarthWorks, Inc	State of California Real Estate Services Division	January 2000
Cultural Resources Study of the Mount Signal and Dixie Ranch Imperial County Prison Alternatives Imperial County, CA	1101057	Andrew Pigniolo, ERC Environmental and Energy Services Company, Inc.	California Department of Corrections	January 1990
Volume I Phase II Archaeological Survey of the La Rosita 230 kV Interconnection Project	1100251	Cultural Systems Research, Inc.	San Diego Gas and Electric	November 1987
Cultural Resource Survey for the Seeley Water and Wastewater Treatment Master Plan Project, City of Seeley, Imperial County, California	1101036	Joseph M. Nixon Ph.D. Tierra Environmental Services	BRG Consulting, Inc.	May 2002a

A cultural resource survey was previously conducted for the SWWRF Master Plan Project and included a field survey of 2.5 acres of the existing project site as well as a one-linear mile survey for associated facilities. The survey was negative and no cultural resources were identified (Nixon 2002a).

Table 2.7-2
Previously Recorded Cultural Resource Sites

Site Name	Cultural Affiliation	Description	Comments
CA-IMP-321	Prehistoric	Cremation	Site location has not been verified since initial recording
4-IMP-453	Prehistoric	Pottery shards	Site location has not been verified since initial recording.
4-IMP-1425	Prehistoric	Isolated find – pottery sherd	
4-IMP-1426	Prehistoric	Village site – extensive pottery and lithic materials	Site location has not been verified since initial recording.
4-IMP-4193H	Historic	Refuse deposit	Site location has not been verified since initial recording.
4-IMP-4389	Prehistoric	Isolate-buffware rim sherd	
4-IMP4390H	Historic	Refuse deposit	Site location has not been verified since initial recording.
4-IMP-4391H	Historic	Refuse deposit	No further information available
4-IMP-4602	Prehistoric	Pottery scatter – pot drop	Salton Buff; site location has not been verified since initial recording
4-IMP-4603	Prehistoric	Isolate – Basalt flake	
CA-IMP-7816H	Historic	Refuse Deposit	Potentially related to the railroad; site location has not been verified since initial recording
US Highway 80	Historic	Linear Highway	Reevaluated with the SES Solar Two Class III Cultural Resources Technical Report
San Diego and Arizona Eastern Railway	Historic	Linear Rail Road	Reevaluated with the SES Solar Two Class III Cultural Resources Technical Report
P-13-009129	Prehistoric	Isolate – Brownware pottery sherd	
CA-IMP-8427	Prehistoric	Open Camp with lithic tools and flakes, ceramics, and three features and groundstone	No further information available
P-13-009221	Prehistoric	Isolate – two secondary porphyry flakes	
P-13-00922	Historic	Isolate – glass insulator cap	

Table 2.7-2
Previously Recorded Cultural Resource Sites
(Continued)

Site Name	Cultural Affiliation	Description	Comments
CA-IMP-8658	Prehistoric	Temporary Camp lithic tools and flakes, ceramics groundstone and a feature	No further information available
P-13-009727	Prehistoric	Isolate-single gray metavolcanic flake	
CA-IMP-8729	Prehistoric	Lithic and ceramic scatter	No further information available
CA-IMP-8730	Prehistoric	Lithic and ceramic scatter	No further information available

A survey buffer of 150 feet on either side of the waterline center was established for the waterline cultural resource survey. The waterline survey area did not include the SWWRF plant site. However, as addressed above, the plant site had previously been surveyed (Nixon 2002a) with negative results.

The result of the survey was the recordation of one previously recorded cultural resource site, three newly recorded cultural resource sites, and five newly recorded prehistoric isolated artifacts along the waterline route. The tabular results of the survey are presented in Table 2.7-3. None of these sites are located in proximity to or within the boundaries of the SWWRF project area.

Table 2.7-3
Cultural Resource Survey Results

Site Name	Cultural Affiliation	Description
Previously Recorded Site		
IMP-4391/H	Historic	Refuse Deposit
Newly Recorded Sites		
KRM-SLY-1	Historic	Linear site, 17 highway markers, 12 historic refuse deposit locations
KRM-SLY-3	Prehistoric	Ceramic and lithic scatter
KRM-SLY-5	Prehistoric	Possible open camp
Newly Recorded Isolates		
SLY-ISO-2	Prehistoric	Metavolcanic hammerstone
SLY-ISO-4	Prehistoric	Tested metavolcanic cobble
SLY-ISO-6	Prehistoric	Metavolcanic secondary flake
SLY-ISO-7	Prehistoric	Sandstone mano fragment
SLY-ISO-8	Prehistoric	Metavolcanic secondary flake.

The Class III pedestrian survey of The Seeley Water Line Extension Corridor resulted in the recording of three sites, one historic and two prehistoric; five isolated finds; and the reevaluation of one previously recorded site. One of the sites is recommended as requiring further investigation to determine if subsurface deposits exist and eligibility for nomination to the NRHP or the CRHR. The remaining sites are recommended as requiring no further work. Previously recorded site IMP-4391H was unevaluated. URS recommends the site as not eligible for nomination to the NRHP or CRHR. None of these sites is within the boundaries of the SWWRF project area.

2.7.2.1.2 Historic Built Environment Survey Results

In March and April, 2009, Mr. Jeremy Hollins, URS Architectural Historian, completed a supplemental reconnaissance-level historic architecture survey for six historic-period properties located immediately outside of the right-of-way for a proposed subsurface waterline that travels from the northeast corner of the Project Area to the SWWRF, primarily along Evan Hewes Highway in Imperial County, California.

Per the CEC Rules of Practice and Procedure and Power Plant Site Regulations Revisions, Appendix D (g)(2)(C), the proposed waterline is not considered an "above-ground linear facility," and therefore the historic architecture survey did not extend a half-mile past the proposed waterline. Rather, investigators performed a historic architecture survey for the parcels adjacent to the west and eastbound lanes of Evan Hewes Highway. Of note, the reconnaissance survey occurred from public vantage points, since site access and right-of-entry were not available at the time of survey for the privately-owned properties. In areas where views of the property were obstructed (*e.g.*, tree overgrowth), arrangements were made to access the properties or investigators utilized available information to study the property. For the most part, the survey did not consider properties set far back from the edge/boundary of their parcel and large rural properties were not identified or evaluated beyond the area reasonably subject to effect by the Project.

The six historic-period properties included: Portion of the Dixie Drain 3, Portion of Fern Canal, Portion of Fig Canal, Portion of Forgot-Me-Not Canal, Portion of Foxglove Canal (previously recorded as CA-IMP-8821H), and Portion of Salt Creek Drain 2. Historic-period properties which were previously surveyed as part of the Solar II project were not surveyed as part this supplemental reconnaissance-level architecture survey. These properties included: CA-IMP-7834H (Portion of the Westside Main Canal), P-37-025680 (Portion of San Diego and Arizona Railroad), CA-IMP-7886H (Portion of Highway 80), CA-IMP-7739H (Portion of U.S. Gypsum Rail-Line), and P-13-009303 (Plaster City Plant).

2.7.3 Cumulative Impacts

No additional cumulative impacts to cultural resources have been identified as part of this analysis beyond those identified in Section 2.7.3 of the AFC.

2.7.4 Mitigation Measures

No additional mitigation measures are recommended based on the SWWRF upgrades related to the Imperial Valley Solar Project.

2.7.5 LORS Compliance

The LORS presented in Section 5.7.11 of the Project AFC are applicable and no additional LORS are recommended. The LORS compliance evaluation presented in the AFC remains unchanged. Similarly, the agency contact information presented in Section 5.7.11 of the Project AFC is unchanged and the proposed Project modifications do not affect the required permits or Project schedule presented in Section 5.7.11 of the Project AFC. The Project will comply with all LORS.

2.7.6 References

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USGS. 1915. El Centro 15-minute USGS Quadrangle Map.

USGS. 1943, 1957. Painted Gorge 7.5-minute USGS Quadrangle Maps.

USGS. 1940. Plaster City 15-Minute USGS Quadrangle Map.

USGS. 1943, 1944. Plaster City 1 to 62,500 Scale Map.

USGS. 1940. Brawley 15-minute USGS Quadrangle Map.

USGS. 1957. Brawley 7.5-minute USGS Quadrangle Map.

USGS. 1957, 1979. Seeley 7.5- minute USGS Quadrangle Map.

2.8 PALEONTOLOGICAL RESOURCES

This section presents a discussion of the potential impacts related to paleontological resources during construction and operations of the SWWRF upgrades related to the Imperial Valley Solar Project.

The discussion below includes the affected environment, environmental consequences, cumulative impacts, mitigation measures, and applicable LORS.

2.8.1 Affected Environment

The affected environment includes paleontological resources related to the SWWRF, located at 1898 West Main Street in Seeley, California, approximately 13 miles east of the Imperial Valley Solar Project site.

2.8.2 Environmental Consequences

The proposed construction and operations of the SWWRF upgrades would result in any potentially significant impacts to paleontological resources. The SWWRF upgrades would result in minor changes that do not create additional construction or operation related impacts to paleontological resources.

2.8.3 Cumulative Impacts

No additional cumulative impacts to paleontological resources have been identified as part of this analysis beyond those identified in Section 2.8.3 of the AFC.

2.8.4 Mitigation Measures

Mitigation measures for paleontological resources are described in Section 2.8.4 of the Project AFC. No additional mitigation measures are recommended based on this analysis for the upgrades to the SWWRF related to the Imperial Valley Solar Project.

2.8.5 LORS Compliance

The LORS presented in Section 5.8.6 of the Project AFC. No additional LORS are recommended for the upgrades to the SWWRF that are related to the Imperial Valley Solar Project. The Project will comply with all LORS.

2.8.6 References

No additional references were consulted for paleontological resources for this analysis.

2.9 LAND USE

This section presents a discussion of the potential impacts related to land use during construction and operations of the SWWRF upgrades related to the Imperial Valley Solar Project.

The discussion below includes the affected environment, environmental consequences, cumulative impacts, mitigation measures, and applicable LORS.

2.9.1 Affected Environment

The affected environment includes land use related to the SWWRF, located at 1898 West Main Street in Seeley, California, approximately 13 miles east of the Imperial Valley Solar Project site in Imperial County.

2.9.2 Environmental Consequences

The analysis conducted by Dudek for the Draft MND (Dudek 2009) concluded that the proposed construction and operations of the SWWRF upgrades would not result in any potentially significant impacts to land use. The proposed upgrades would occur entirely within the boundaries of the existing SWWRF and would not conflict with any land use plans or policies.

2.9.3 Cumulative Impacts

No additional cumulative impacts to land use have been identified as part of this analysis beyond those identified in Section 2.9.3 of the AFC.

2.9.4 Mitigation Measures

Mitigation measures for land use are described in Section 2.9.4 of the Project AFC. No additional mitigation measures are recommended based on this analysis for the upgrades to the SWWRF related to the Imperial Valley Solar Project.

2.9.5 LORS Compliance

The LORS presented in Section 5.9.6 of the Project AFC. No additional LORS are recommended for the upgrades to the SWWRF related to the Imperial Valley Solar Project.

2.9.6 References

Dudek, 2009. *Draft Mitigated Negative Declaration for the Seeley Wastewater Reclamation Facility Improvements*. Prepared for Seeley County Water District. Imperial Valley, California. December 2009.

2.10 SOCIOECONOMICS

This section presents a discussion of the potential impacts related to socioeconomics during construction and operations of the SWWRF upgrades related to the Imperial Valley Solar Project.

The discussion below includes the affected environment, environmental consequences, cumulative impacts, mitigation measures, and applicable LORS.

2.10.1 Affected Environment

The affected environment includes the socioeconomic environment related to the SWWRF, located at 1898 West Main Street in Seeley, California, approximately 13 miles east of the Imperial Valley Solar Project site in Imperial County.

2.10.2 Environmental Consequences

Existing available information from the Draft MND (Dudek 2009) concludes that the proposed construction and operations of the SWWRF upgrades would result in a small addition in the number of construction workers onsite with a minimal and temporary effect on local employment. There would be no potentially significant socioeconomic impacts.

2.10.3 Cumulative Impacts

No additional cumulative socioeconomic impacts have been identified as part of this analysis beyond those identified in Section 2.10.3 of the AFC.

2.10.4 Mitigation Measures

No additional mitigation measures are recommended based on this analysis for the upgrades to the SWWRF related to the Imperial Valley Solar Project.

2.10.5 LORS Compliance

No additional LORS are recommended for the upgrades to the SWWRF related to the Imperial Valley Solar Project. The Project will comply with all LORS.

2.10.6 References

Dudek, 2009. *Draft Mitigated Negative Declaration for the Seeley Wastewater Reclamation Facility Improvements*. Prepared for Seeley County Water District. Imperial Valley, California. December 2009.

2.11 TRAFFIC AND TRANSPORTATION

This section presents a discussion of the potential impacts related to traffic and transportation during construction and operations of the SWWRF upgrades related to the Imperial Valley Solar Project.

The discussion below includes the affected environment, environmental consequences, cumulative impacts, mitigation measures, and applicable LORS.

2.11.1 Affected Environment

The affected environment includes transportation and traffic related to the SWWRF, located at 1898 West Main Street in Seeley, California, approximately 13 miles east of the Imperial Valley Solar Project site in Imperial County.

2.11.2 Environmental Consequences

The analysis conducted by Dudek for the Draft MND (Dudek 2009) concluded that the proposed construction and operations of the SWWRF upgrades would not result in any potentially significant impacts to traffic and transportation. Construction of the tertiary treatment facilities onsite would result in a slight increase in traffic associated with equipment delivery and construction workers, but these trips would be temporary in nature and they would not have a substantial effect on local roadways (Dudek 2009).

2.11.3 Cumulative Impacts

Cumulative impacts are discussed in Section 5.11.3 of the Project AFC. No additional cumulative impacts to traffic and transportation for the SWWRF upgrades, including both internal and external (regional and local) circulation, related to the Imperial Valley Solar Project have been identified as part of this analysis.

2.11.4 Mitigation Measures

Mitigation measures for impacts related to traffic and transportation presented in Section 5.11.4 of the Project AFC. No additional mitigation measures for traffic and transportation are recommended based on the SWWRF upgrades related to the Imperial Valley Solar Project.

2.11.5 LORS Compliance

The LORS presented in Section 5.11.5 of the Project AFC are applicable to the SWWRF upgrades related to the Imperial Valley Solar Project and no additional LORS are recommended. The Project will comply with all LORS.

2.11.6 References

Dudek, 2009. *Draft Mitigated Negative Declaration for the Seeley Wastewater Reclamation Facility Improvements*. Prepared for Seeley County Water District. Imperial Valley, California. December 2009.

2.12 NOISE

This section presents a discussion of the potential impacts related to noise during construction and operations of the SWWRF upgrades related to the Imperial Valley Solar Project.

The discussion below includes the affected environment, environmental consequences, cumulative impacts, mitigation measures, and applicable LORS.

2.12.1 Affected Environment

The affected environment includes noise and receivers related to the SWWRF, located at 1898 West Main Street in Seeley, California, approximately 13 miles east of the Imperial Valley Solar Project site in Imperial County.

2.12.2 Environmental Consequences

The environmental consequences for Noise during Project construction and operation remain unchanged from those discussed in AFC section 5.12.2 and 2.12.2 of the Supplemental Filing. Based on information provided in Section 4.2.11 of the Draft MND for the SWWRF Improvements (Dudek 2009), construction of upgrades at the SWWRF would be expected to cause temporary increases in ambient noise levels at nearby residential receivers. Because upgrade construction is planned to occur during allowable hours as dictated by the Imperial County Noise Ordinance, and due to the temporary nature of these increases over ambient, the potential impact from SWWRF upgrade construction noise is expected to be less than significant. Existing, available information provided in MND also suggests that operation of these upgrades would not create a perceptible increase to ambient sound levels in the vicinity of the SWWRF and thus result in no anticipated impact. Therefore, the SWWRF upgrade and associated activities are expected to result in minor changes that do not create additional significant construction or operation related noise impacts.

2.12.3 Cumulative Impacts

No additional cumulative impacts to noise have been identified for the SWWRF upgrades related to the Imperial Valley Solar Project beyond those identified in Section 2.12.3 of the AFC.

2.12.4 Mitigation Measures

The mitigation measures for temporary impacts related to construction presented in Section 5.12.4 of the Project AFC and Section 2.12.4 of the Supplemental Filing. No additional mitigation measures for noise are recommended based on the SWWRF upgrades related to the Imperial Valley Solar Project.

2.12.5 LORS Compliance

The LORS presented in Section 5.12.5 of the Project AFC and Section 2.12.5 of the Supplemental Filing are applicable to the SWWRF upgrades related to the Imperial Valley Solar Project and no additional LORS are recommended. Reflecting an understood change in staffing, the agency contact information for the CEC as presented in Section 5.12.5.4 of the Project AFC should be modified: Erin Bright is the

current CEC contact. The SWWRF upgrades related to the Imperial Valley Solar Project do not affect the required permits or Project schedule presented in Section 5.12.5.5 of the Project AFC. The Project will comply with all LORS.

2.12.6 References

Dudek, 2009. *Draft Mitigated Negative Declaration for the Seeley Wastewater Reclamation Facility Improvements*. Prepared for Seeley County Water District. Imperial Valley, California. December 2009.

2.13 VISUAL RESOURCES

This section presents a discussion of the potential impacts related to visual resources during construction and operations of the SWWRF upgrades related to the Imperial Valley Solar Project.

The discussion below includes the affected environment, environmental consequences, cumulative impacts, mitigation measures, and applicable LORS.

2.13.1 Affected Environment

The affected environment includes visual resources associated with the SWWRF, located at 1898 West Main Street in Seeley, California, approximately 13 miles east of the Imperial Valley Solar Project site in Imperial County.

2.13.2 Environmental Consequences

Existing available information from the Draft MND (Dudek 2009) concludes that the proposed construction and operations of the SWWRF upgrades would occur within the facility property and would not result in any potentially significant impacts to visual resources.

2.13.3 Cumulative Impacts

No additional cumulative impacts to visual resources have been identified as part of this analysis beyond those identified in Section 2.13.3 of the AFC.

2.13.4 Mitigation Measures

Mitigation measures for visual resources are described in Section 2.13.4 of the Project AFC. No additional mitigation measures are recommended based on this analysis for the upgrades to the SWWRF related to the Imperial Valley Solar Project.

2.13.5 LORS Compliance

The LORS presented in Section 5.13.6 of the Project AFC. No additional LORS are recommended for the upgrades to the SWWRF related to the Imperial Valley Solar Project. The Project will comply with all LORS.

2.13.6 References

Dudek, 2009. *Draft Mitigated Negative Declaration for the Seeley Wastewater Reclamation Facility Improvements*. Prepared for Seeley County Water District. Imperial Valley, California. December 2009.

2.14 WASTE MANAGEMENT

This section presents a discussion of the potential impacts from waste management during construction and operation of the SWWRF upgrades.

The discussion below includes the affected environment, environmental consequences, cumulative impacts, mitigation measures, and applicable LORS.

2.14.1 Affected Environment

The affected environment includes upgrades to the existing SWWRF, at 1898 West Main Street in Seeley, California, approximately 13 miles east of the Imperial Valley Solar Project site.

2.14.2 Environmental Consequences

Small amounts of non-hazardous and hazardous wastes could be generated during construction of the SWWRF upgrades. Waste generated during construction will be segregated, where practical, for recycling. Non-hazardous waste that cannot be recycled will be placed in covered dumpsters and removed on a regular basis by a certified waste handling contractor for disposal at a Class III landfill. Hazardous waste generated during construction will be taken offsite for recycling or disposal by a permitted hazardous waste transporter to a permitted treatment, storage, and disposal facility or Class I landfill. The analysis conducted by Dudek for the Draft MND indicated that the SWWRF upgrade and associated activities would not create additional construction related impacts to waste management (Dudek 2009).

Small amounts of non-hazardous and hazardous waste could be generated during operation of SWWRF. In addition, operation of the SWWRF will generate dried sludge that will require disposal in a landfill. The analysis conducted by Dudek for the Draft MND indicated that the SWWRF upgrade and associated activities would not create additional operation related impacts to waste management (Dudek 2009).

2.14.3 Cumulative Impacts

Class I and Class III landfills and recycling facilities in the Project site area have adequate recycling and disposal capacities for the SWWRF Project. Therefore cumulative impacts from the SWWRF upgrades and other projects in the region are not expected to be significant.

2.14.4 Mitigation Measures

Mitigation Measures as described in the Project AFC, provide waste management procedures for handling non-hazardous and hazardous wastes. No additional mitigation measures are recommended based on the SWWRF upgrades related to the Imperial Valley Solar Project.

2.14.5 LORS Compliance

Section 5.14.5 of the Project AFC summarizes the applicable LORS that govern the handling of non-hazardous and hazardous wastes, as well as the applicable permits that will be required for the Project.

The LORS presented in Section 5.14.5 of the Project AFC are applicable to the SWWRF upgrades related to the Imperial Valley Solar Project and no additional LORS are recommended. The Project will comply with all LORS.

2.14.6 References

Dudek, 2009. *Draft Mitigated Negative Declaration for the Seeley Wastewater Reclamation Facility Improvements*. Prepared for Seeley County Water District. Imperial Valley, California. December 2009.

2.15 HAZARDOUS MATERIALS HANDLING

This section presents a discussion of the potential impacts from hazardous materials handling during construction and operation of the SWWRF upgrades.

The discussion below includes the affected environment; environmental consequences; cumulative impacts; mitigation measures; and applicable LORS.

2.15.1 Affected Environment

The affected environment includes upgrades to the existing SWWRF, at 1898 West Main Street in Seeley, California, approximately 13 miles east Imperial Valley Solar Project site.

2.15.2 Environmental Consequences

Small amounts of hazardous materials could be used during construction of the SWWRF upgrades and operation of the SWWRF. These materials are expected to be minimal. The analysis conducted by Dudek for the Draft MND for the SWWRF upgrades did not identify any additional construction or operation related impacts to hazardous materials (Dudek 2009).

2.15.3 Cumulative Impacts

No additional cumulative impacts to hazardous materials handling have been identified as part of this analysis beyond those identified in Section 2.15.3 of the AFC.

2.15.4 Mitigation Measures

Implementation of mitigation measures as described in Section 2.15.4 of the Project AFC, provide management procedures for the handling of hazardous materials during construction and operation of the Imperial Valley Solar Project. The analysis conducted by Dudek for the Draft MND does not identify any additional construction or operation related impacts to hazardous materials (Dudek 2009). No further mitigation is proposed.

2.15.5 LORS Compliance

Section 5.15.5 of the Project AFC summarizes the applicable LORS that govern the use and storage of hazardous materials, as well as the applicable permits that will be required for the Project. No additional LORS are recommended. The Project, including the changes discussed herein, will comply with all LORS.

2.15.6 References

Dudek, 2009. *Draft Mitigated Negative Declaration for the Seeley Wastewater Reclamation Facility Improvements*. Prepared for Seeley County Water District. Imperial Valley, California. December 2009.

2.16 PUBLIC HEALTH

This section presents a discussion of the potential impacts related to public health during construction and operations of the SWWRF upgrades related to the Imperial Valley Solar Project.

The discussion below includes the affected environment, environmental consequences, cumulative impacts, mitigation measures, and applicable LORS.

2.16.1 Affected Environment

The affected environment for public health was originally discussed in Section 5.16.1 of the Imperial Valley Solar AFC. The affected environment resulting from the upgrades at the SWWRF is unchanged from that presented in the AFC, and it includes public health related to the SWWRF, located at 1898 West Main Street in Seeley, California, approximately 13 miles east of the Imperial Valley Solar Project site.

2.16.2 Environmental Consequences

This section describes the potential public health impacts from the upgrade to the SWWRF. A discussion of the potential emission sources during construction and operation of the upgrade to the SWWRF is presented in this section. The SWWRF upgrade and associated activities will result in minor changes that will not cause significant construction or operations related impacts to public health.

2.16.2.1 Project Construction Emissions

The only source of toxic air contaminants (TAC) emissions from the construction of the upgrades to the SWWRF would be the diesel particulate matter (DPM) in the exhaust from the diesel construction equipment. Due to the relatively short duration of the SWWRF upgrade construction phase (less than one year), and the expected small construction equipment roster, significant public health effects are not expected.

2.16.2.2 Project Operations Emissions

The only new source of TAC associated with the upgrades to SWWRF will be one emergency diesel backup generator. The backup generator engine planned for the SWWRF would be no larger (and most likely smaller) than the generator planned for installation at the Imperial Valley Solar facility, which is rated at 335 horsepower. If the generator associated with SWWRF Project is the same size and is tested the same amount, 15 minutes per week for a total of 13 hours per year, emissions of DPM will be less than 1 pound per year. It is expected that the emissions from the generator associated with the SWWRF Project will be lower. The AFC and subsequent responses to Data Requests showed that no significant impacts are expected from the operation of the generator at the Imperial Valley Solar Project, thus no significant impacts from the operation of the generator at the SWWRF project are expected.

2.16.3 Cumulative Impacts

Since the SWWRF is located approximately 13 miles from the Imperial Valley Solar Project, the potential public health impacts from each portion of the project will not be additive. Thus no additional cumulative

analysis will be conducted for the SWWRF project. The AFC and subsequent responses to Data Requests determined that no significant cumulative impacts are associated with the Imperial Valley Solar Project, and none are identified as a part of this analysis.

2.16.4 Mitigation Measures

The mitigation measures for temporary impacts related to construction presented and operations in Section 5.2.4 of the Project AFC and the responses to Data Requests, March 2009, are applicable to the proposed Project. No additional mitigation measures are recommended based on the SWWRF upgrades associated with the Imperial Valley Solar Project.

2.16.5 LORS Compliance

The LORS presented in Section 5.16.5 of the Imperial Valley Solar AFC are applicable to the upgrades to the SWWRF and no additional LORS are recommended. Similarly, the agency contact information presented in Section 5.16.5 of the Imperial Valley Solar AFC is unchanged and the proposed SWWRF upgrades do not affect the required permits or Project schedule presented in Section 5.16.5 of the Project AFC. The Project, including the changes discussed herein, will comply with all LORS.

2.16.6 References

No additional references beyond those presented in Section 5.16.6 of the Project AFC were used for this analysis.

2.17 WORKER SAFETY

This section addresses safety and health issues and describes or outlines systems and procedures that provide occupational safety and health protection for the Project workers, proposed worker safety mitigation methods to minimize impacts to workers, and applicable LORS. All applicable elements of the Title 8 California Code of Regulations (CCR), General Industry Safety Orders (GISO), Construction Safety Orders (CSO), and Electrical Safety Orders (ESO), are addressed in the Project AFC.

2.17.1 Affected Environment

The affected environment for worker safety includes the SWWRF, at 1898 West Main Street in Seeley, California, approximately 13 miles east Imperial Valley Solar Project site.

2.17.2 Environmental Consequences

Construction, operation, and maintenance activities may expose workers to the hazards identified in Table 5.17-1 of the Project AFC. Exposure to these hazards can be minimized through adherence to appropriate engineering, design criteria and administrative controls, use of applicable personal protective equipment (PPE), and compliance with all applicable health and safety LORS. The programs, regulations, and hazards such as those described in the Project AFC encompass a comprehensive health, safety, and fire prevention program and an accident/injury prevention protection program intended to ensure healthful and safe operations at the Project site. The upgrades to the SWWRF will not create additional construction or operation related impacts to worker safety.

To protect the health and safety of workers during construction and operation activities, the SWWRF upgrade Project will ensure compliance with a Health and Safety Program, and all federal, state and local health standards that pertain to worker health and safety.

2.17.3 Cumulative Impacts

As the various projects described in the cumulative impact evaluation in the AFC will be responsible for complying individually with applicable worker safety requirements, no cumulative impacts on worker safety are expected as a result of upgrades to the SWWRF.

2.17.4 Mitigation Measures

Environmental consequences related to worker safety are not foreseen at this time; therefore, additional measures are not considered necessary.

2.17.5 LORS Compliance

Section 5.17.5 of the Project AFC summarizes the applicable LORS that govern worker safety, as well as the applicable permits that will be required for the Project. No additional LORS are recommended. The Project will comply with all LORS.

2.17.6 References

No additional references beyond those presented in Section 5.17.6 of the Project AFC were used for this analysis.

2.18 CUMULATIVE IMPACTS

Section 15126.2(d) of the CEQA Guidelines states that an cumulative impact should consider "…the ways in which the proposed project could foster economic or population growth, or the construction of additional housing either directly or indirectly, in the surrounding environment." For NEPA, the purpose of cumulative impact analysis is to identify past, present, and reasonably foreseeable actions in the vicinity of the SWWRF that could affect the same set of resources examined for direct and indirect impacts.

2.18.1 Affected Environment

The affected environment for Cumulative Impacts was originally discussed in Section 5.18.1 of the AFC and Supplemental Cumulative Analysis (April 21, 2009). The Supplemental Cumulative Analysis includes an estimate of impacts for Projected Urban Development for eastern San Diego and Imperial County completed by the California Department of Conservation, Division of Land Resource Protection, Farmland Mapping and Monitoring Program (Cal DLRP [2009]). The CA DLRP projections are based on extrapolations of current population and urban development trends. In the supplemental cumulative analysis, results from the Cal DLRP study are used to illustrate past, present and future urban development from 1984 to 2020 in the area surrounding the SWWRF. The forecast of urban development was used to define the past, present, and future geographic extent of "urban" types of development including residential, industrial, commercial, institutional facilities, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, and water control structures such as the SWWRF upgrade.

2.18.2 Environmental Consequences

The Supplemental Cumulative Analysis found that urban development in Imperial County is expected to increase by about 19,000 acres between 2006 and 2020. Renewable energy development in Imperial County is expected to change the land use status of about 34,000 acres during that same time period. Based on these forecasts, the total estimated "developed" land area in Imperial County is expected to increase from about 1 percent to more than two percent by 2020, essentially doubling the developed land area in 14 years. This rate of development is much faster than in the past and renewable energy development is the major contributor to the acceleration. However, this level of impact does not exceed any of the significance thresholds defined in CEQA or for NEPA analysis.

In considering potential growth inducing impacts of the SWWRF, it is important to remember that the purpose of the SWWRF upgrade is to meet Title 22 standards to help ensure that no discharges from the facility exceed established effluent limits. The SWWRF upgrade will not increase the amount of effluent coming from the facility but will make the resulting effluent suitable for unrestricted recycled uses. The permitted effluent capacity for the SWWRF is 250,000 gpd. The current influent rate to the SWWRF is about 112,000 to 150,000 gpd (104 gpm or 168 afy) and the resulting effluent rate is also in this range. Imperial Valley Solar has contracted to take up to 200,000 gpd of the tertiary effluent. The remaining capacity will be available for unrestricted recycled use such as irrigation water for parks in Imperial County. Given that the SWWRF will not increase the capacity of the facility to create effluent and the primary purpose of the upgrade is to ensure that discharge from the facility meet Title 22 standards, there would be no growth inducing impacts associated with the upgrade.

BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION OF THE STATE OF CALIFORNIA
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APPLICATION FOR CERTIFICATION
For the SES SOLAR TWO PROJECT

Docket No. 08-AFC-5

PROOF OF SERVICE
(Revised 1/27/10)

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*indicates change

DECLARATION OF SERVICE

I, Corinne Lytle , declare that on February 26, 2010, I served and filed copies of the attached Applicant's Submittal of Additional Information Related to the Seeley Wastewater Reclamation Facility Improvements. The original document, filed with the Docket Unit, is accompanied most recent by a copy of the Proof of Service list, located on the web page for this project at:
[http://www.energy.ca.gov/sitingcases/solartwo/index.html].

The documents have been sent to both the other parties in this proceeding (as shown on the Proof of Service list) and to the Commission's Docket Unit, in the following manner:

(*Check all that Apply*)

FOR SERVICE TO ALL OTHER PARTIES:

_____ sent electronically to all email addresses on the Proof of Service list;

_____ by personal delivery or by depositing in the United States mail at _____ with first-class postage thereon fully prepaid and addressed as provided on the Proof of Service list above to those addresses NOT marked "email preferred."

AND

FOR FILING WITH THE ENERGY COMMISSION:

_____ sending an original paper copy and one electronic copy, mailed and emailed respectively, to the address below (*preferred method*);

OR

_____ depositing in the mail an original and 12 paper copies, as follows:

CALIFORNIA ENERGY COMMISSION
Attn: Docket No. 08-AFC-5
1516 Ninth Street, MS-4
Sacramento, CA 95814-5512
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I declare under penalty of perjury that the foregoing is true and correct.

Original signed by

_____

Corinne Lytle

*indicates change