

Appendix E

**Interim Visual Resource
Management Classification
West Chocolate Mountains
Imperial County, California**

This appendix is available in the DEIS.

It has been removed from the FEIS to save paper and
due to the fact that it is unchanged from the DEIS.

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Appendix F

Water Resources Tables

Named Surface Water Features Within the West Chocolate REEA

GNIS_ID	GNIS_Name	LengthKM	FTYPE
240721	Coachella Canal	5.531	CanalDitch
241774	East Highline Canal	0.585	CanalDitch
243760	I Lateral	2.198	CanalDitch
243879	Iris Wash	1.853	StreamRiver
243945	J Lateral	2.437	CanalDitch
244189	K Lateral	3.353	CanalDitch
244379	L Lateral	3.483	CanalDitch
245332	M Lateral	4.109	CanalDitch
246422	N Lateral	12.967	CanalDitch
255665	Niland Lateral Five	3.186	CanalDitch
255664	Niland Lateral Four	5.508	CanalDitch
255663	Niland Lateral Three	6.326	CanalDitch
255662	Niland Lateral Two	3.479	CanalDitch
246693	O Lateral	11.777	CanalDitch
247059	P Lateral	4.194	CanalDitch
247843	Q Drain	10.924	CanalDitch
247844	Q Lateral	11.035	CanalDitch
247899	R Side Main Canal	0.855	CanalDitch
254268	Siphon Five	0.696	StreamRiver
254251	Siphon Fourteen	2.056	StreamRiver
254261	Siphon Seven	1.448	ArtificialPath
254266	Siphon Three	1.272	ArtificialPath
254265	Siphon Two	1.783	ArtificialPath
251121	W Lateral	0.869	CanalDitch
251834	X Drain	1.161	CanalDitch
251835	X Lateral	1.724	CanalDitch
251836	Y Lateral	5.865	CanalDitch
251897	Z Lateral	0.334	CanalDitch

Geothermal Wells Located Within the West Chocolate REEA

APINUMBER	OPERATOR	WELL TYPE	STATUS	YEAR DRILL	SECTION	TOWNSHIP	RANGE
02590141	Freeport-McMoRan Resource Partners	TG	ABDN	1975	29	9S	13E
02590142	Freeport-McMoRan Resource Partners	TG	ABDN	1975	31	9S	13E
02590143	Freeport-McMoRan Resource Partners	TG	ABDN	1975	33	9S	13E
02590190	MCR Geothermal Corp.	EWT	ABDN	1979	15	9S	12E
02590300	Freeport-McMoRan Resource Partners	TG	ABDN	1980	6	11S	15E
02590358	Chevron U.S.A. Inc.	TG	ABDN	1981	28	10S	14E
02590395	Chevron U.S.A. Inc.	TG	ABDN	1981	26	11S	15E
02591183	Imperial Spa	CLT	ACTV	1938	2	9S	12E
02591184	Imperial Spa	CLT	ACTV	1962	2	9S	12E
02591206	Fish Partners (was FPROD - Fish Partners	CLT	IDLE	1992	12	11S	14E
02591249	Fish Partners (was FPROD - Fish Partners	CLT	ACTV	1995	12	11S	14E
02591250	Fish Partners (was FPROD - Fish Partners	CLT	ACTV	1995	12	11S	14E
02591200	Trily, J. T.	TG	ACTV	1979	13	9S	13E

Summary of Wetlands Type and Acreage

Wetland Type	Acreage	% of Total
Lacustrine Limnetic/Littoral (L1/L2)	1516.0	66
Palustrine Aquatic Bed (PAB)	1.4	0
Palustrine Emergent (PEM)	23.5	1
Palustrine Scrub-Shrub (PSS)	146.1	6
Palustrine Unconsolidated Bottom (PUB)	124.4	5
Palustrine Unconsolidated Shore (PUS)	28.4	1
Riverine Lower Perennial (R2)	288.5	13
Riverine Intermittent (R4)	158.5	7
TOTAL	2286.7	100

Source: USFWS National Wetlands Inventory.

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Appendix G

Stipulations and Lease Notices Exception, Modification, and Waiver Criteria

West Chocolate Mountains REEA

APPENDIX G

STIPULATIONS AND LEASE NOTICES EXCEPTION, MODIFICATION, AND WAIVER CRITERIA

The purpose of this appendix is to provide the stipulations and conditions of approval that apply to geothermal leases, or renewable energy rights of way, that would be applied within the West Chocolate Mountains Renewable Energy Evaluation Area under each proposed alternative. Any requests for exceptions, modifications, and waivers from the stipulations would be processed by the appropriate BLM office. The requests for exceptions must be initiated in writing by the operator near the time that the work is proposed to be initiated. This requirement is in place due to the unpredictability of weather, animal movement and condition, etc. The analysis of a request will typically include the review of potential mitigation measures and alternatives (traffic restrictions, alternative scheduling, staged activity, etc.). The request is considered as a unique action and is analyzed and documented individually for CDCA Plan and NEPA compliance.

The definitions for waivers, exceptions and modifications are as follows:

- Exception - A one-time exemption for a particular site within the leasehold or right of way; exceptions are determined on a case-by-case basis; the stipulation continues to apply to all other sites within the leasehold or right of way. An exception is a limited type of waiver.
- Modification - A change to the provisions of a lease or right of way stipulation, either temporarily or for the term of the lease. Depending on the specific modification, the stipulation may or may not apply to all sites within the leasehold, or right of way, to which the restrictive criteria are applied.
- Waiver - A permanent exemption from a lease or right of way stipulation. The stipulation no longer applies anywhere within the leasehold or right of way.

SPECIAL ADMINISTRATION (SA) STIPULATIONS

Please see the table below:

West Chocolate Mountains REEA

STANDARD STIPULATIONS

Resource: Cultural Resources

Stipulation: “This geothermal lease may be found to contain historic properties and/or resources protected under the National Historic Preservation Act (NHPA), American Indian Religious Freedom Act, Native American Graves Protection and Repatriation Act, E.O. 13007, or other statutes and executive orders. The BLM will not approve any ground disturbing activities that may affect any such properties or resources until it completes its obligations under applicable requirements of the NHPA and other authorities. The BLM may require modification to exploration or development proposals to protect such properties, or disapprove any activity that is likely to result in adverse effects that cannot be successfully avoided, minimized or mitigated.”

Objective: This stipulation will be applied to all geothermal leases within the WCM REEA to protect cultural resources in accordance with BLM Instruction Memorandum No. 2005-003.

Exceptions, waivers, or modifications to this stipulation may not be approved unless, (1) the authorized officer determines that the factors leading to the stipulation’s inclusion in the lease have changed sufficiently to make the protection provided by the stipulation no longer justified; or (2) the proposed operations would not cause unacceptable impacts. (43 CFR 3101.1-4)

Resource: Geothermal.

Stipulation: Parts of the lands contained in the parcel tract with serial number CACA 047196 may potentially be subject to drainage by offset wells which may be located adjacent to this parcel in sections 2, 12, and 14, T 9 S., R 12 E., SBB&M, Imperial County, California (on Federal Lease CACA 046142.) The lessee shall, within 6 months of the drilling and completion of any productive well on the adjacent federal lease, submit for approval by the authorized officer:

- 1) Plans for protecting the lease from drainage (43 CFR § 3210.16.) The plan must include either (a) a completed application for Geothermal Drilling Permit (GDP) for the necessary protective wells, or (b) a proposal for inclusion in an agreement for the affected portion of the lease. Any agreement should provide for an appropriate share of the production from the offending well to be allocated to the lease; or
- 2) Engineering, geologic and economic data to demonstrate to the authorized officer’s satisfaction that no drainage has occurred or is occurring and/or that a new protective well(s) would have little or no chance of production sufficient to yield a reasonable rate of return in excess of the costs of drilling, completing and operating the well.
- 3) If no plan, agreement or data is submitted and drainage is determined to be occurring, compensatory royalty will be assessed. Compensatory royalty will be assessed on the first day following expiration of the 6-month period, and shall continue until a protective well has been drilled and placed into production status, or until the offending well ceases production, whichever occurs first. Failure to comply with this special leasing stipulation also may subject the lease to termination under the provisions of 43 CFR § 3213.17.

Objective: Drainage Protection. To protect the federal geothermal resource from being drained by development on adjacent non-federal lands.

An exception, waiver, or modification to this stipulation may not be approved unless, (1) the authorized officer determines that the factors leading to the stipulation’s inclusion in the lease have changed sufficiently to make the

West Chocolate Mountains REEA

protection provided by the stipulation no longer justified; or (2) the proposed operations would not cause unacceptable impacts. (43 CFR 3101.1-4).

Stipulation: The single non-competitive lease application (CACA 047196) within the REEA was pending on August 8, 2005. Therefore, the lease applicant must make their election and provide written notice to the BLM of their preference for payment of royalties on production before the lease may be issued.

Objective: Royalty Compliance in accordance with the revised geothermal regulations at 43 CFR 3200.8 (b)(1) and (b)(3).

No exception, waiver or modification to this stipulation will be authorized.

Stipulation: Potential geothermal lessees should be aware of the revised due diligence requirements contained in the federal regulations at 43 CFR § 3207. Leases are typically issued for an initial term of 10 years, and may be extended if diligent work requirements have been satisfied, and the BLM believes that the lessee has made satisfactory progress in complying with the lease terms and stipulations.

The BLM may, after giving you 30 days written notice, terminate your lease if we determine that you have violated any of the requirements of 43 CFR § 3200.4, including, but not limited to compliance with the terms and conditions of the lease, including any and all lease stipulations, the nonpayment of required annual rentals or royalties and fees (43 CFR § 3213.17.)

Objective: “Due Diligence” in compliance with the revised geothermal regulations at 43 CFR § 3207.

Exceptions, waivers, or modifications to this stipulation may not be approved unless, (1) the authorized officer determines that the factors leading to the stipulation’s inclusion in the lease have changed sufficiently to make the protection provided by the stipulation no longer justified; or (2) the proposed operations would not cause unacceptable impacts. (43 CFR 3101.1-4),

Resource: Geothermal Features.

Stipulation: Requirement to Characterize Thermal Features. Prior to surface disturbing activities, a survey of surface expressions of the geothermal reservoir (hot springs) shall be conducted. Such surveys shall include identification of invertebrate species and water characteristics, as well as all available geologic information regarding their potential source. Monitoring of thermal features may also be required during exploration, development, and production to ensure that there are no impacts to water quality or quantity, or to protect the integrity of geothermal resource features. If it is determined that geothermal operations are reasonably likely to result in adverse effects to such a feature, significant additional restrictions may be imposed.

Objective: Areas within the West Chocolate Mountains REEA are known to contain thermal features (e.g., hot springs or surface expressions). Monitoring of the thermal features shall be required during exploration, development, and production to ensure that there are no impacts to water quality or quantity.

Exceptions, waivers, or modifications to this stipulation may not be approved unless, (1) the authorized officer determines that the factors leading to the stipulation’s inclusion in the lease have changed sufficiently to make the protection provided by the stipulation no longer justified; or (2) the proposed operations would not cause unacceptable impacts. (43 CFR 3101.1-4).

West Chocolate Mountains REEA

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Appendix H

**Legal Description for the
West Chocolate Mountains
REEA**

West Chocolate REEA
BLM Surface Ownership
Imperial County, California

San Bernardino Meridian

T. 9 S., R., 12 E.,

section 2, $E\frac{1}{2}SE\frac{1}{4}SW\frac{1}{4}, S\frac{1}{2}SE\frac{1}{4}, S\frac{1}{2}NE\frac{1}{4}SE\frac{1}{4}$;
section 4, lots 1 and 2 of the $NE\frac{1}{4}$, lots 1 and 2 of the $NW\frac{1}{4}, SW\frac{1}{4}, SE\frac{1}{4}$;
section 6, lots 1 and 2 of the $NE\frac{1}{4}$, lots 1 and 2 of the $NW\frac{1}{4}$; lots 1 and 2 of the
 $SW\frac{1}{4}, SE\frac{1}{4}$;
section 8, $NE\frac{1}{4}, SE\frac{1}{4}$;
section 10, entire section;
section 12, $NW\frac{1}{4}, SW\frac{1}{4}, NW\frac{1}{4}SE\frac{1}{4}, NE\frac{1}{4}SE\frac{1}{4}, SE\frac{1}{4}SE\frac{1}{4}, NE\frac{1}{4}$
with the exception of land east of the Coachella Canal;
section 14, $E\frac{1}{2}NE\frac{1}{4}, NW\frac{1}{4}$
section 18, lots 1 and 2 of the $NW\frac{1}{4}$, lots 1 and 2 of the $SW\frac{1}{4}, NE\frac{1}{4}, SE\frac{1}{4}$;
section 20, entire section;
section 24, entire section;
section 26, $S\frac{1}{2}NW\frac{1}{4}, SW\frac{1}{4}, SE\frac{1}{4}$;
section 28, $SE\frac{1}{4}NW\frac{1}{4}, E\frac{1}{2}, SW\frac{1}{4}$;

T. 9 S., R. 13 E.,

section 18, lots 3-6 inclusive; $E\frac{1}{2}NW\frac{1}{4}, E\frac{1}{2}SW\frac{1}{4}, SE\frac{1}{4}$;
section 20, $SW\frac{1}{4}NE\frac{1}{4}, W\frac{1}{2}NW\frac{1}{4}, S\frac{1}{2}, SE\frac{1}{4}NW\frac{1}{4}$;
section 22, $S\frac{1}{2}SW\frac{1}{4}$,
section 26, $SW\frac{1}{4}NW\frac{1}{4}, SW\frac{1}{4}, S\frac{1}{2}SE\frac{1}{4}$;
section 28, entire section;
section 30, $E\frac{1}{2}SW\frac{1}{4}, S\frac{1}{2}SE\frac{1}{4}$;
section 32, entire section;
section 34, entire section;

T. 10 S. R. 13 E.,

section 4, lots 6,7,14 of the $NW\frac{1}{4}, SW\frac{1}{4}$;
section 6, lots 5-8 inclusive of the $NE\frac{1}{4}$, lots 11-14 inclusive of the $NW\frac{1}{4}$; lots 2
and 15 of the $SW\frac{1}{4}, E\frac{1}{2}SW\frac{1}{4}, SE\frac{1}{4}$;

T. 10 S., R. 14 E.,

section 6, lots 6, 7, 13, 14, 15 and 16,
 $E\frac{1}{2}SW\frac{1}{4}, W\frac{1}{2}SE\frac{1}{4}, SE\frac{1}{4}SE\frac{1}{4}$;
section 8, $SW\frac{1}{4}NE\frac{1}{4}, W\frac{1}{2}, SE\frac{1}{4}$;
section 22, $SW\frac{1}{4}NE\frac{1}{4}, W\frac{1}{2}, SE\frac{1}{4}$;
section 26, $S\frac{1}{2}N\frac{1}{2}SW\frac{1}{4}, N\frac{1}{2}NW\frac{1}{4}, N\frac{1}{2}SE\frac{1}{4}NW\frac{1}{4}, S\frac{1}{2}SW\frac{1}{4}, E\frac{1}{2}$;
section 28, $NE\frac{1}{4}SE\frac{1}{4}$;
section 34, $E\frac{1}{2}$

T. 10 S., R. 15 E.,

section 32, entire section;

T. 11 S., R. 15 E.,

section 4, entire section;

section 6, entire section ;

section 8, entire section;

section 10, entire section;

section 11, entire section;

section 13, entire section;

section 14, entire section;

section 18, E $\frac{1}{2}$ E $\frac{1}{2}$;

section 20, N $\frac{1}{2}$,N $\frac{1}{2}$ SE $\frac{1}{4}$,SE $\frac{1}{4}$ SE $\frac{1}{4}$,

section 22, entire section

section 24, entire section

section 28, N $\frac{1}{2}$,N $\frac{1}{2}$ SE $\frac{1}{4}$,SE $\frac{1}{4}$ SE $\frac{1}{4}$;

section 34, SW $\frac{1}{4}$;

T. 11 S., R. 16 E.,

section 19, lots 3-18 inclusive;

section 29, entire section;

section 30, entire section;

Recommendations:

- Have another Realty Specialist proof this document.
- Field Offices often use minor variations in legal descriptions it might be good to have a local person make sure this legal description matches El Centro FO and the District formats for consistency with past documents.
- The legal description contained here lists only those BLM lands on the ownership map from Chapter #1, page 1-9 of the ADEIS and does not include BLM lands with subsurface mineral estate.
- Maps in ADEIS are of a scale which limits verification of subsurface minerals and some boundaries. BLM minerals shop should be able to determine BLM subsurface mineral estate within the REEA and furnish that data.
- California State Lands commission should know or be able to determine which lands they hold within the REEA and furnish that data to the BLM rather than BLM advising them. There may be lands which passed from public domain to private then to the state, which do not appear on our MTPS and the mineral estate may have changed ownership at some time leaving the State with subsurface minerals under private and BLM probably will not have a record of this. This may need to be researched at the local courthouse by the California Lands Commission staff.
- Verify that ownership maps include correct information. There appear to be lands shown as State lands on the map that appear as private on BLM MTPS and lands shown as BLM or private that appears as State lands on BLM MTPs.
- Prepare a legal description of the entire REEA for clarity and for “the record”.

JGB 4-28-11

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