

TO: PLANNING COMMISSION

FROM: PLANNING & DEVELOPMENT SERVICES

AGENDA DATE: July 12, 2023 AGENDA TIME: 9:00AM / No. 4

PROJECT TYPE: American Girl	Mine, Reclamation I	Plan (RP #22-0001) St	JPERVISOR DIST	* <u>5</u>
LOCATION:3737 Americ	can Girl Road	APN: <u>0</u>	50-320-031-000	
Winterhaven,	CA	PARCEL S	IZE: 40 of 799.68	<u>acres</u>
GENERAL PLAN (existing) Rec	reation/Open Space	<u>G</u> ENERAL	PLAN (proposed) N	<u>/A</u>
ZONE (existing) S-2 (Open Space	e/Preservation)	ZONE (pr	oposed) N/A	
GENERAL PLAN FINDINGS	CONSISTENT	☐ INCONSISTENT	MAY BE/FIND	INGS
PLANNING COMMISSION DEC	<u>CISION</u> :	HEARING DA	.TE;	
	APPROVED	DENIED	OTHER	
PLANNING DIRECTORS DECI	SION:	HEARING DA	TE:	
	APPROVED	DENIED	OTHER	
ENVIROMENTAL EVALUATION	N COMMITTEE DE	CISION: HEARING DA	TE:	
		INITIAL STU	)Y:	
☐ NEG/	ATIVE DECLARATION	MITIGATED NEG.	DECLARATION _	] EIR
DEPARTMENTAL REPORTS /	APPROVALS:			
PUBLIC WORKS AG APCD E.H.S. FIRE / OES SHERIFF OTHER	NONE NONE NONE NONE NONE NONE NONE NONE		ATTACHED ATTACHED ATTACHED ATTACHED ATTACHED ATTACHED ATTACHED ATTACHED anagement	

REQUESTED ACTION:
IT IS RECOMMENDED THAT YOU CONDUCT A PUBLIC HEARING AND HEAR ALL THE OPPONENTS AND PROPONENTS OF THE PROPOSED PROJECT. STAFF WOULD THEN RECOMMEND THAT THE PLANNING COMMISSION APPROVE RECLAMATION PLAN #22-0001 BY TAKING THE FOLLOWING ACTIONS:

- FIND THAT THE PROJECT IS CATEGORICALLY EXCEPT FROM CEQA UNDER GOVERNMENT CODE SECTION 15301 AND THAT NO FURTHER ENVIRONMENTAL DOCUMENTATION IS NECESSARY; AND
- 2. APPROVE THE ATTACHED RESOLUTION(S), SUPPORTING FINDINGS, AND RECLAMATION PLAN #22-0001 FOR A NEW 10-YEAR TERM SUBJECT TO THE EXISTING CONDITIONS TO AS SPECIFIED IN RECLAMATION PLAN #08-0001.

#### STAFF REPORT

### Planning Commission Meeting July 12, 2023

**Project Name:** American Girl Mine - Reclamation Plan #22-0001

**Property Owner:** Bureau of Land Management.

<u>Applicant:</u> Pyramid Construction & Aggregates, Inc.

839 Dogwood Road

Heber, CA.

#### **Project Location:**

The project site is located at 3737 American Girl Road, Winterhaven, CA, within Bureau of Land Management administered lands. It is further identified as Assessor's Parcel Number 050-320-031-000 and legally described as is further described as Section 19, Township 15 South, Range 21 East of the San Bernardino Base and Meridian (S.B.B.M.) located approximately 12 miles northwest of the unincorporated townsite of Winterhaven of the County of Imperial, State of California.

The subject property is approximately 40 acres whose area is bounded by Ogilby Road (State Route 34) on the East, Interstate 8 (I-8) on the South and by the Cargo Muchacho Mountains on the West (about 15 miles northwest of Yuma, Arizona and 50 miles northeast of El Centro, California), surrounded by vacant desert parcels administered by the Bureau of Land Management on the North, South, East, and West.

#### **Project Summary:**

Pyramid Construction & Aggregates, Inc. has submitted a re-entitlement request on their existing and previously approved Reclamation Plan (RP #08-0001) to continue with their existing mining operations of aggregate materials (sand and gravel), which consists of a maximum annual mining and processing rate capped at 500,000 cubic yards as stipulated in 43 CFR Part 3602 (Mineral Material Sales).

Upon approval of Pyramid Construction's re-entitlement request on their existing Reclamation Plan, previously approved Reclamation Plan (RP #08-0001) will be superseded by Reclamation Plan (RP #22-0001) for a new (10) ten year term, starting November 6, 2018 until November 6, 2028 when a new (10) year term will be required. Reclamation Plan (RP #22-0001) will be subject to existing conditions as specified on

Reclamation Plan (RP #08-0001). No changes to the existing Reclamation Plan (RP #08-0001) were proposed.

#### Project Background:

- RP #08-0001 was approved by the Imperial County Planning Commission on August 27, 2008 for a (10) ten year term;
- RP #08-0001 was recorded on November 6, 2012;
- On November 23, 2022, ICPDS received a comment letter from the Bureau of Land Management expressing no objection to Pyramid Construction's new (10) ten year term on Reclamation Plan (RP.#08-0001);
- On December 23, 2022, ICPDS received Pyramid Construction's re-entitlement request for a new (10) ten year term for Reclamation Plan (RP #08-0001).

#### **Land Use Analysis:**

Per Imperial County's General Plan, the land use designation for this project is "Recreation/Open Space" and zoned as S-2 (Open Space/Preservation) on BLM-administered lands per Zoning Map #70 of the Imperial County Title 9 Land Use Ordinance. The existing S-2 Zone is compatible with the land use designation as shown on Table 4 of the County's Land Use Element. The proposed project is consistent with the County's General Plan and County's Land Use Ordinance (Title 9), Division 20 – "Surface Mining & Reclamation," Chapter 2, Section 92002.00.

## Surrounding Land Uses, Zoning and General Plan Designations:

DIRECTION	CURRENT LAND	ZONING	GENERAL PLAN
Project Site	Mining Operations	S-2 (Open	Recreation/Open
		Space/Preservation) on	Space
		BLM Lands	ор 0.00
North	Vacant/Open Desert	S-2 (Open	Recreation/Open
	Space	Space/Preservation) on	Space
	•	BLM Lands	opus.
South	Vacant/Open Desert	S-2 (Open	Recreation/Open
	Space	Space/Preservation) on	Space
	·	BLM Lands	opudo.
East	Vacant/Open Desert	S-2 (Open	Recreation/Open
	Space	Space/Preservation) on	Space
		BLM Lands	
West	Vacant/Open Desert	S-2 (Open	Recreation/Open
	Space	Space/Preservation) on	Space
		BLM Lands	<b></b>

#### **Environmental Determination:**

Reclamation Plan #22-0001 is categorically except from CEQA pursuant to Section 15301 of the CEQA Guidelines (Class 1 – Existing Facility).

#### **Staff Recommendation:**

It is recommended that you conduct a public hearing and hear all the opponents and proponents of the proposed project. Staff would then recommend that the Planning Commission approve Reclamation Plan #22-0001 by taking the following actions:

- 1. Find that the project is categorically except from CEQA under Government Code Section 15301 and that no further environmental documentation is necessary; and
- 2. Approve the attached Resolution(s), Supporting Findings, and Reclamation Plan #22-0001 for a new 10-year term subject to the existing conditions as specified in Reclamation Plan #08-0001.

Prepared By:	Gerardo A. Quero, Planner I #3/15
	Casaly Wet
Reviewed By:	Michael Abraham, AICP, ICPDS Assistant Director
	mel Nh
Approved By:	Jim Minnick, Planning & Development Services Director
	Sor Jule 14h
Attachments:	
	A. Vicinity Map
	B. Site Plan
	C. Planning Commission Resolutions D. Previously Approved Reclamation Plan RP#08-0001
	b. Troviously Approved Accidination Flat IX: #00-0001

Reclamation Plan RP#22-0001 Re-entitlement Request

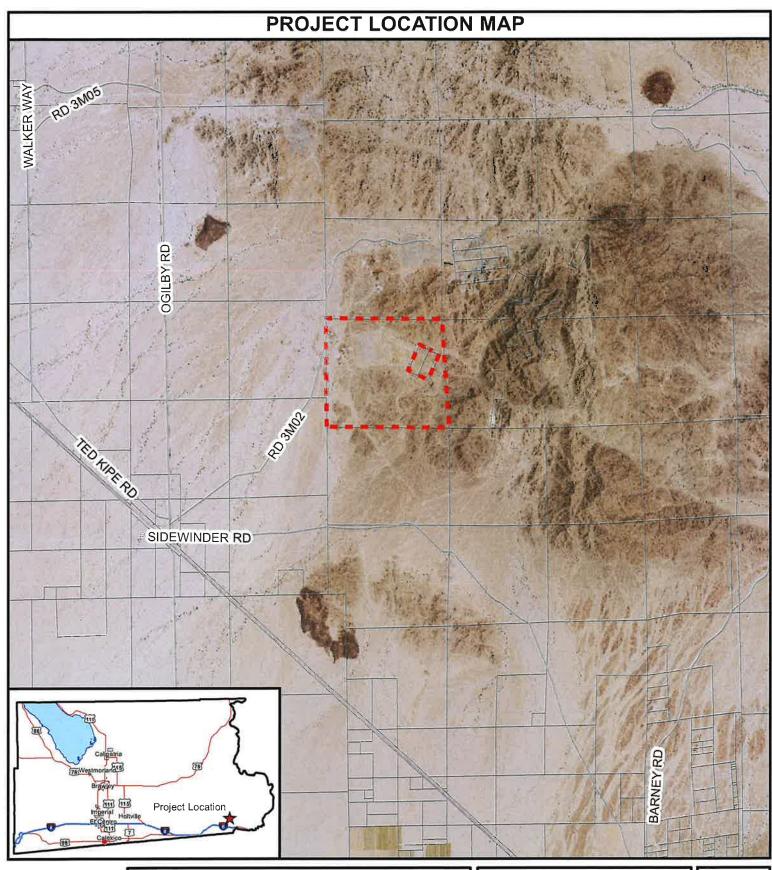
S:\AIIUsers\APN\050\320\031\RP22-0001\PC\STAFF REPORT 2023 RP22-0001 (APN 050-320-031) .docx

Comment Letters

E.

F.

ATTACHMENT "A" - VICINITY MAP



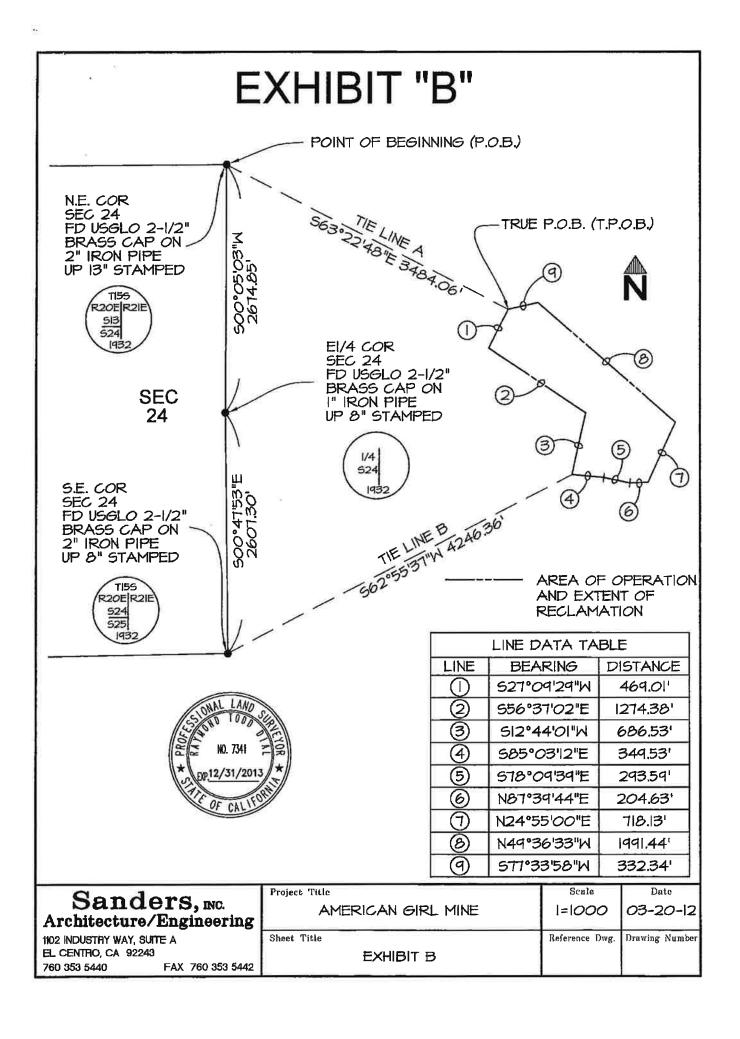


PYRAMID CONSTRUCTION
AND AGGREGATES, INC.
(AMERICAN GIRL MINE)
RP #22-0001 APN 050-320-031-000





ATTACHMENT "B" - SITE PLAN



ATTACHMENT "C" - PC RESOLUTIONS

<b>RESOLI</b>	UTION	NO.	
112002	<b>911911</b>	1101	

A RESOLUTION OF THE PLANNING COMMISSION OF THE COUNTY OF IMPERIAL, CALIFORNIA, APPROVING "RECLAMATION PLAN #22-0001" FOR PYRAMID CONSTRUCTION & AGGREGATES, INC.

**WHEREAS**, Pyramid Construction and Aggregates, Inc. has submitted an application for American Girl Mine Reclamation Plan #22-0001 to continue with the existing mining operations of aggregate materials of sand and gravel; and,

**WHEREAS**, existing Reclamation Plan was previously approved under Reclamation #08-0001 and will be superseded by Reclamation Plan #22-0001; and,

**WHEREAS**, the project is categorically exempt in accordance with section 15301 of the requirements of the California Environmental Quality Act, the State Guidelines, and the County's "Rules and Regulations to implement CEQA as Amended"; and,

**WHEREAS**, the Planning Commission of the County of Imperial has been delegated with the responsibility of approvals and certifications; and,

**WHEREAS**, public notice of said application has been given, and the Planning Commission has considered evidence presented by the Imperial County Planning & Development Services Department and other interested parties at a public hearing held with respect to this item on July 12, 2023; and

**NOW, THEREFORE**, the Planning Commission of the County of Imperial **DOES HEREBY RESOLVE** as follows:

**SECTION 1.** The Planning Commission has considered the proposed Reclamation Plan prior to approval. The Planning Commission finds and determines that the Reclamation Plan is adequate and prepared in accordance with the requirements of the Imperial County General Plan and Land Use Ordinance, State Mine and Reclamation Act and the California Environmental Quality Act (CEQA), which analyses environmental effects, based upon the following findings and determinations.

**SECTION 2.** That in accordance with State Planning and Zoning law and the County of Imperial regulations, the following findings for the approval of Reclamation Plan 22-0001 has been made as follows:

A. That Reclamation Plan complies with SMARA Sections 2772 and 2773, and any other applicable provisions;

The Reclamation Plan and Reclamation Map have been filed with the Imperial County Planning and Development Services (SMARA Lead Agency) in accordance with Section 2772 and 2773 of the State Mine and Reclamation Act (SMARA).

B. That the Reclamation Plan complies with applicable requirements of State regulations (CCR §3500-3505, and §3700-3713).

Reclamation Plan #22-0001 complies with the requirements of the State Surface Mining and Reclamation Act of 1975 (SMARA), specifically Public Resources Code Sections 2772 and 2773, and the Reclamation Standard specified in California Code of Regulations, Article 9, Sections 3700 through 3713, as adopted by the State Mining and Geology Board.

C. That the Reclamation Plan and potential use of reclaimed land pursuant to the plan are consistent with this Chapter and the County's General Plan and any applicable resource plan or element.

The General Plan Land Use Element designates the subject site as "Recreation/Open Space". It is zoned as S-2 (Open Space/Preservation under the Imperial County Land Use Ordinance (Title 9). The existing S-2 Zone is compatible with the Land Use Element of the Imperial County General Plan [Table 4 – Compatibility Matrix (Page 64)]. The Reclamation Plan is consistent with Title 9, Division 20, Chapter 2, Section 92002.00.

D. That the Reclamation Plan has been reviewed pursuant to CEQA and the County's environmental review guidelines, and all significant adverse impacts from reclamation of the surface mining operations are mitigated to the maximum extent feasible.

Reclamation Plan #22-0001 is categorically exempt from CEQA pursuant to Section 15301 of the CEQA Guidelines (Class 1 – Existing Facility).

E. That the land and/or resources such as water bodies to be reclaimed will be restored to a condition that is compatible with, and blends in with, the surrounding natural environment, topography, and other resources, or that suitable off-site development will compensate for related disturbance to resource values.

Reclamation Plan #22-0001 Conditions of Approval ensures that the project complies with all applicable regulations of the County of Imperial and the State of California. Therefore, the proposed project shall restore the lands to blend in with the surrounding environment and topography.

F. That the Reclamation Plan will restore the mined lands to a usable condition which is readily adaptable for alternative land uses consistent with the General Plan and applicable resource plan.

The proposed reclamation of the mined lands as provided for in this plan will provide for the protection and subsequent beneficial use of the mined and reclaimed lands. The Conditions of Approval shall ensure that the project is consistent with the County of Imperial General Plan and Title 9 Land Use Ordinance and the State of California regulations.

G. That a written response to the State Department of Conservation has been prepared, describing the disposition of major issues raised by that Department. Where the County's position is at variance with the recommendations and objections raised by the State Department of Conservation, said response shall address, in detail, why specific comments and suggestions were not accepted. A written response to the State Department of Conservation was prepared on July 24, 2008, describing the disposition of major issues raised by that Department for previously approved Reclamation Plan #08-0001. Imperial County adopted the recommendations raised by the State Department of Conservation. NOW, THEREFORE, based on the above findings, the Imperial County Planning Commission DOES HEREBY APPROVE Reclamation Plan #22-0001, subject to existing Conditions of Approval from superseded Reclamation Plan #08-0001. Rudy Schaffner, Chairperson Imperial County Planning Commission I hereby certify that the preceding resolution was taken by the Planning Commission at a meeting conducted on July 12, 2023 by the following vote: AYES: NOES: ABSENT: ABSTAIN:

ATTEST:

Jim Minnick, Director of Planning & Development Services
Secretary to the Planning Commission

ATTACHMENT "D" – PREVIOUSLY APPROVED RECLAMATION PLAN (RP#08-0001)

## RECEIVED

Please return to:

Imperial County
Planning & Development Services
801 Main Street
El Centro, California 92243

NOV 06 2012

BY				
IMPER	IAL COUNT	Y CLERK	-RECORDE	-

Assessors Parcel No. 050-320-031-000 FOR RECORDER'S USE ONLY

NOTICE OF RECLAMATION PLAN APPROVAL PYRAMID CONSTRUCTION AND AGGREGATES, INC. AMERICAN GIRL EAST MINE OPERATION RP08-0001

Pursuant to California Public Resources Code Section 2772.7 the County of Imperial, a political subdivision of the State of California hereby gives notice that mining operations conducted on the hereinafter described property are subject to a Reclamation Plan approved by the Imperial County a copy of which is on file with the Planning and Development Services Department of said Imperial County. The property which is subject to the Reclamation Plan is described on Exhibit A which is attached to this Notice and is hereby incorporated herein by this reference. This Reclamation Plan dated August 27, 2008 supersedes any previous versions that may have been recorded. The approved Reclamation Plan #08-0001 is on file at the Imperial County Planning and Development Services Department.

COUNTY OF IMPERIAL, a political subdivision of the STATE OF CALIFORNIA

By: Orlyws

ARMANDO VILLA, Planning and Development Services Director

STATE OF CALIFORNIA }
COUNTY OF IMPERIAL }

On <u>October 302012</u> before me, <u>Patricia A. Valenzuela</u> a Notary Public in and for said County and State, personally appeared <u>Armando Villa</u>, who proved to me on the basis of satisfactory evidence to be the person(\*) whose name(\*) is/ate subscribed to the within instrument and know ledged to me that he/she/they executed the same in his/her/their authorized capacity(has), and that be his/her/their signature(\*) on the instrument the person(\*), or the entity upon behalf of which the person(\*) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

Notary Public In and For the

State of California

PATRICIA A. VALENZUELA
Commission # 1993041
Notary Public - California
Imperial County
My Comm. Expires Oct 28, 2016

PAV\S:\APN Files\003\050\015\Notice of Reclamation Approval (RP06-0002).doc

## **EXHIBIT "A"**

# AMERICAN GIRL MINE OPERATION AND EXTENT OF RECLAMATION BOUNDARY DESCRIPTION

THE AMERICAN GIRL MINE OPERATION AND EXTENT OF RECLAMATION IS LOCATED IN AN AREA DESIGNATED AS "UNSURVEYED AREA" UPON A GOVERNMENT LAND OFFICE PLAT OR BUREAU OF LAND MANAGEMENT PLAT AND IS LOCATED TO BE IN SECTION 19, TOWNSHIP 15 SOUTH, RANGE 21 EAST, SAN BERNARDINO BASE AND MERIDIAN, IMPERIAL COUNTY, STATE OF CALIFORNIA.

MORE PARTICULARLY DESCRIBED AS FOLLOWS:

**POINT OF BEGINNING**: THE NORTHEAST CORNER OF SECTION 24, TOWNSHIP 15 SOUTH, RANGE 21 EAST, S.B.M.; THENCE SOUTH 63°22'48" EAST A DISTANCE OF 3484.06 FEET, ALONG TIE LINE "A" AS SHOWN ON EXHIBIT "B" ATTACHED HERETO TO THE NORTHWEST CORNER OF THE AMERICAN GIRL MINE OPERATION AND EXTENT OF RECLAMATION BOUNDARY, SAID POINT BEING THE **TRUE POINT OF BEGINNING**:

THENCE SOUTH 27°09'29" WEST A DISTANCE OF 469.01 FEET ALONG THE NORTHWEST SAID BOUNDARY AS SHOWN AS LINE 1 ON EXHIBIT "B" ATTACHED HERETO TO A POINT ON THE WEST SAID BOUNDARY;

THENCE SOUTH 56°37'02" EAST A DISTANCE OF 1274.38 FEET ALONG THE WEST SAID BOUNDARY AS SHOWN AS LINE 2 ON EXHIBIT "B" ATTACHED HERETO TO A POINT ON THE WEST SAID BOUNDARY:

THENCE SOUTH 12°44′01″ WEST A DISTANCE OF 686.53 FEET ALONG THE WEST SAID BOUNDARY AS SHOWN AS LINE 3 ON EXHIBIT "B" ATTACHED HERETO TO THE SOUTHWEST CORNER OF THE AMERICAN GIRL MINE OPERATION AND EXTENT OF RECLAMATION BOUNDARY, SAID POINT ALSO BEING NORTH 62°55′37″ WEST A DISTANCE OF 4246.36 FEET, ALONG TIE LINE "B" AS SHOWN ON EXHIBIT "B" ATTACHED HERETO FROM THE SOUTHEAST CORNER OS SECTION 24, TOWNSHIP 15 SOUTH, RANGE 21 EAST, S.B.M.;

THENCE SOUTH 85°03'12" EAST A DISTANCE OF 349.53 FEET ALONG THE SOUTH SAID BOUNDARY AS SHOWN AS LINE 4 ON EXHIBIT "B" ATTACHED HERETO TO A POINT ON THE SOUTH SAID BOUNDARY;

THENCE SOUTH 78° 09' 39" EAST A DISTANCE OF 293.59 FEET ALONG SAID RECLAMATION BOUNDARY AS SHOWN AS LINE 5 ON EXHIBIT "B" ATTACHED HERETO, TO AN ANGLE POINT IN SAID RECLAMATION BOUNDARY;

THENCE NORTH 87° 39' 44" EAST A DISTANCE OF 204.63 FEET ALONG THE SAID RECLAMATION BOUNDARY AS SHOWN AS LINE 6 ON EXHIBIT "B" ATTACHED HERETO, TO AN ANGLE POINT IN SAID RECLAMATION BOUNDARY;

THENCE NORTH 24° 55' 00" EAST A DISTANCE OF 718.13 FEET ALONG SAID RECLAMATION BOUNDARY AS SHOWN AS LINE 7 ON EXHIBIT "B" ATTACHED HERETO, TO AN ANGLE POINT IN SAID RECLAMATION BOUNDARY;

THENCE NORTH 49° 36′ 33″ WEST A DISTANCE OF 1991.44 FEET ALONG SAID RECLAMATION BOUNDARY AS SHOWN AS LINE 8 ON EXHIBIT "B" ATTACHED HERETO, TO AN ANGLE POINT IN SAID RECLAMATION BOUNDARY;;

THENCE SOUTH 77° 33′ 58″ WEST A DISTANCE OF 332.34 FEET ALONG THE NORTH SAID BOUNDARY AS SHOWN AS LINE 9 ON EXHIBIT "B" ATTACHED HERETO TO THE **TRUE POINT OF BEGINNING.** 

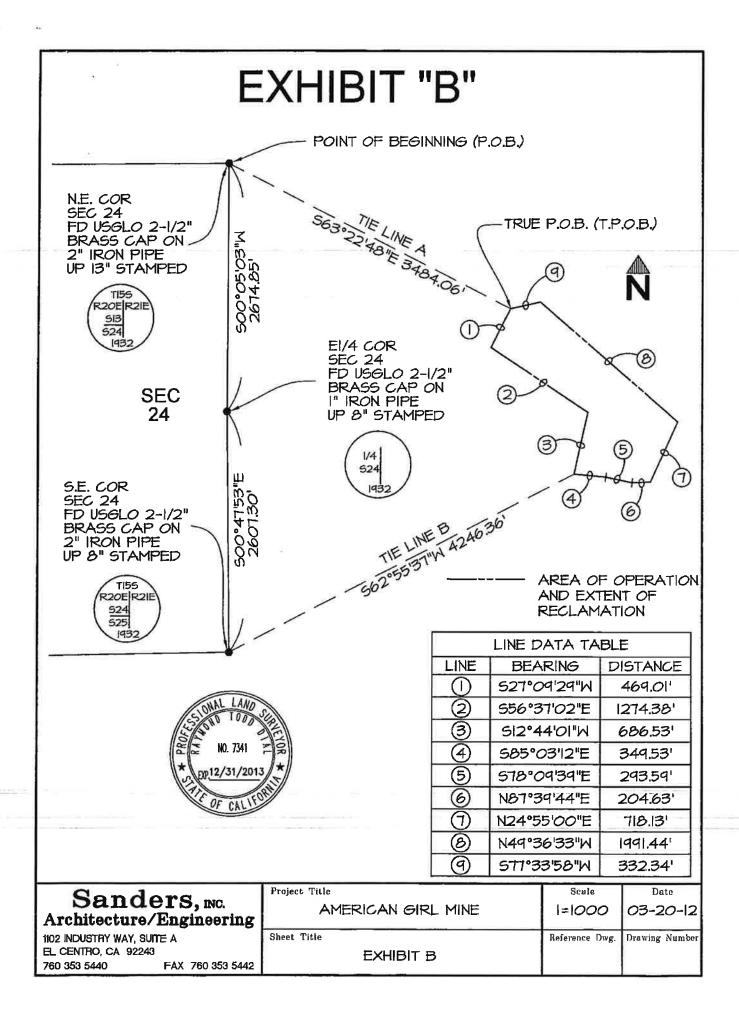
SAID AREA CONTAINING 39.11 ACRES MORE OR LESS, AS SHOWN ON EXHIBIT "B" ATTACHED HERETO.

**RAYMOND TODD DIAL, PLS 7341** 

MAY 11, 2012

CHALLAND SERVICE OF CALIFORN

DATE



#### **RECLAMATION PLAN**

#### Prepared for

Pyramid Construction and Aggregates, Inc.
American Girl Operations
Imperial County, California
July 2, 2008



#### BROWN AND CALDWELL

9665 Chesapeake Drive, Suite 201 San Diego, California 92123

PC ORIGINAL PKG
EEC ORIGINAL PKG

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#### RECLAMATION PLAN

#### IMPERIAL COUNTY RECLAMATION PLAN APPLICATION

#### **OWNER, OPERATOR AND AGENT:**

1. Applicant (Name, Mailing Address and Telephone Number):

Pyramid Construction and Aggregates Incorporated

839 Dogwood Road Heber, California 92249 Telephone: (760) 337-5839

2. Property Owner(s), or owner of Surface Rights (Name, Mailing Address and Telephone Number): [if different from applicant]

United States Bureau of Land Management

El Centro Area Office Attn: Walter Todd III 1661 South 4th Street El Centro, California 92243 Telephone: (760) 337-4400

3. Owner of Mineral Rights (Name, Mailing Address and Telephone Number): [if different than applicant]

United States Bureau of Land Management

El Centro Area Office Attn: Walter Todd III 1661 South 4th Street El Centro, California 92243 Telephone: (760) 337-4400

4. Lessee (Name, Mailing Address and Telephone Number):

Pyramid Construction and Aggregates Incorporated

839 Dogwood Road Heber, California 92249 Telephone: (760) 337-5839

5. Operator (Name, Mailing Address and Telephone Number): [if different than applicant]

Pyramid Construction and Aggregates Incorporated

839 Dogwood Road Heber, California 92249 Telephone: (760) 337-5839

Planning/Building Department EMAIL planning@icoe.k12.ca.us 939 Main Street, Suite B-1

#### 6. Agent of Process (Name, Mailing Address and Telephone Number):

Brown and Caldwell 9665 Chesapeake Drive, Suite 201 San Diego, California 92123 Telephone: (858) 514-8822 Project Number: 133384

#### LOCATION:

#### 7. Legal Description: (must be full legal)

This area of Imperial County is not formally surveyed by the United States Geological Survey. The proposed American Girl Operation (AGO) is located in what is estimated to be Section 19, Township 15 South Range 21 East.

	Legal Description of Proposed AGO
Assessor Parcel No.:	050320031000
Longitude:	114°47'45.50' W
Latitude:	32°50'38.35" N
Elevation:	550 to 650 feet above mean sea level

The proposed well site is located in Section 25, Township 15 South Range 20 East.

Legal Description of Proposed AGO Well Site	
Assessor Parcel No.:	050120009000
Longitude:	114°49'18.38" W
Latitude:	32°49'38.63" N
Elevation:	420 to 435 feet above mean sea level

#### 8. Size of the land(s) that will be affected by mining operation. Total acreage:

The estimated total acreage affected by the proposed operation is 40 acres, 39.5 acres for the mining area, and 0.5 acre for the water well area. The mining disturbance associated with the proposed AGO will affect previously mine (and subsequently reclaimed) lands and will be focused on mine overburden stockpiles created by historic mining operations. Mining these stockpiles will reuse and recycle the material while returning the area to a more natural topography.

#### 9. Describe existing and proposed access to the mine site: (please be specific)

The proposed AGO is located in an uninhabited area of the southern Cargo Muchacho Mountains (about 15 miles northwest of Yuma, Arizona, and 45 miles east of El Centro, California) in an unsurveyed portion of Section 19, Township 15 South Range 20 East, of Imperial County, California (Figure 1). The proposed AGO is located entirely upon previously disturbed lands associated with the former American Girl Mine-Padre Madre Mining Operation, which was part of the American Girl Canyon Mining Area. The proposed AGO will mine a portion of existing overburden stockpiles

Planning/Building Department EMAIL planning@icoe.k12.ca.us 939 Main Street, Suite B-1

remaining at the site and process these materials for sale as construction aggregate in the local Imperial County market. The project will reduce, reuse, and reclaim or recycle what are considered to be wastes, thus removing waste stockpiles and restoring the area to near-original surface contours.

Access to the proposed AGO will be over the existing county roads (i.e., same road originally used for access to the American Girl Mine-Padre Madre Operation). A short section of unpaved access road will require some dust control upgrades including the possible use of industry-standard chemical dust control treatments such as magnesium chloride (Figure 2). Additionally, a short section of road will be re-graded to provide more level access to the process plant and material load-out area as shown in Figure 2. The road will not be relocated but rather the grade of an approximately 300 foot section will be reduced to better accommodate haul trucks that will pass through the area. This process will not be achieved through blasting but rather "ripping" the grade with mining equipment. Excess materials resulting from this grade reduction will be processed as saleable material. Additionally, a small access road will be constructed for site access and the scale house. This road will be constructed within the confines of the property and will not affect the existing County road.

Based on communication with the United States Army Corps of Engineers (USACE), construction for this road will be performed under the authority of Nationwide Permit Number 14 and is therefore exempt from 404 and 401 permitting requirements. Further, since the former American Girl cyanide leach piles are not on the proposed AGO parcel and there is no indication of cyanide being used historically along the roads related to the proposed AGO parcel, the site is exempt from a Water Discharge Requirement (WDR) permit.

For potential discharges to surface waters outside of the site, the federal NPDES permit application Forms 1 and 2D will be completed and submitted to the California SWRCB.

#### **GEOLOGICAL BACKGROUND:**

#### 10. Mineral commodity to be mined:

Materials to be mined include sand and gravel.

#### 11. General Geological description of the area:

The site is located in the eastern portion of the Colorado Desert Geologic Province of California, which is generally characterized by extensional mountain ranges and alluviated valleys bordering the Salton Trough. The area is dominated by the San Andreas Fault system. The main geologic formation in the area is the Pelona and Orocopia Schist, which was metamorphosed during Mesozoic thrust faulting. Locally, the Cargo Muchacho Mountains, part of the larger Chocolate Mountain Range, historically exhibited highly mineralized zones that originated from hydrothermal activity in the area. The predominant feature in the Cargo Muchacho Mountains is the highly fractured quartz. Many of the mineralized deposits are no longer in place as the entire region has been heavily mined for gold and other associated metals in the past.

#### 12. Detailed description of the geology of the actual site in which surface mining is to be conducted:

The site is located in the Cargo Muchacho Mountains, which are a small part of the Chocolate Mountain Range in the eastern portion of the Colorado Desert Geologic Province. Little site-specific geological interpretation has been conducted of the Cargo Muchacho Mountains. However, based on documentation of past mining activities, it is known that this area had, in the past, highly mineralized zones as a result of hydrotherinal activity. Four geologic settings have been identified for this area. These include sheared rocks, linear zones trending north-northeast, chemically and physically altered Cenozoic metamorphosed rocks as well as fractured quartz in east trending thrust faults.

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The geology at the site has been highly altered due to past surface and subsurface mining activities. Currently, the site is covered with stockpiles of alluvium and waste rock material that resulted from these mining activities (Figure 2). The stockpiled resource is a composite of all materials mined at the site in the past and cannot, therefore, be characterized easily.

13. Brief description of the environmental setting of the site and the surrounding areas. Existing land uses, soil, vegetation, groundwater elevation and surface water characteristics.

Pyramid's proposed AGO is located on the western side of the Cargo Muchacho Mountains and east of Pilot Knob Mesa. The topography ranges from approximately 500 to 700 feet above mean sea level (amsl) (Figure 1). The Site is a previously mined area, which operated as the American Girl Mine associated with the American Girl Canyon Permit area. The American Girl Mine was an open pit gold mine with heap leach processing and overburden disposal operated by the AGMJV.

The climate in this area is extremely hot and arid and receives approximately 2.14 inches of precipitation per year based on data collected by AGMJV during the mine operation. This precipitation usually occurs during the late fall and early winter months. Two types of rainfall patterns occur in this region and will affect the revegetation and reclamation efforts. Frontal storms from the west in the winter months give gentle, relatively longer periods of rain, while episodic convectional thunderstorms with short intense periods of rain occur in the late summer. This Reclamation Plan includes procedures to take advantage of each kind of rainfall.

Surface water is limited in the proposed AGO area and occurs in the shallow alluvium of each wash, and in the deeper alluvium west of the project area. The water supply for the project will be from a proposed well located in the alluvial fill southwest of the project area. The water quality of the supply well does not meet the California Drinking Water Standards, but is suitable for the non-potable industrial requirements of the proposed AGO.

The proposed AGO is located in an uninhibited area of the southern Cargo Muchacho Mountains (about 15 miles northwest of Yuma, Arizona, and 50 miles east-northeast of El Centro, California) in an area that has not been formally surveyed by the USGS but is interpreted to be located in Section 25, T15S, R20E, of Imperial County, California. The proposed AGO is partially coincident with the previous American Girl Mining Operation, which was a portion of the American Girl Canyon Mining Area. The proposed AGO is located entirely upon lands related to the former American Girl Mining Operation, which was a portion of the American Girl Canyon Mining Area, and will utilize existing roads for site access.

For a more complete discussion of the environmental setting of the proposed AGO, please refer to Section 3.0 of this Reclamation Plan which covers topics including but not limited to topography and geology/soils, air quality and climatology, hydrologic resources, visual resources and land use, and transportation.

#### MINING OPERATION AND PRODUCTION:

14. Proposed starting date of operation:

Mobilization of the proposed AGO will begin when applicable Federal, State and local approvals have been obtained. Pyramid anticipates project mobilization and initial commercial sales to commence on May 1, 2008. Reclamation activities will occur in parallel with mining and material beneficiation operations with final reclamation planned for completion following the cessation of operations at the site. Based on the resource extraction rates described in the Plan of Operations (submitted to the Bureau of Land Management [BLM] under separate cover), the life of the proposed AGO is planned to be two

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years but may extend for up to 10 years. This operating life estimate is dependent upon a variety of economic variables, including production costs, material sales contracts, and commodity prices.

Esti	mated Start and Finish Date of Operation
Estimated Start Date	May 1, 2008
Estimated life of operation:	10 years
Termination Date:	May 1, 2018
Duration of first phase:	10 years

#### 15. Operation will be (include days and hours of operation):

Pyramid plans to operate the proposed AGO on an intermittent basis, 12 months a year, for up to 10 years. The project will typically operate only during daylight hours, up to six days a week. No night shifts are planned.

An intermittent work force of approximately five to 10 employees is planned for the life of the project. These workers are currently employed by Pyramid therefore an increase in work force is not planned or anticipated.

	Hours of Operation
Continuous:	10 hours a day, 6 days a week
Intermittent:	
Seasonal:	

#### 16. Maximum anticipated annual production (Tons or Cubic Yards):

Production at the proposed AGO is limited on an annual basis by the BLMs material sales contract limitations and by market demand. The maximum daily production is planned to be 4,500 cubic yards. The annual extraction is estimated at 500,000 cubic yards.

#### 17. Total anticipated production:

Pyramid projects a total of approximately one million cubic yards<sup>1</sup> of material are available for mining as construction aggregate materials within the approximately 40-acre footprint of the operations and within the limits of the current contract with BLM. The maximum mining rate is established by 43 CFR 3600 and is dependent upon the BLM award of competitive mineral material contracts to Pyramid as well as approval of this Reclamation Plan and associated Plan of Operations (submitted to the BLM under separate cover).

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<sup>1</sup> Estimated available volume based on visual assessment, analytical data and field mapping. Estimate accurate to +/-50%.

Total Anticipated Production			
Minerals:	Construction Aggregates	- 500,000	cubic yards
Tailings retained of	on site:	- 500,000	cubic yards/tons
Tailings disposed	off site:	o	cubic yards/tons

#### Maximum anticipated depth (indicate on map location of benchmarks to verify mine depth):

Pyramid proposes to mine and process all the overburden and stockpiled materials within a small portion of the confines of the formerly mined American Girl Mine-Padre Madre Mine Operation and will not disturb any native or previously undisturbed ground. The extraction of materials from these stockpiles will be accomplished with conventional mining methods using loaders and haul trucks. No blasting will be required. All mining will occur at elevations above natural ground elevation (i.e., no new open pits will be created at the site as a result of the mining operation).

#### 18. Describe mining method:

Pyramid proposes to mine and process all the overburden and stockpiled materials within a small portion of the confines of the formerly mined American Girl Mine-Padre Madre Mine Operation and will not disturb any native or previously undisturbed ground. The extraction of materials from these stockpiles will be accomplished with conventional mining methods using loaders and haul trucks. No blasting will be required. The operation will include mining, crushing, screening, and washing, with future provision for a portable asphalt batch plant.

Each of the stockpiles will be mined systematically in order to facilitate concurrent reclamation in parallel with the proposed operation. Approximately one million cubic yards of stockpiled material is estimated and planned for extraction under the current contract with BLM.

#### 19. Describe nature of processing and explain disposal of tailings or waste.

Material processing will include crushing and screening, and washing when necessary, to meet the required specification of the respective construction aggregates being sold. Some materials will require crushing and screening as well as washing to remove fines, while others may require only washing. All plant reject material will be temporarily stockpiled in the north portion of the site (Figure 3A) for eventual spreading over the reclamation areas and graded into the final contours.

Plant reject/wash material will be stored in a small sediment pond as shown in Figure 3A. All plant reject materials will be used as part of concurrent reclamation and graded into the final reclamation contours.

#### 20. Do you plan to use cyanide or other toxic materials in your operations?

#### Do you plan to use or store petroleum products or other hazardous materials on the site?

Fuel and other supplies to be used at the proposed AGO include diesel fuel, motor oil, and lubricating compounds. Fuels to be stored at the site will be contained in two 12,000-gallon diesel storage tanks (Figure 3A). A secondary containment area will be constructed around the storage tanks to hold 100 percent of the capacity of the largest single-walled tank as well as the area displaced by all other tanks in the secondary containment. This is in addition to calculated freeboard to accommodate the average daily rain event. All refueling of vehicles will occur within the bounds of the containment area. All appropriate State and local storage permits will be obtained prior to delivery to the project area.

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Daily fuel consumption estimates are included in the table below.

	Model		Estimated Fuel	Hours of	Estimated Fleet
Equipment Type	Equivalent	Quantity	Consumption / Hr / Vehicle (gallons)	Operation Per Day	Fuel Consumption Bay (gallons)
Front-End Loader - 7 cubic yards1	CAT 980	1	11.25	8	90
Motor Grader <sup>1</sup>	CAT 140	1	5.05	8	40.4
Haul Truck - 35 ton1	CAT D350	3	9.25	8	222
Bulldozer <sup>1</sup>	CAT D8	1	8.75	8	70
Generator <sup>2</sup>	Cummins QSX15-G9 (725 kW)	1	39.3	8	314.4
Water truck <sup>1</sup>	4,000 gallon	1	5.8	8	46.4
Water pull <sup>1</sup>	5,000 gallon	1	6.5	8	52

Source:

A Spill Prevention Control and Countermeasure (SPCC) Plan will be prepared prior to start-up to comply with 40 CFR Part 112.

#### Describe refueling and maintenance of vehicles.

All refueling of vehicles will occur within the bounds of the containment area as outlined above.

Equipment maintenance will be provided by owner or vendor service trucks. Temporary or permanent maintenance facilities are not required.

21. Indicate the quantity of water to be used, source of water, method of conveyance to the mine site, the quantity, quality and method of disposal of used and/or surplus water. Indicate if water well to be used for mine operation (drilling, reactivation, changing use or increasing volume of water well may require Conditional use Permit approval).

The maximum daily water requirement is proposed to be 60,000 gallons, or approximately 42 gallons per minute.

Construction of a new alluvial well is proposed for the water source for the project. The location of the proposed well is approximately 1.5 miles southwest of the proposed AGO along the north side of American Girl Mine Road on Assessor's Parcel Number 0501200009000 (Figures 2, 3B). This location was chosen for its proximity to access roads, the proposed mine site as well as roads that will be subject to dust control measures. Several wells are currently or were historically located in this alluvial setting and reportedly produce up to four times the required volume for the proposed AGO.

Water extracted from this well will be transferred to two portable storage tanks at the well site and conveyed in water trucks to portable storage tanks to be located on the site (Figure 3.A). Use of this well will require coordination with BLM for use and right-of-way access as well as a Conditional Use Permit from Imperial County.

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<sup>(1)</sup> Cat Handbook, Edition 31 (assumas "medium" duty")

<sup>(2)</sup> Diesel Service and Supply, Brighton, Colorado (assumes 3/4 load

## 22. Describe phases of mining if applicable and concurrent reclamation including time schedule for concurrent activities.

The estimated areas of disturbance associated with the project are listed in the table below and are shown on Figure 2. The mining disturbance associated with the proposed AGO will affect previously reclaimed lands and will be focused on mine overburden stockpiles created by historic mining operations. Mining of these stockpiles will return the area to near original land surface contours or road base elevation.

Estimated Areas of Disturbance / Year Reclaimed			
Location	Acres	Year Reclaimed	
Plant Site	5	Concurrent	
Haul Road Year 1-5	3	END	
Year 1 Mining	25	2	
Year 2-3 Mining (including well location)	4.5	4	
Year 4-5 Mining	0	6	
Year 5-10 Mining	0	N/A	
Water Well	1	N/A	
Access Road	1	END	
Well*	0.5	END	
Long-term Monitoring	N/A	Post-Reclamation	
Project Total	40		

<sup>\*</sup>The proposed well is located on a non-configuous parcel of land. See Figure 2.

Revegetation activities will be timed to take advantage of climatic conditions ideal for seed germination conditions, primarily in the winter/spring months. Since the success of revegetation is typically tied directly to precipitation events and cooler ambient temperatures, all revegetation efforts will occur between October and April each year.

The monitoring program for determining vegetative cover and density will be conducted at an appropriate time of year during the mine operation/reclamation period. The reclaimed areas will be monitored at periodic intervals depending on precipitation and plant germination and growth cycles, but at a minimum of once a year. The monitoring period is proposed to extend to the point of creating a self-sustaining ecosystem but in any event, no longer than 10 years.

Pyramid proposes to conduct reclamation concurrent with mining. In this way the project will minimize overall un-reclaimed surface disturbance and overall reclamation liability. The reclamation will occur following aggregate extraction in discrete areas of sufficient size and there is adequate operating area to complete reclamation.

## 23. Describe the types of equipment that will be used in the operating, including the estimated average daily trips (ADT) that will be generated by the operation.

All mining will occur at elevations above natural ground elevation (i.e., no new open pits will be created at the site as a result of the mining operation). The stockpile extraction will be accomplished with conventional surface mining equipment including front-end loaders, haul trucks, bulldozers, motor graders, and water trucks. The table below lists the proposed mining equipment fleet.

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Proposed Mining Equipment		
Equipment Type	Model Equivalent	Quantity
Front-End Loader – 7 cubic yards	CAT 980	1
Motor Grader	CAT 140	1
Hauf Truck - 35 ton	CAT D350	3 (future)
Bulldozer	CAT D8	1
Generator	Cummins QSX15-G9 (725 kW)	1
Water truck	4,000 gallon	1
Water pull	5,000 gallon	1

A crushing and screening facility will be used to manufacture construction aggregate materials to meet specific market needs. Mined stockpile material will be delivered directly to the crushing plant feeder hopper. Material will be fed from the hopper into the jaw crusher and then conveyed to the portable screen plant and either routed to a product pile or to a secondary cone crusher, which returns material to the screen plant. The entire crushing and screening plant is designed as a portable system such that no permanent foundations are required, and the plant can be relocated as necessary. The table below lists the anticipated crushing and screening equipment.

Proposed Process Equipment Including Equipment Type and Description	
I- 3 144 Pioneer jaw crusher (1 50 HP)	
I-7' x 20' JCI triple deck screen, Model 7203-38 (50 HP)	
I- 1400LS JCI cone crusher (300 HP)	
i- 48" x 30"jaw under crusher conveyor (30 HP)	
I- 42" x 60' conveyor (30 HP)	
I-60° x 25' screen conveyor (30 HP)	
I- 36" x 25' screen conveyor ( I5 HP)	
I-36' x 1 5' screen conveyor ( 10 HP)	
I-42" x 30' cone crusher feed conveyor (30 HP)	
I-48" x 15' cone under crusher conveyor (20 HP)	
1-30° x 30' portable conveyor (10 HP)	
2-30" x 60' portable conveyors (15 HP each)	
1-30" x 100' radial stacking conveyor (25 HP)	
1- 36° x 30' portable conveyor ( 15 HP)	
1-36° x 60' portable conveyor (20 HP)	
1-36" x 100" radial stacking conveyor (30 HP)	
1- Caterpillar generator set, powered by a Cat diesel-fueled engine, Model 3412CDITA, turbocharged, rated at 1,186 HP@ 1, rpm	800
1- JCI 7 x 20 Screening Plants sin 2006165	
1- Thor 36 x 150 telescopic portable radial	
12- RF 36 x 60 stackable conveyor	
1 – riprap separator	
1 –Ford F800 (maintenance truck)	

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The proposed AGO will have truck traffic associated with the removal of mineral materials related to the sale of construction aggregates. The anticipated maximum daily trip-count for aggregate trucks is 250.

- 24. Include the following maps: (NOTE: Without these the application is automatically incomplete.)
  - (1) Topographic Map with overlay showing proposed area to be mined. (Please see Figure 3A.)
  - (2) Site Plan showing mine layout and dimensions. (Please see Figure 2.)
  - (3) General Vicinity Map showing the location of the mine site in Imperial County. (Please see Figure 1.)
  - (4) Cross Section Map. (Please see Figure 4.)

The following additional figures are included in this Reclamation Plan:

- (5) Detail of proposed well site associated with the proposed AGO. (Please see Figure 3B.)
- (6) Site Plan showing approximate post reclamation grading contours. (Please see Figure 5.)

#### **RECLAMATION:**

25. Indicate by overlay of map of Item No. 24, or by color or symbol on map those areas to be covered by the reclamation plan:

The estimated total acreage affected by the proposed operation is 40 acres, 39.5 acres for the mining area, and 0.5 acre for the water well area. The mining disturbance associated with the proposed AGO will affect previously mine (and subsequently reclaimed) lands and will be focused on mine overburden stockpiles created by historic mining operations. Mining these stockpiles will reuse and recycle the material while returning the area to a more natural topography. Figures 2 and 3A illustrate the area affected by the proposed AGO.

26. Describe the ultimate physical condition of the site and specify the proposed use(s) or potential uses of the land after reclamation. Explain if utilities, haul or access roads will be removed or reclaimed.

For a detailed description of the site including discussion of geologic and seismic setting, hydrologic resources, air quality, socioeconomics, land uses and more, please refer to Section 3.0 of the attached Reclamation Plan.

- 27. Describe relationship of the interim uses mining and the ultimate physical condition to:
  - (a) Imperial County Zoning Ordinance
  - (b) Imperial County General Plan

The proposed AGO activities conform with Imperial County's General Plan Design (Open Space/Recreation) and Zoning (S-Open Space with mining allowed, subject to Conditional Use Permit [CUP] approval). This area is designated as "Class M" or "Moderate" use under the California Desert Conservation Act (CDCA) of 1980, as amended, due to past, present, and potential future mining activities.

28. Notarized statement that all owners of the possessory interest in the land have been notified of the proposed uses or potential uses identified in Item No. 25 (see Attachment "A").

Please refer to Attachment A following this Application.

29. Describe soil conditions and proposed topsoil salvage plan.

Soils in and around the project site are derived from the host granitic or meta-sedimentary substrate, either as weathered in place or as material deposited as shallow alluvium over bedrock. Soils in the project area are characterized as shallow and poorly developed. Native soils on the project site are covered with stockpiles from previous mining activity and are not generally exposed. Therefore, native topsoil is not available for reclamation efforts. However, Pyramid will stockpile materials that appear to

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support abundant vegetative life encountered during mining operations for use during reclamation on the north side of the property (Figure 3A).

For more information on the reclamation and revegetation process, please refer to Section 6 of the attached Reclamation Plan.

- 30. Describe the methods, their sequence and timing, to be used in bringing the reclamation of the land to its end state. Indicate on map (Item Nos. 24 and 25) or on diagrams as necessary. Include discussion of the pertinent items listed below.
  - (a) Backfilling and grading
  - (b) Stabilization of slopes
  - (c) Stabilization of permanent waste dumps, tailings, etc.
  - (d) Rehabilitation of pre-mining drainage
  - (e) Removal, disposal or utilization of residual equipment, structure, refuse, etc.
  - (f) Control and disposal of contaminants, especially with regard to surface runoff and ground water.
  - (g) Treatment of streambeds and streambanks to control erosion and sedimentation
  - (h) Removal or minimization of residual hazards
  - (i) Re-soiling, revegetation with evidence that selected plants can survive given the site's topography, soil and climate:

For a detailed description of the reclamation process, please refer to Section 6 of the attached Reclamation Plan.

31. If applicant has selected a short term phasing of his reclamation, describe in detail the specific reclamation to be accomplished during the first phase:

The proposed AGO plans to conduct reclamation on a concurrent basis as the resource is extracted and sufficient area to perform reclamation is developed. Reclamation earthwork will occur over a period of months in order to allow seed sowing to occur between October and April in the reclamation areas. This methodology will provide the best opportunity for seed germination and maximize the chances for successful revegeration of the reclaimed areas.

32. Describe how reclamation of this site in this manner may affect future mining at this site and in the surrounding area:

The proposed AGO, under its current contract with the BLM and under this Reclamation Plan, will not deplete the existing aggregate resource remaining from past mining activities. It is estimated that several million cubic yards will remain on the property for viable extraction and sale. Notwithstanding that, the reclamation for the proposed AGO will proceed without consideration to potential future mining activities but will regrade to create a more natural topographic profile on the property.

33. Notarized statement that the person submitting the plan accepts responsibility for reclaiming the mined land in accordance with the Reclamation Plan (Attachment "B"):

Please refer to Attachment B following this Application.

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#### 34. Include Reclamation Cost Calculations as Attachment "C":

Please refer to Section 8.0 of the attached Reclamation Plan for a detailed breakdown of Reclamation Cost Calculations for the proposed AGO.

#### 35. Describe proposed Revegetation Plan (attach as "Attachment D" if necessary):

Please refer to Section 6.0 of this Reclamation Plan for a full and detailed discussion of the Revegetation Plan for the proposed AGO.

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Operator or Operator's Agent

## ATTACHMENT "A" STATEMENT OF NOTIFICATION

I, the undersigned, have notified all owners of the possessory interest in the land of the proposed use (s) or potential uses identified in Item No. 26 of the Reclamation Plan. <sup>2</sup>
potential discontinued in Algert 140. do 01 the security in a security i

Signed this \_\_\_\_\_\_ day of \_\_\_\_\_\_, 2008.

<sup>2</sup>Imperial County and the BLM have been notified per instructions from Mr. Walter Todd III, BLM.

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#### **ATTACHMENT "B"**

#### STATEMENT OF RESPONSIBILITY

I, the undersigned, hereby agree to accept full responsibility for reclaiming all mined lands as described and submitted herein with any modifications requested by the County of Imperial as conditions of approval.

Signed this	day of	, 2008.
Operator or Operat	or's Agent	

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## **ATTACHMENT "D" REVEGETATION PLAN**

Please refer to Section 6.0 of this Reclamation Plan.

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#### 1. INTRODUCTION

This Reclamation Plan (Plan) is for the proposed Pyramid American Girl Operation (AGO), to be operated by Pyramid Construction and Aggregates Incorporated (Pyramid), at the previously mined American Girl Mine—Padre Madre Operations, located in Imperial County, California. The American Girl Mine was owned and operated by the American Girl Mining Joint Venture (AGMJV) and was closed in 1996.

The proposed AGO will mine a portion of existing overburden stockpiles remaining at the site and process these materials for sale as construction aggregate in the local Imperial County market. The project will reduce, reuse, and reclaim or recycle what are considered to be wastes, thus removing waste stockpiles resulting from previous precious metals mining and restoring the area to near-original surface contours. This Reclamation Plan describes the work necessary to reclaim the mining area disturbed as a result of the construction aggregate operation including but not limited to the removal of all structures and operational equipment prior to site closure, abandonment of the water well, regrading, and revegetation. This Plan has been prepared to comply with the requirements of the Surface Mining and Reclamation Act of 1975 (SMARA), as amended.

Land within the proposed AGO site is under the jurisdiction of both Imperial County, California, and the United States Department of the Interior, Bureau of Land Management (BLM). Imperial County is the lead agency for reclamation permitting and oversight, while the BLM is the lead agency for administering the mineral material contracts. BLM requires a mining Plan of Operations be prepared and submitted to support the request for award of a mineral material contract. This required document has been submitted to the BLM under separate cover.

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#### 2. PROJECT OVERVIEW

Pyramid's proposed AGO is a construction aggregate mining operation located in Imperial County, California (Figure 1). A Plan of Operations has been submitted to the BLM as required by Title 43 CFR Part 3600 under separate cover. The proposed AGO will include mining of existing stockpiles, processing of the material for use as construction aggregate products, commercial sales of construction aggregates, and future provision for an asphalt batch plant. The mining sequence is planned to support concurrent reclamation while maintaining operational flexibility for the extraction of the stockpiled materials. The maximum anticipated annual mining and processing rate is capped at 500,000 cubic yards as supulated in 43 CFR Part 3602 and will vary below or up to that limit depending on cost of production and local market conditions.

Access to the proposed AGO will be over existing county roads (i.e., the same road originally used for access to the former American Girl Mine-Padre Madre Operations). Haul and access roads will follow existing access and exploration roads. A short section of road will be modified or reduced in grade to provide level access to the process plant and material load-out area (Figure 2). A maximum of 250 truck trips per day (25 trucks at 10 trips per day) is projected during periods of peak activity.

Haulage and access roadways will follow existing access and exploration roads. All mine roads will be developed to an operating width of 25 feet which is no greater than the current approximate width of the roads leading the site. Road grades will be limited to overall gradients of eight percent or less.

Approximately 39.5 acres of previously disturbed land will be mined over a period of approximately two to 10 years (Figure 3). The remaining 0.5 acres is a well site located roughly 1.5 miles southwest of the proposed site and on the northern edge of American Girl Mine Road. The reclamation will be concurrent with the mining activities in order to minimize final reclamation activities and costs.

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#### 3. ENVIRONMENTAL SETTING

The proposed AGO is located on the western side of the Cargo Muchacho Mountains and east of Pilot Knob Mesa. The topography ranges from approximately 500 to 700 feet above mean sea level (amsl) (Figure 1). The Site is a previously mined area, which operated as the American Girl Mine associated with the American Girl Canyon Permit area. The American Girl Mine was an open pit gold mine with heap leach processing and overburden disposal operated by the AGMJV.

The climate in this area is extremely hot and arid and receives approximately 2.14 inches of precipitation per year based on data collected by AGMJV during the mine operation. This precipitation usually occurs during the late fall and early winter months. Two types of rainfall patterns occur in this region and will affect the revegetation and reclamation efforts. Frontal storms from the west in the winter months give gentle, relatively longer periods of rain, while episodic convectional thunderstorms with short intense periods of rain occur in the late summer. This Reclamation Plan includes procedures to take advantage of each kind of rainfall.

Surface water is limited in the proposed AGO area and occurs in both the shallow alluvium of each wash and in the deeper alluvium west of the project area. The water supply for the project will be from a proposed well located in the alluvial fill southwest of the project area. The water quality of the supply well does not meet the California Drinking Water Standards, but is suitable for the non-potable industrial requirements of the proposed AGO.

The proposed AGO is located in an uninhibited area of the southern Cargo Muchacho Mountains (about 15 miles northwest of Yuma, Arizona, and 50 miles east-northeast of El Centro, California) in an area that has not been formally surveyed by the USGS but is interpreted to be located in Section 19, Township 15 South Range 21 East, of Imperial County, California. The proposed AGO is partially coincident with the previous American Girl Mining Operation, which was a portion of the American Girl Canyon Mining Area. The proposed AGO is located entirely upon lands related to the former American Girl Mining Operation, which was a portion of the American Girl Canyon Mining Area, and will utilize existing roads for site access.

#### 3.A Existing Studies

A Final Environmental Assessment/Environmental Impact Report (EIR) (BLM EA No. CA-067-88-65) was prepared for the former American Girl Mining Project. Environmental studies were previously conducted over a 2,100-acre Study Area, which includes the proposed 40-acre proposed AGO area. Thirteen environmental resource areas were studied in the previous assessment of impacts due to the former mining operations. The EIR states "In the context of the regional environment, none of the adverse impacts identified were determined to be significant." Based on the nature and scope of the proposed AGO project, impacts will be even less than those identified and documented for the former American Girl gold-mining operation, and none will be environmentally significant.

A summary of 13 key environmental resource areas has been addressed below with respect to the proposed AGO.

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3: Environmental Setting Reclamation Plan

## 3.B Topography

The proposed project area is characterized by desert landscape and low mountain ranges with barren, rocky slopes interspersed with arroyos (washes) and alluvial plains. While the general views are expansive and marked by sparse development, the Cargo Muchacho Mountains have long been an area of active mining and the vistas in the project area reflect the associated surface disturbance.

While the proposed AGO will alter the landscape in the project area, the proposed operation will remove the "unnatural" landforms created and resulting from past mining activities. The project will reduce, reuse, and reclaim or recycle what are considered to be wastes, thus removing waste stockpiles and restoring the area to more natural surface contours.

# 3.C Geology and Seismic Setting

The Cargo Muchacho Mountains are a small part of the Chocolate Mountain Range in the eastern portion of the Colorado Desert Geologic Province. Four geologic settings have been identified for this area: sheared rocks, linear zones trending north-northeast, chemically and physically altered Cenozoic metamorphosed rock, and fractured quartz in east-trending thrust faults. Highly mineralized zones, believed to have originated from hydrothermal activity in the area, are generally developed within shear zones. Many of the mineralized deposits are no longer in place as the entire region has been heavily mined for gold and associated metals.

The proposed project is located in the Imperial Valley at the southern end of the San Andreas Fault system, a seismically active area. Active and potentially active faults exist in the area, although no recently active faults were identified in the 1988 EA/EIR. Recent information indicates that the very active Imperial Fault lies roughly 42 miles west of the proposed AGO site. This fault experienced significant activity in 1940, 1966, 1968, 1971, 1977, and 1979. Some of this activity was surface ruptures and some was classified as triggered creep. Despite the very active nature of this fault, however, it falls outside of the Earthquake Fault Zone for the proposed project site as defined by the Alquist-Priolo Act (Hart 1994).

Soils in and around the project site are derived from the host granitic or meta-sedimentary substrate, either as weathered in place or as material deposited as shallow alluvium over bedrock. Soils in the project area are characterized as shallow and poorly developed. Native soils on the project site are covered with stockpiles from previous mining activity and are not generally exposed.

# 3.D Air Quality and Climatology

Because the area is largely undeveloped and uninhabited, the major air quality issues are particulate matter (PM) and ozone. PM standards pertain to the size of the particulates and are generally evaluated by their ability to be inhaled (e.g., PM<sub>10</sub>).

The project area is located in a part of the Imperial Valley that is designated as an "unclassifiable attainment area" (any area that cannot be classified on the basis of available information as meeting or not meeting the national primary or secondary ambient air quality standard for the pollutant) for PM by the U. S. Environmental Protection Agency (USEPA) (USEPA 2004). The California Air Resources Board (2007) has indicated that the entire Imperial County is a state nonattainment area for PM<sub>10</sub> and unclassified for PM<sub>2.5</sub> under the California Health and Safety Code Section 39608.

USEPA found that Imperial County failed to attain the 8-hour ozone national ambient air quality standard that was required to be reached in June 2007, and has proposed that Imperial County be reclassified as a moderate 8-hour ozone nonattainment area (USEPA 2007).

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3: Environmental Setting Reclamation Plan

The proposed AGO will have fewer emissions than previous mining operations in the area since the overall mining rates and times of operation are significantly less. All equipment, if not self-permitting, will be permitted in accordance with Federal, State and local regulations.

The calculations for PM<sub>10</sub> for the proposed mining operation are based on "Modeling Fugitive Dust Sources", a guidance document from the National Stone, Sand & Gravel Association (NSSGA), and US EPA's AP-42 Handbook of Emission Factors. The estimates include PM<sub>10</sub> emissions from various processes/operations such as equipment (i.e. crushers, screens, and conveyors); customer truck traffic on unpaved roads within the property boundary; and stockpile emissions, including dust created from wind erosion, truck loading, and stockpile construction. Whenever applicable, the guidance document presents uncontrolled emissions in contrast to controlled emissions. The table below contains variable diesel engine horsepower ratings and their corresponding emission output, including those for PM<sub>10</sub>.

Table 3-1. Annual Pollutant Emissions								
	10 HP	15 HP	20 HP	25 HP	30 HP	150 HP	300 HP	1186 HP
Pollutant  -				Emission	s (ton/yr)			
PMio	0.1	0.14	0.19	0.24	0.29	1.45	2.89	11.43
SOx	0.09	0.13	0.18	0.22	0.27	1.35	2.69	10.65
NOx	1.36	2.04	2.72	3.39	4.07	20.37	40.73	161.04
со	0.29	0.44	0.59	0.73	0.88	4.39	8.78	34.70

Imperial County Air Pollution Control District (ICAPCD) Rule 401 prohibits the emissions of plumes beyond a certain opacity. In general, the opacity that cannot be exceeded is No. 1 on the Ringlemann Chart, as published by the United States Bureau of Mines (USBM). This is determined visually/subjectively by a trained/certified person.

A Fugitive VIII Dust Plan has been submitted under separate cover to and discussed with the ICAPCD. Air quality will be addressed on an as-needed basis. If there is equipment that is not self permitting, Pyramid will perform periodic monitoring and implement best management practices and products to reduce emissions as necessary to meet local, State and Federal standards.

Air quality will be addressed on an as-needed basis. If there is equipment that is not self permitting, Pyramid will perform periodic monitoring and implement best management practices and products to reduce emissions as necessary to meet local, State and Federal standards.

#### 3.E Noise

There is currently no regulated threshold for noise in the vicinity of the proposed AGO. The proposed project will not use blasting to mine mineral materials and there is no 24-hour per day milling or processing operation proposed.

The project area is largely uninhabited and undeveloped, so natural noise sources are generally limited to wind, rain, thunder, insects, birds, and other wildlife. Man-made noise in the area, when present, would be created by periodic vehicle travel along Ogilby Road, Sidewinder Road, and American Girl Mine Road, and is related mainly to haul trucks associated with mining or other sporadic vehicle travel including seasonal "snowbird" recreational vehicles that frequent the area in the winter months. Occasional light aircraft and military aircraft, such as fighter jets and helicopters, also produce minor noise. Mining activity will produce noise from generators and other aggregate processing equipment. These impacts will be mitigated through installation of MSHA-approved mufflers on necessary equipment to dampen noise if applicable as well as regular maintenance of all equipment.

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# 3.F Hydrologic Resources

A detailed groundwater evaluation was undertaken for the former 1988 Padre Madre EA/EIR. The Imperial Valley groundwater reservoir consists of Cenozoic-era valley fill deposits underlain by a basement complex of pre-Terriary rock. Moderate to high groundwater yields have been obtained in the eastern part of the Imperial Valley by deep wells tapping into marginal alluvial deposits of the Colorado River. Regional groundwater recharge in Imperial Valley is controlled by the Colorado River, while underflow from tributary areas, direct precipitation, and local runoff are minor contributors to recharge. Flowing wells are common in the eastern Imperial Valley.

Alluvial aquifer waters are predominantly a sodium-chloride type. The water quality has been determined suitable for non-potable uses in mining and milling operations.

The proposed AGO will use less groundwater for the mining operation than the former American Girl—Padre Madre Mining Operation, currently estimated at roughly 60,000 gallons per day (gpd), and is not expected to appreciably impact groundwater supply. No chemical processes are necessary for the proposed AGO and therefore there will be no impacts to groundwater from potential process discharges. For more discussion related to the proposed water well, refer to the Well Siting Study included as Appendix A to this Reclamation Plan and submitted to Imperial County under separate cover (Brown and Caldwell, 2008)

Surface water issues will be addressed through the SWPPP and through the regular use of BMP's.

#### 3.G Cultural Resources

Cultural resources include both prehistoric and historic resources. The Imperial Valley area has a well-documented history of prehistoric occupation. Historic settlements and mining operations are also well known in the Valley.

A cultural resources site records search was conducted for this project in January 2008 by the Southeast Information Center, the state repository for Imperial County cultural resource information. A total of 11 sites and 10 field surveys have been recorded covering the project area up to a 1-mile radius of the project boundaries, indicating that the area has been well studied. One potentially significant historic mining feature was recorded in 1987 within 1 mile of the AGO project area: 4-IMP-3303-H, the town and mills of Obregon. This resource was considered eligible for the National Register of Historic Places.

One resource, 4-IMP-5300-H, was recorded in 1986 within the proposed AGO project boundaries. It consisted of a highly disturbed isolated artifact scatter and one group of disturbed historic features. As reported in the 1988 Draft EA/EIR, due to the disturbed nature of the resources, in 1987 the State Historic Preservation Officer concurred with the report recommendation that 4-IMP-5300-H was not National Register eligible. Therefore, 4-IMP-5300-H was not considered significant and no mitigation measures were required. Because the area was used subsequently for the American Girl-Padre Madre Mining Operation, the resource no longer exists.

A preliminary archaeological site visit was conducted by a Registered Professional Archaeologist (RPA) in March 2008 to evaluate the potential for undisturbed cultural resources remaining on the property. The RPA also consulted with an historic archaeologist (also an RPA) regarding potential historic resources in the project area. Based upon review of the site records search results, map information, aerial photographs of the project site, site visit, and historic consultation, it was concluded that the potential for cultural resources on the site is essentially nonexistent due to the extensive site disturbance caused by previous mining activity.

The two proposed well locations were also evaluated by aerial photo and were driven past during the site visit. It was concluded that the well and alternative well locations have no undisturbed surface and therefore no potential for undisturbed archeology in this area exists.

The segment of existing road proposed for lowering and regrading was also examined via map, aerial photo, and drive-over. It was concluded that the road is within the area previously surveyed for cultural resources in the past (as addressed in the 2008 site records search) and no cultural resources were located there. The letter report that addresses cultural resources is included as Appendix B to this Reclamation Plan. The project area is not known to have religious/sacred or traditional cultural significance to local Native American groups.

### 3.H Soils Resources

Soils in and around the project site are derived from the host granitic or meta-sedimentary substrate, either as weathered in place or as material deposited as shallow alluvium over bedrock. Soils in the project area are characterized as shallow and poorly developed. Native soils on the project site are covered with stockpiles from previous mining activity and are not generally exposed.

The proposed AGO will be removing the existing steep-sloped stockpiles and returning the area to near original contours or road base. The steepest planned slope will be 4:1, horizontal to vertical, and will help reduce any surface erosion potential from current conditions.

Erosion and sedimentation will be controlled during all phases of construction, operation, reclamation and closure of a surface mining operation to minimize siltation. Surface runoff and drainage from surface mining activities will be controlled by berms, silt fences, sediment ponds, revegetation, hay bales, or other erosion control measures, to ensure that surrounding land and water resources are protected from erosion, gullying, sedimentation, and contamination. Erosion control methods will be designed and maintained to accommodate runoff from a 20 year intensity storm that lasts approximately one hour.

#### Wildlife Resources 3.1

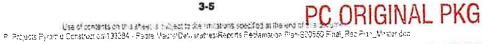
No listed animal species were observed on the site during the biological reconnaissance. A search of the CNDDB revealed eight sensitive animal species known to occur in the general vicinity of the proposed AGO site, including three bat species (pallid bat, western mastiff bat, and California leaf-nosed bat). Because of the lack of suitable roosting habitat, the bats roost off site but may use the project area for foraging. No suitable on-site habitat exists to support the other five species (two beetles, two birds, and a lizard). The presence of one CDFG sensitive animal, the mule deer, was detected on the project site.

The desert tortoise, a federally and state-listed threatened species, is not known to occur in the project area; however, desert tortoise are known to occur about 2.5 miles north of the project site, according to the U.S. Fish & Wildlife database. Tortoises were not observed during the 2008 field survey. Because the project site is too disturbed and lacks appropriate burrowing and foraging habitat, desert tortoise are not expected to occur on the project site or proposed well locations. It is possible; however, that desert tortoise may traverse the access road area leading to the mine site.

The project site provides potential foraging habitat for raptors. However, suitable habitat for tree-nesting or cliff-nesting raptors does not occur on site as the trees present on the property are not tall enough to provide adequate protection for raptor nests.

Mitigation measures will be designed and enforced at proposed AGO to prevent on-site impacts to bats and desert tortoises by AGO personnel operating on site. These measures include education and avoidance. For a more thorough discussion of these measures, please refer to the Environmental Assessment submitted to the BLM under separate cover.

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Reclamation Plan Environmental Setting

#### Vegetation 3.J

The proposed AGO project area is highly disturbed from past mining activities and the site itself supports mostly disturbed Sonoran creosote bush scrub that has re-established on abandoned mine spoils and tailings. Due to the disturbed nature of the site, the Sonoran creosote scrub has little to very low wildlife habitat quality because the plants are widely spaced over open and uneven topography and provide no cover for animals. Of the plant communities observed in the project area, desert dry wash woodland is designated as sensitive habitat by California Department of Fish & Game (CDFG) and requires mitigation. Plants observed in this community include ironwood, cat-claw acacia, blue palo verde, creosote, brittlebush, and sweetbush. This habitat was observed along the wash in the southern portion of the property. This habitat and a small wetland located on the property are discussed in more detail in the Reclamation Plan and Environmental Assessment both submitted under separate cover.

No listed or sensitive plant species were observed on the site during the biological survey, nor are they expected to occur due to the disturbed nature of the site. Further, listed species are not known to occur in the general site vicinity according to the 2007 CDFG California Natural Diversity Database (CNDDB). Following cessation of construction aggregate extraction at the site, Pyramid plans to provide the same or greater level of re-vegetation as prescribed by SMARA. Re-vegetation is discussed in more detail, including planned vegetative density and seed mixes, in the Reclamation Plan submitted to Imperial County under separate cover.

#### 3.K Visual Resources

The proposed project area is characterized by desert landscape and low mountain ranges with barren, rocky slopes interspersed with arroyos (washes) and alluvial plains. While the general views are expansive and marked by sparse development, the Cargo Muchacho Mountains have long been an area of active mining and the vistas in the project area reflect the associated surface disturbance.

While the proposed AGO will alter the landscape in the project area, the proposed operation will remove the "unnatural" landforms created and resulting from past mining activities. The project will reduce, reuse, and reclaim or recycle what are considered to be wastes, thus removing waste stockpiles and restoring the area to more natural surface contours.

While the proposed AGO will alter the landscape in the project area, the proposed operation will remove the "unnatural" landforms created during former mining operations. As a result, the proposed aggregate extraction will return the previously mined areas to more a natural topographic profile (Figures 4 and 5).

#### 3.L Socioeconomics

According to the 1988 EA/EIR, mining employs about 1 percent or less of the employed population. Traditionally, mining in Imperial County has involved quarry products such as sand and gravel, stone, clay, gypsum, and limited precious metals production. Currently, there is no job activity on the project site and therefore no employees.

The largest residential center is El Centro, the Imperial County seat, about 45 miles west of the proposed project site. The largest residential center near the project site is Yuma, Arizona, located about 15 miles southeast.

The proposed AGO plans to utilize existing employees to operate the project; therefore, no impacts on the socioeconomics of the area are impacted.

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# 3.M Transportation

The largest transportation artery is Interstate 8, located less than five miles south of the project site. Interstate 8 passes through both El Centro and Yuma. The project site is reached from Interstate 8 by taking State Route 34/Ogilby Road north about four miles to American Girl Mine Road and travelling roughly two miles northeast on American Girl Mine Road. This road is a well-maintained County gravel road and also serves as public access to BLM lands.

The proposed AGO will have truck traffic associated with the removal of mineral materials related to the sale of construction aggregates. The anticipated maximum daily trip-count for aggregate trucks is 250.

Because the area is largely uninhabited there are no schools, parks, or other public facilities in the project area. Fire protection is provided by the Imperial County Fire Department/Office of Emergency Services and the California Department of Forestry. Police protection is provided by the Imperial County Sheriff's Department.

The proposed AGO plans to utilize the same roads already established in the area.

## 3.N Land Use

The Cargo Muchacho Mountains historically and presently are largely devoted to mining and mineral exploration. This area is designated as "Class M" or "Moderate" in use under the California Desert Conservation Act due to past, present, and potential future mining activities. Other land uses in the general area include military and Indian reservation lands.

The project site is zoned S-Open Space with Recreational Use under the Imperial County General Plan. The proposed AGO plans no modification to the intended land use once reclamation is complete and the land is returned to reclaimed land status.

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## 4. RECLAMATION APPROACH

The proposed reclamation approach for the proposed AGO will generally follow the standards of practice and care currently required by SMARA. The Reclamation Plan is based on the five components:

- Establish stable surface and drainage conditions that are compatible with the surrounding landscape; this will be accomplished during operations by material placement and grading.
- Where possible, create surface and substrate conditions using water catchment basins and topographic
  control that are conducive to seed germination, natural plant regeneration, and native plant establishment.
- Use seed of native plant species from local sources and sow into specially prepared locations. These revegetation plots will provide continued natural revegetation on the entire reclaimed site.
- Leave some slopes as talus-like slopes to resemble the surrounding rocky hillsides. These surfaces may be re-contoured for erosion and drainage control, and for slope stability. Partial revegetation will occur through natural plant establishment.
- Consideration of public safety through the stabilization, removal, and/or fencing of structures or landforms that could constitute a public hazard. The proposed AGO will be lowering the un-natural landforms created by the previous mining operation to a more natural topographic profile.

Surface stabilization will focus on contouring and drainage control due to the sparse vegetation cover in this desert region. The contouring will be done in a manner that promotes local runoff into catchment areas and provides localized concentrations of water during precipitation events for use in vegetation establishment. These localized areas will concentrate vegetation and provide similar wildlife habitat as the undisturbed areas around the project site.

### 4.A Reclamation Requirements/Standards for Success

The standards for reclamation success and bond release will be based on the adherence to this Reclamation Plan and the applicable SMARA Sections.

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## 5. RECLAMATION SCHEDULING

Revegetation activities will be timed to take advantage of climatic conditions ideal for seed germination conditions, primarily in the winter/spring months. Since the success of revegetation is typically tied directly to precipitation events and cooler ambient temperatures, all revegetation efforts will occur between October and April each year.

The monitoring program for determining vegetative cover and density will be conducted at an appropriate time of year during the mine operation/reclamation period. The reclaimed areas will be monitored at periodic intervals depending on precipitation and plant germination and growth cycles, but at a minimum of once a year. The monitoring period is proposed to extend to the point of creating a self-sustaining ecosystem but in any event, no longer than 10 years.

Pyramid proposes to conduct reclamation concurrent with mining. In this way the project will minimize overall un-reclaimed surface disturbance and overall reclamation liability. The reclamation will occur following aggregate extraction in discrete areas of sufficient size and there is adequate operating area to complete reclamation.

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# 6. GENERAL RECLAMATION PROCEDURES

The reclamation and revegetation procedures presented are intended to generally follow the standards of practice and care currently required by SMARA. The general procedures include the following items:

- Fine grading of disturbed reclaimed areas to establish water catchment basins;
- Preparing soil surfaces and establishing plots for seeding of native plant species;
- Optimal planning season for perennial shrubs and trees;
- Determining sources of native species seeds;
- Sowing seeds in plots and observations of the appropriate season for best germination and survival;
- Using the appropriate types of heavy equipment and tools needed for revegetation procedures; and
- Calculating the time and costs of revegetation procedures.

#### 6.A Baseline Data

The proposed AGO project area is highly disturbed from past mining activities and the site itself supports mostly disturbed Sonoran creosote bush scrub that has re-established on abandoned mine spoils and tailings. Due to the disturbed nature of the site, the Sonoran creosote scrub has little to very low wildlife habitat quality because the plants are widely spaced over open and uneven topography and provide no cover for

Current vegetation cover at the site can be characterized as very light to sparse. Vegetation such as ocoillo and mesquite has been noted in scarce amounts on the 40 acre parcel. The few plants present on site are the result of the reclamation efforts of the former American Girl Canyon Mining Operations.

# 6.B Site Preparation - Prior to Mining

The previous mine operator implemented a transplant program and had limited success due to the harsh desert climate. The proposed AGO will be mining through the previously disturbed areas and will disrupt some of these transplanted species; however, it is not practical to attempt a second transplant operation for these relatively young plants. Since no new disturbance outside the previously disturbed lands is planned, there will not be a supply of transplants generated by the proposed project.

# 6.C Site Preparation - Prior to Revegetation

Clearing. Following all mining activities and prior to any final grading or revegetation efforts, Pyramid will clear the site of all structures and operational equipment including but not limited to office trailers, conveyor belts, crushing equipment, vehicles, fencing and temporary bollards. Additionally, Pyramid will abandon the water well installed to support the daily operation of the facility.

Grading. Surface preparation prior to planting or transplanting is critical to the success of the revegetation effort. Areas of revegetation will include the catchment basins and slopes or stockpiles. All disturbed areas will be graded along the contour and scarified to break up compacted soil. The roughened surface will aid in the accumulation of seeds by wind and water.

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The revegetation plot areas should be prepared as soon as possible after grading the catchment basins. Plot preparation will consist of loosening approximately 100 square feet of material at the bottom of the catchment basin and then planting seeds.

Fine grading will occur on a concurrent basis in the area mined the preceding season. The intent of the fine grading is to provide water catchment areas of approximately 5,000 square feet. Each of these basins becomes a local source of water collection to stimulate seed germination and revegetation. To prevent disturbance, these areas will be identified with signs that state, "Topsoil – Do Not Disturb". Testing by the previous mine operator determined that the shape of the basins was not critical to the success of plant germination. Therefore, various shapes will be used to achieve a more natural reclaimed surface and provide the necessary water basin profile. The basins will be graded in such a way as to capture a 2-inch rainfall and will take on different basin profiles depending on the slope of the area being reclaimed. In general, the proposed AGO will be removing unnatural stockpiles and the associated slopes and returning them to a more natural topographic profile. The majority of the final reclaimed area will be relatively flat areas in which the water catchment basins will be developed.

Since seed germination depends heavily on the time of year planted, Pyramid intends to have the previous season's mining area graded and planted by no later than October of the next season. In this way, precipitation from the winter/spring months should be available to promote revegetation success.

# 6.D Revegetation Methods

Soils in and around the project site are derived from the host granitic or meta-sedimentary substrate, either as weathered in place or as material deposited as shallow alluvium over bedrock. Soils in the project area are characterized as shallow and poorly developed. Native soils on the project site are covered with stockpiles from previous mining activity and are not generally exposed. Therefore, native topsoil is not available for reclamation efforts. However, Pyramid will stockpile materials that appear to support abundant vegetative life encountered during mining operations for use during reclamation on the north side of the property (Figure 3A).

Extensive testing by the previous mine operator indicated that soil amendments had little or no effect in the success of the revegetation efforts at the Site. Therefore, the proposed AGO does not plan to utilize soil amendments since there is no evidence that any benefit will be achieved. In addition, no pest or disease control is planned. Further, since the proposed AGO will not be disturbing any new, natural ground they will rely on direct purchase of seeds for the appropriate native mix.

Broadcast seeding with equipment tracking will be utilized to revegetate all disturbed areas. A random pattern of pockets and mounds up to three to six inches high will be created via equipment tracking. The broadcasted seed mix will be augmented by seed naturally transported by wind and water. Commercially available native seed species will be used. Broadcast seeding will occur in October to take advantage of winter precipitation and reduce the need for on-site irrigation.

The site appears to support a typical bush scrub in a rocky wash environment. Broadcast seeding will occur over the disturbed areas with the native species and rates shown in the table below. The average precipitation in the area during the wet season should be sufficient for seed germination and root establishment. In order to avoid non-native invasive plants, site irrigation is not encouraged but may be necessary.

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Table 6-1. Proposed Plant Species and Seeding Rates				
Plant Species	Minimum Purity/Germination	Seeding Rate (Pounds/Acre)		
South American creosote bush (Larrea tridentate)	90/40	8		
Burbush, White bursage, burro-weed (Ambrosia dumosa)	80/50	6		
Cheesebush, burrobrush (Hymenoclea salsola)	90/60	4		
Ocotillo (Fouquieria splendens)	50/60	4		
Sweetbush (Bebbia juncea)	50/60	4		

The proposed AGO shall establish, at a minimum, four 100-square meter test plots including two control (no seed) areas. The plots areas will represent a disturbed mining area and will be maintained and monitored. Observations will be included in an annual monitoring report. The initial tests shall compare:

- equipment tracking with reapplied surface material;
- broadcast seeding with reapplied surface material;
- reapplication of surface material only; and
- scarification only (no reapplication of surface material).

The sowing of the seed will require coordination with the grading efforts. The sowing will occur between October and April during the same season as the grading is completed. If the seed is not sown within one year of the completion of grading in an area it will be necessary to hand rake or loosen the soil by another approved method prior to planting.

# 6.E Types of Heavy Equipment and Tools Needed

Pyramid proposes to utilize the equipment listed in the table below and test plot techniques to accomplish the reclamation effort.

	Table 6-2. Types of Heavy Equipment And Tools
Equipment	Activity
Bulldozer	Re-grading mined areas, fine grading for catchment basins, re-grading/chiseling haul road
Motor Grader	Forming catchment basins on roads and flat surfaces, surface drainage ditching and control
Front-end loader	Construct large berms
Water Truck	Dust Suppression and initial seeding water distribution
Pickup Truck	Transport seed and personnel
Shovel, hand rake, seed spreader	For seeding plots

## 6.F Weed Control Plan

The occurrence of non-native plant species may invade the site where active and natural revegetation is taking place. Non-native species can compete with native plant species for available moisture and nutrients. Weed or non-native species of concern may include Russian thistle (tumbleweed), tamarisk, or salt cedar. None of these species were observed during the recent site visit.

The project area is heavily disturbed and the site itself supports mostly disturbed plant species that have reestablished themselves on the abandoned mine spoils and tailings. The issue of invasive or non-native weed

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species does not apply to the proposed AGO project. However, as a precaution, weed occurrence at the proposed AGO will be monitored by periodic visual inspection. If inspection reveals that weeds are becoming established at the proposed AGO, then removal will begin. The visual inspections will be performed in conjunction with revegetation monitoring.

If necessary, weed removal will be accomplished through various methods depending on how the weeds have established. For example, solitary numbers of tree-like species (e.g., tamarisk) will be manually removed and the stumps sprayed with an approved weed killer.

# 6.G Monitoring

The Annual Monitoring Report will measure revegetation efforts, including revegetated areas and areas where revegetation is beginning or being planned for in the future. The Annual Monitoring Report will be kept on file at the proposed AGO and will be submitted to the lead agency as part of overall compliance with the Reclamation Plan and associated conditions at the end of reclamation or as requested by the lead agency. Revegetated areas will be assessed using success criteria discussed in the next section.

Revegetation efforts will be monitored annually in the late spring (e.g., towards the end of the wet season) for a minimum of five years after seeding. During the first two years of revegetation, qualitative assessments will be made by Pyramid to determine the need for re-seeding, weed control and/or plant-specific fencing. Following two years of revegetation efforts, the surviving native species will be evaluated quantitatively for relative success as determined by diversity and density success criteria. Plant transects will be carried out in order to determine the species richness, vegetation cover, and shrub density of each native plant species. Each transect line will be 100 meters long and one meter wide. Densities will be estimated along each transect by counting each perennial species within a one square meter area adjacent to each one meter segment. These data will be compared to the baseline data to determine success of the revegetation effort.

If the monitoring indicates revegeration is not successful, individual specimens or areas will be remediated. Remedial actions may include removal of non-native weed species, reseeding, and herbivore protection. This procedure will be performed annually thereafter for years three through five and will continue until revegetation is consistent with success criteria. The revegetation effort must also be self-sustaining. A minimum of five years has been selected as the length of time appropriate to ascertain the stability and ultimate sustainability of the revegetated plant community. As part of the overall monitoring program, observations will be summarized annually. This schedule may change depending on the revegetation results and whether or not success was attained. Monitoring and revegetation results will be reporting to the lead agency as necessary as well as in any Annual Monitoring Report requested by the lead agency.

## 6.H Success Criteria

Section 3705 (m) of the California SMARA Policies and Procedures states the following:

"Success of revegetation shall be judged based upon the effectiveness of the vegetation of the approved end use, and by comparing the quantified measures of vegetative cover, density, and species-richness of the reclaimed mined-lands to similar parameters of naturally occurring vegetation in the area...80% confidence level on a site-by-site basis..."

Based on the definition above, success criteria will be founded on the revegetation results compared to the baseline vegetation data. Natural variation in desert environments is significant. At the time of the site visit, vegetative coverage on the proposed AGO site was visually estimated to be less than 10%. When revegetation is completed for a given area, the density will be assessed and compared to the 80% confidence level of the baseline per SMARA Section 3705 (m). The surviving perennial plant species will be evaluated

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annually for five years for relative growth as measured by plant diversity and density. Areas will receive remedial attention as necessary.

Successful revegetation will be attained when the reseeded areas have accomplished the following within the transect areas:

- 15 percent cover by native species (higher than the estimated baseline);
- 25 percent diversity or a minimum of 2 perennial native plant shrub species;
- 15 percent density;
- Less than 15 percent cover of non-native plant species; and
- Recruitment of seedlings of native plant species demonstrating a positive trend in cover and diversity.

# 7. RECLAMATION IMPLEMENTATION

The proposed AGO plans to conduct reclamation on a concurrent basis as the resource is extracted and sufficient area to perform reclamation is developed. Reclamation earthwork will occur over a period of months in order to allow seed sowing to occur between October and April in the reclamation areas. This methodology will provide the best opportunity for seed germination and maximize the chances for successful revegetation of the reclaimed areas. It should be noted that prior to any regrading or revegetation, structures and operational equipment will be removed from the site.

# 8. ESTIMATED RECLAMATION COSTS

A reclamation cost estimate has been prepared to quantify the annual reclamation liability for the purpose of supporting the financial assurance requirement as defined in SMARA §2773.1.

The reclamation cost estimate is based on third party execution of the work in order to ensure that adequate funds are available in the event Pyramid is unable to fulfill their reclamation responsibilities. The labor rates are based on published United States Department of Labor rates for Imperial County and equipment production cost rates published by RS Means. Professional labor is based on current industry rates.

The reclamation cost estimates provided in this section include but are not limited to the following activities: reclamation grading, abandonment of the water well, revegetation, and removal of all structures and operational equipment.

## **8.A Labor Cost Data**

The labor rates are based on the United States Department of Labor rates for Imperial County dated November 23, 2007. The wage rate burden includes Federal Unemployment, State Unemployment, California Workman's Compensation, and Federal Insurance Contributions Act taxes (FICA). Fringe benefits include but are not limited to items such as health care, retirement, and vacation, as established by the United States Department of Labor. The wage rates used for the reclamation calculation are included in Table 8-1.

Company of the second s	(Dated November 23, 2007)			
	Base Wage (\$/Hr)	Fringes (\$/Hr)	Hourly Rate (Rounded To Nearest \$	
Labor Rates				
Laborer (laborer group 2)	\$25.18	\$13.25	\$38	
Power Equipment Operator (labor group 13)	\$36.93	\$15.82	\$52	
Dozer Operator (power equipment operator Group 8)	\$36.54	\$15.82	\$52	
Motor Grader Operator (power equipment operator Group 10)	\$36.66	\$15.82	\$52	
Front End Loader Operator (power equipment operator Group 13)	\$36.93	\$15.82	\$52	
Backhoe Operator (power equipment operator Group 4)	\$36.21	\$15.82	\$52	
Professional Labor <sup>1</sup>				
Revegetation Specialist			\$100.00	
Drilling Contractor			\$50.00	

Based on consultant rates

# 8.B Equipment Cost Data

The equipment rates used for the reclamation cost estimate are based on Ownership Operating Rates as published in the RS Means- Facilities Construction Cost Data (2004) and adjusted for inflation to 2008 using the Consumer Price Index Multiplier of 15 per cent. The rates are based on average terrain and ground conditions since the majority of the reclamation will be on shallow sloping terrain and previously disturbed ground. Table 8-2 lists the equipment type planned for the reclamation work and the rates used for the reclamation cost estimate.

Туре	Model/Size	Hourly Operating Cost (rounded to the nearest \$)	
Bulldozer	CAT D-8	\$53	
Motor Grader	CAT 140	\$42	
Front End Loader	CAT-980	\$66	
Backhoe	CAT-428	\$19	
Water Truck	N/A	\$48	
Pickup Truck!	N/A	\$21	
Drill Rig	N/A	\$2,500 <sup>1,2</sup>	
Highway Flatbed	N/A	\$63	

<sup>\*</sup>Estimate, not from RS Means.

# **8.C Crew and Equipment Cost Assumptions**

The crew and equipment cost combines the labor and equipment cost data to provide a crew cost for each type of crew. Table 8-3 lists the crews by number and includes a description of the crew make-up.

	Table 8-3. Labor and Equipment (cost p	er hour)
Crew	Grew Make-Up	Labor & Equipment Cost/Hour (rounded to the nearest \$)
1	Bulldozer with Operator	\$105
2	Motor Grader with Operator	\$94
3	Front End Loader with Operator	\$118
4	Backhoe with Operator	\$71
5	Water Truck with Operator	\$100
6	Pickup and 2 Laborers	\$97
7	Revegetation Specialist	\$100
8	Drill Rig and 1 Drilling Contractor	\$2,550
9	Highway Flatbed and 2 Laborers	\$139

## 8.D Reclamation Unit Production Rates

The unit production rates are estimated for mined areas, plant/road areas, and the well parcel separately. The crew number and associated tasks are listed in Table 8-4.

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<sup>¿</sup>Estimate based on abandonment production of 50 feet per hour

Table 8-4. Equipment and Manpower Units (hrs)/acre					
Crew	Tasks	Mined Area	Plant/Road Area	Well Parcel	
1	Re-contour, catchment basins, ripping	2	1.5	0	
2	Re-grading, catchment basins	2	2	0	
3	Large berms	0	2	0	
4	Fence removal, small berms	2	0	1	
5	Dust Suppression and Watering	4	4	1	
6	Labor, seeding	4	4	0	
7	Monitoring, vegetation inspection	2	2	0	
8	Well Abandonment	0	0	8	
9	Structure and Operational Equipment Removal	5	0	0.5	

# 8.E Reclamation Schedule and Cost Estimates

The reclamation plan is developed around a concurrent reclamation process which allows previously mined areas to be reclaimed prior to the end of mine life. It is important to note that well abandonment is not included in the per acre costs but rather follows as a lump sum cost.

The direct costs per acre are presented in Table 8-5.

Crew #	Costs Per A	Lump Sum Cost (rounded to the nearest \$) Well Parcel	
Crew #	Mine Area		
1	\$210	\$158	\$0
2	\$188	\$188	\$0
3	\$0	\$236	\$0
4	\$142	\$0	\$71
5	\$400	\$400	\$100
6	\$388	\$388	\$0
7	\$200	\$200	\$0
8	\$0	\$0	\$20,400
9	\$695	\$0	\$70
Seed (lump sum)	\$110	\$110	\$0
TOTAL DIRECT	\$2,333	\$1,726	\$20,641

Indirect costs are added on a percentage basis as outlined in the SMARA financial assurance guidelines Appendix A-1. The inclusion of indirect costs as a percentage of direct costs is outlined in Table 8-6.

Indirect Costs	Costs Per A	Lump Sum Cost		
Per Acre	Mine Area	Plant/Road Area	Well Parcel	
Direct costs per acre	\$2,333	\$1,680	\$20,641	
Supervision – 6%	\$140	\$101	\$1,238	
Profit & overhead - 13%	\$303	\$218	\$2,683	
Contingency – 10%	\$233	\$168	\$2,064	
TOTAL COSTS	\$3,009	\$2,167	\$26,626	

The reclamation costs and schedule are summarized by area in Table 8-7.

Location	Acres	Cost	Year Reclaimed
Plant Site	5	\$15,045	END
Haul Road Year 1-10	3	\$6,501	6
Year 1 Mining	25	\$75,225	2
Year 2 Mining (including well parcel)	5	\$41,671	4
Year 3-10 Mining	0	\$0	
Access Road	1	\$2,167	END
Long-term Monitoring—10 years	N/A	\$80,0001	Post-Reclamation
PROJECT TOTAL	40	\$220,609	

<sup>1</sup>Estimate based on 80 hours of monitoring annually for 10 years, \$100/hour.

## **Financial Assurance**

Pyramid Construction will submit an Irrevocable Letter of Credit from Rabobank, N.A. (1498 West Main Street, El Centro, California 92243) for the 10-year reclamation cost estimate of not less than \$220,609.

## 9. LIMITATIONS

# **Report Limitations**

This document was prepared solely for Pyramid Construction in accordance with professional standards at the time the services were performed and in accordance with the contract between Pyramid Construction and Brown and Caldwell dated September 21, 2007. This document is governed by the specific scope of work authorized by Daryl Dickerson; it is not intended to be relied upon by any other party except for regulatory authorities contemplated by the scope of work. We have relied on information or instructions provided by Pyramid Construction and, unless otherwise expressly indicated, have made no independent investigation as to the validity, completeness, or accuracy of such information.

### REFERENCES

Brown and Caldwell, June 21, 2004. Draft Plan of Operations, Pyramid Construction, Ogilby Project, Imperial County, Anzona.

Brown and Caldwell. April 7, 2008. Well Siling Study Report, Proposed American Girl Operation, Imperial County, California.

California Department of Conservation, January 16, 1997. Surface Mining and Reclamation Act Financial Assurance Guidelines.

RS Means., 2004. (Edition 19). RS Means Facilities Construction Cost Data.

United States Department of Labor, November 23, 2007. Department of Labor Rate for Imperial County, California.

# PERSONS AND AGENCIES CONSULTED

United States Bureau of Land Management, El Centro Field Office

Walter Todd, III - Environmental Assessment Daniel Steward - Biology Jesse Irwin - Biology

Carrie Simmons - Cultural Resources

United States Army Corps of Engineers Laurie Monarres - 404/401 permit exemption

California Regional Water Quality Control Board, Region 7 Joan Stormo - Waste Discharge Requirement waiver

County of Imperial Planning Department Patricia Valenzuela - SMARA and Conditional Use Permit

County of Imperial Air Pollution Control District Jesus Ramirez - Dust Plan

County of Imperial Public Works Department Joe Hernandez - Traffic Control Plan

# **FIGURES**

Figure 1. Vicinity Map Figure 2. Site Map Figure 3A. Existing Site Conditions Figure 3B. Detail of Well Site Figure 4. Cross-Sections Figure 5. Post Reclamation Grading Plan

# APPENDIX A

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A

# APPENDIX B

# 9. LIMITATIONS

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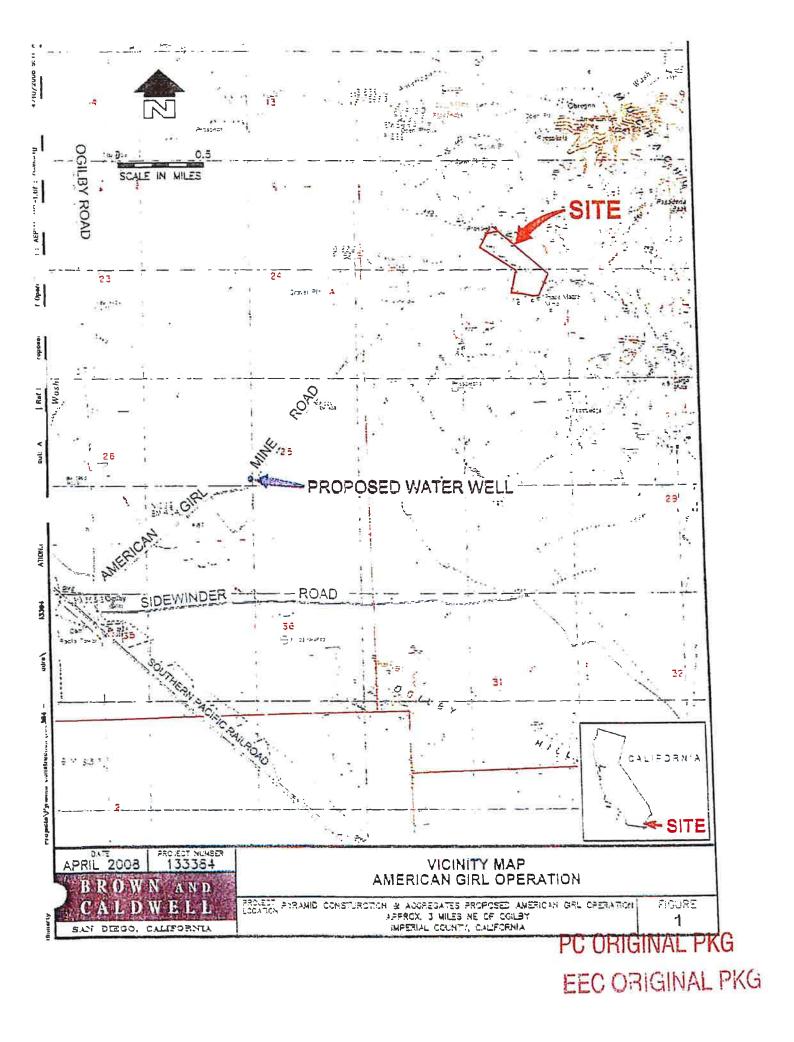
County of Imperial Planning Department
Patricia Valenzuela - SMARA and Conditional Use Permit

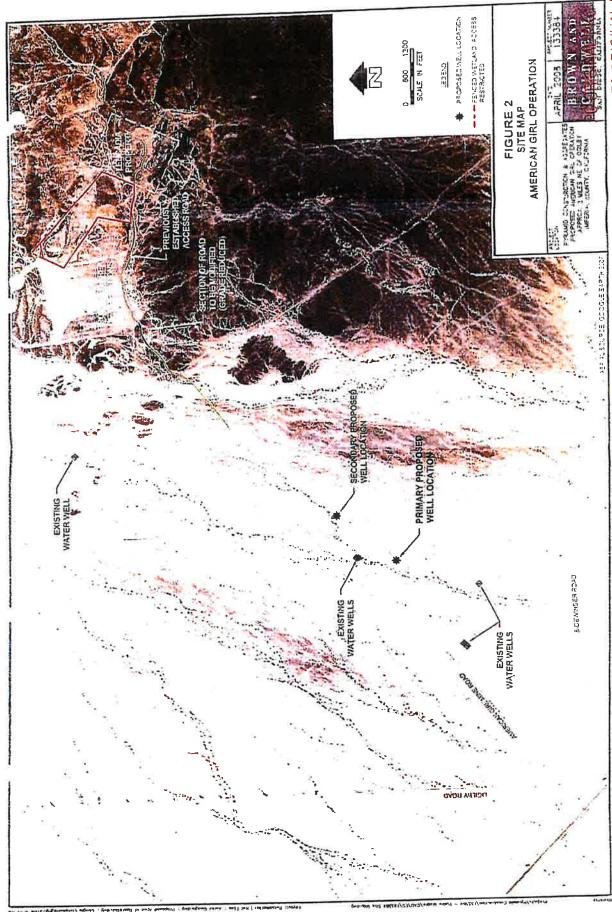
County of Imperial Air Pollution Control District Jesus Ramirez – Dust Plan

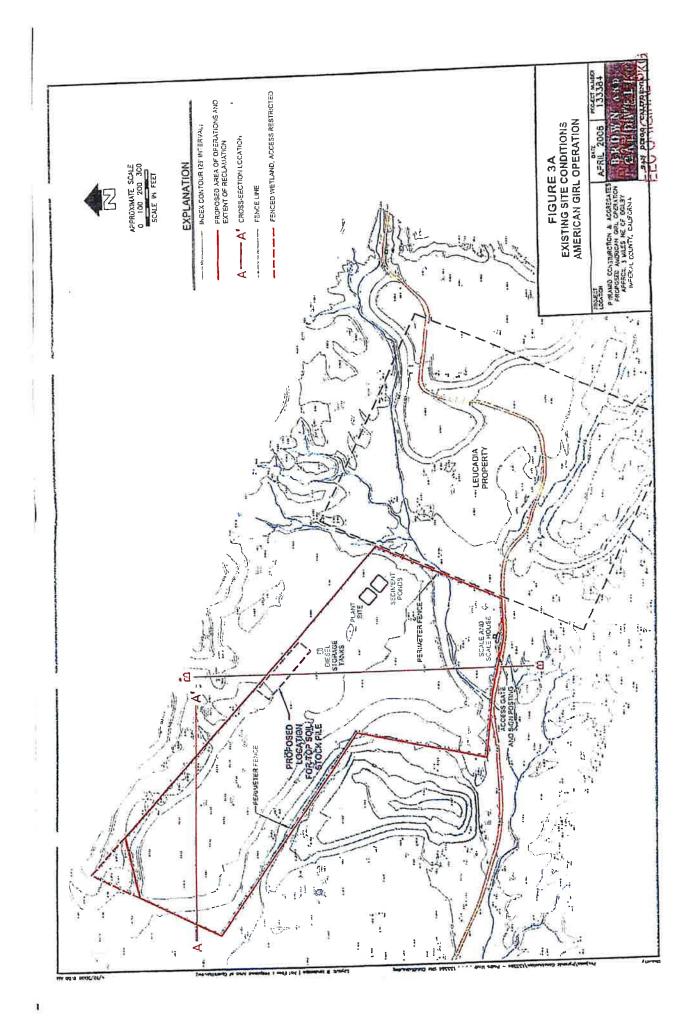
County of Imperial Public Works Department Joe Hernandez - Traffic Control Plan

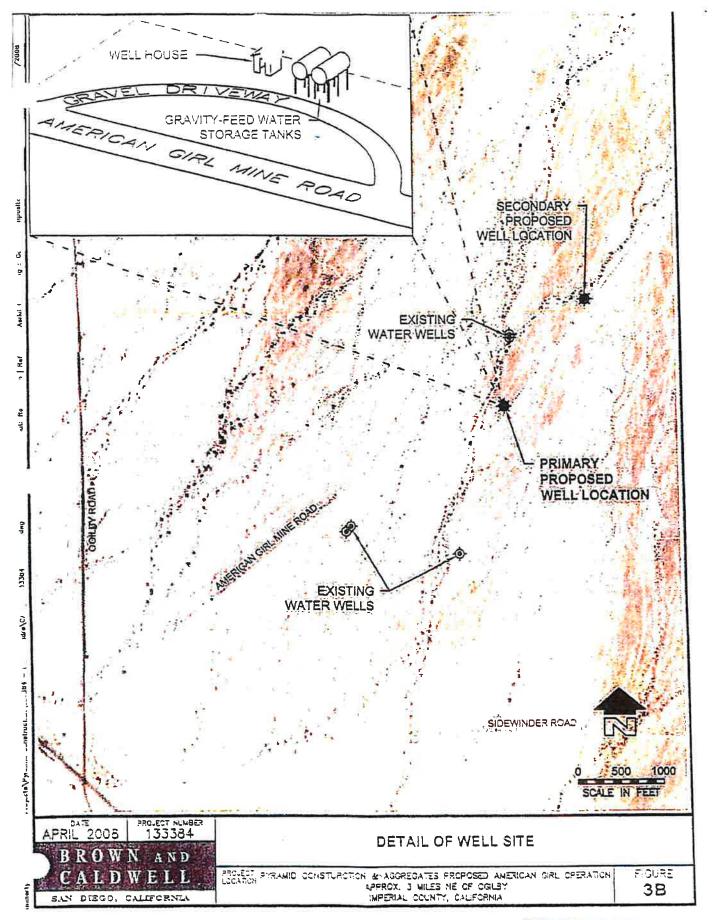
# **FIGURES**

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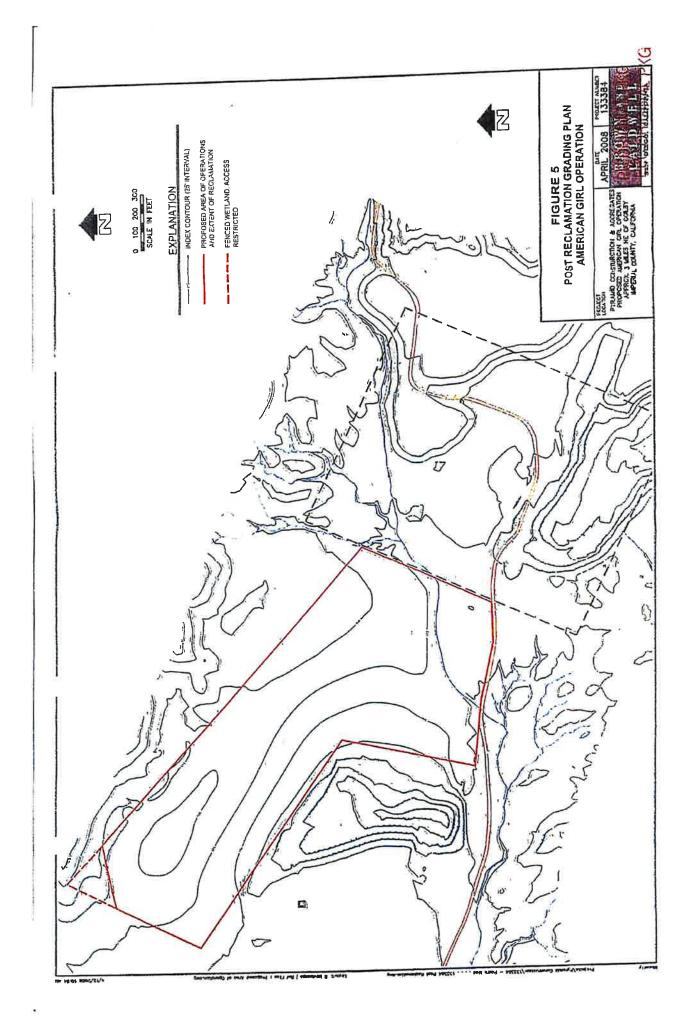






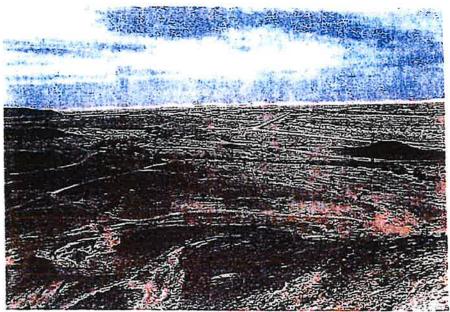
(Part Annal) FIGURE 4
CROSS-SECTIONS
AMERICAN GIRL OPERATION FIFAVIOR SECTION B-B' SECTION A-A' E E E E E E ELEVATION (Inot bind)

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# APPENDIX A





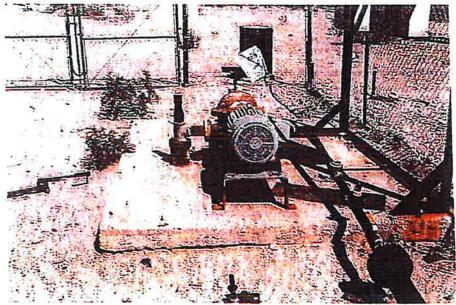
View facing southwest of the study area from Vitrefrax Mountain. The prominent road near the center is American Girl Mine Road.



View facing east of the American Girl Operation mine site from Vitrefrax Mountain. Note crystalline rock exposures in the foreground and background surrounding the mine site.



Well 15S20E25N001S inside fenced compound with a generator. The well did not appear to be operational.



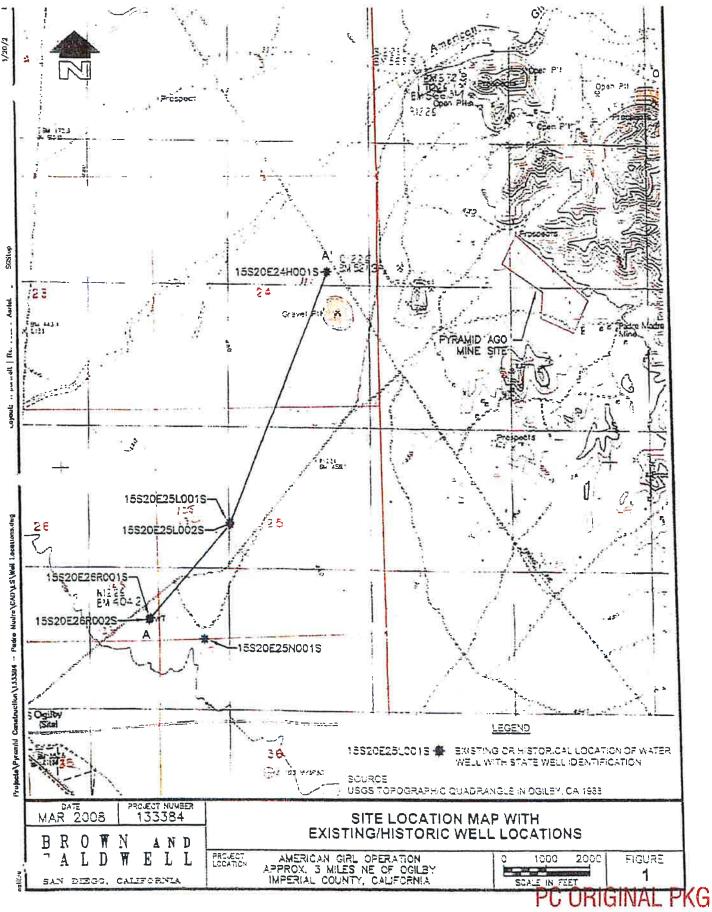
Well 15S20E26R001S inside fenced compound with a pump and piping. The well did not appear to be operational.



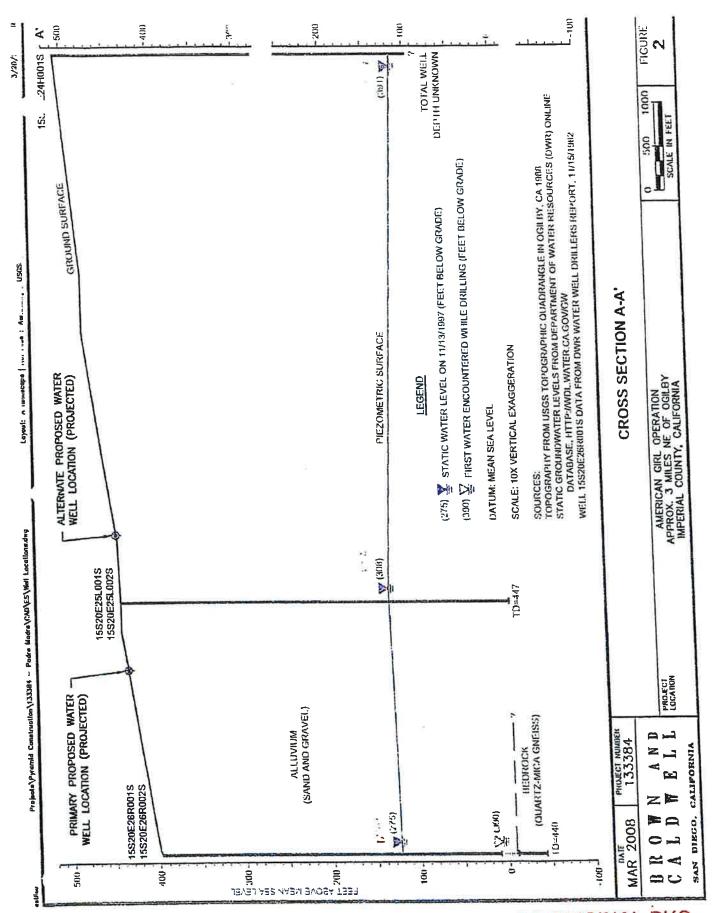
View facing southwest of the proposed AGO water well site. The proposed well site is the unvegetated area right of the bushes to the side of American Girl Mine Road.



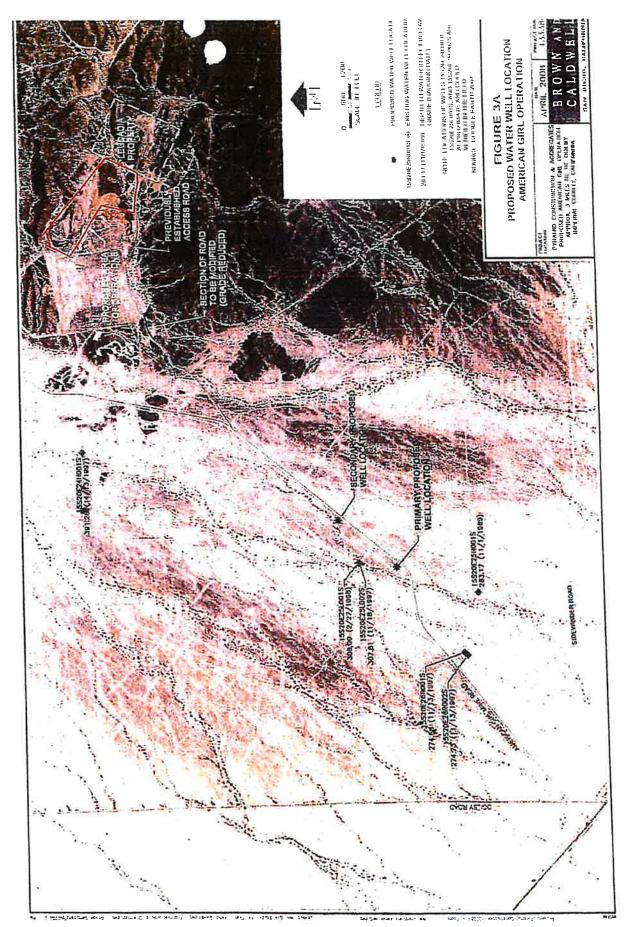
View facing north of the proposed AGO water well site from American Girl Mine Road (foreground). The proposed well site is the unvegetated area beyond the foreground bushes.

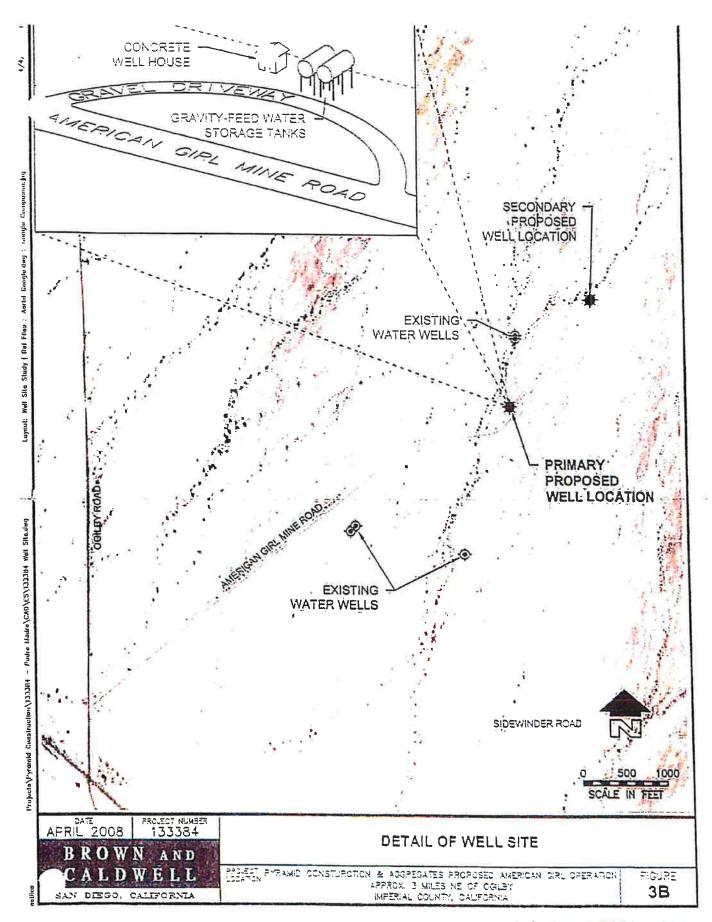


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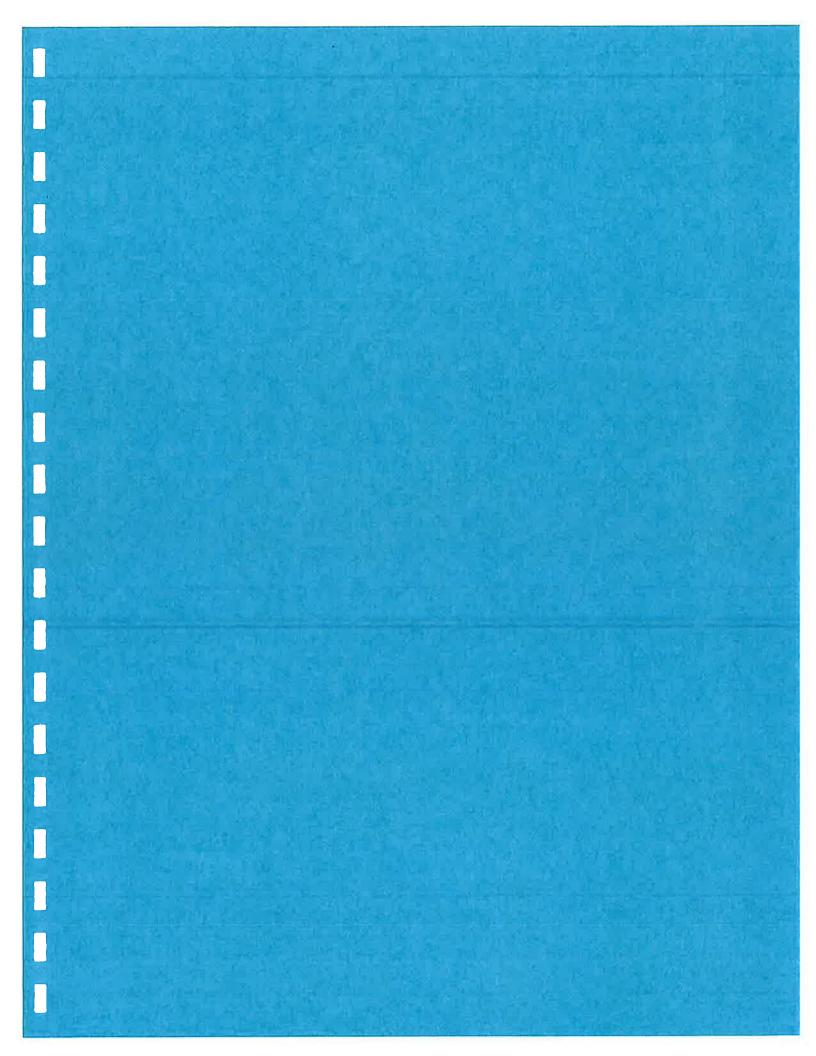


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PC ORIGINAL PKG EEC ORIGINAL PKG



### PLAN OF OPERATIONS

Prepared for
Pyramid Construction
American Girl
Imperial County, California
April 11, 2008



RROWN AND CALDWELL

9665 Chesapeake Drive, Suite 201 San Diego, California 92123

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#### PLAN OF OPERATIONS

### 1. INTRODUCTION

Pyramid Construction (Pyramid) is submitting this Plan of Operations as part of the process to finalize a competitive mineral material sale contract for the proposed American Girl Operation (AGO). This Plan of Operations has been prepared to comply with the Title 43 Code of Federal Regulations (CFR) Part 3600.

AGO is a proposed construction aggregate mining and processing operation located in Imperial County, California (Figure 1). A Reclamation Plan has been submitted as a separate document to the Imperial County Planning/Building Department. The Reclamation Plan has been prepared to comply with the requirements of Imperial County and the Surface Mining and Reclamation Act of 1975 (SMARA), as amended.

The proposed AGO is located in an historic mining district with mining to be conducted entirely on lands mined as the former American Girl- Padre Madre Mining Operation. The proposed area of disturbance (Figure 2) has been the subject of extensive environmental studies conducted previously in support of the former American Girl-Padre Madre Mining Operation (BLM EA No. CA-067-88-65).

#### 2. APPLICANT INFORMATION

# 2.A Individual Completing Application

Mr. Daryl Dickerson

Owner

Pyramid Construction and Aggregates, Incorporated

Application Date: January 2008

# 2.B Applicant's Business Address

Pyramid Construction and Aggregates, Incorporated 839 Dogwood Road Heber, California 92249

# 2.C Applicant's Business Telephone Number

(760) 337-5839

# 2.D Corporate Information

Corporate Name:

Pyramid Construction and Aggregates, Incorporated

839 Dogwood Road Heber, California 92249

Telephone Number: (760) 337-5839

Owner:

Mr. Daryl Dickerson

Pyramid Construction and Aggregates, Incorporated

839 Dogwood Road Heber, California 92249

# 2.E Partnership Information

Not applicable.

# 2.F Authorized Field Representative

Pyramid personnel will be onsite at all times during active mining or processing operations and will be responsible for ensuring compliance with this Plan of Operations and associated Reclamation Plan.

#### 3. PROJECT OWNERSHIP AND SURFACE DISTURBANCE

### 3.A Project Location

The proposed AGO is located in an uninhabited area of the southern Cargo Muchacho Mountains (about 15 miles northwest of Yuma, Arizona, and 45 miles east of El Centro, California) in an un-surveyed portion of Township 15 South Range 20 East, of Imperial County, California (see Figure 1). The proposed AGO is located entirely upon previously disturbed lands associated with the former American Girl Mine-Padre Madre Mining Operation, which was part of the American Girl Canyon Mining Area. The proposed AGO will mine a portion of existing overburden stockpiles remaining at the site and process these materials for sale as construction aggregate in the local Imperial County market. The project will reduce, reuse, and reclaim or recycle what are considered to be wastes, thus removing waste stockpiles and restoring the area to near-original surface contours.

#### Estimated Acreage of the Proposed Disturbances

The estimated areas of disturbance associated with the project are listed in Table 3-1 and shown on Figure 2. The mining disturbance associated with the proposed AGO will affect previously reclaimed lands and will be focused on mine overburden stockpiles created by historic mining operations. Mining of these stockpiles will return the area to near original land surface contours or road base elevation.

Location	Acres	Year Reclaimed
Plant Site	5	Concurrent
Haul Road Year 1-5	3	END
Year 1 Mining	25	2
Year 2-3 Mining	5.5	4
Year 4-5 Mining	0	6
Year 5-10 Mining	0	N/A
Access Road	1	END
Well*	0.5	END
Long-term Monitoring	N/A	Post-Reclamation
Project Total	40	

<sup>\*</sup>The proposed well is located on a non-contiguous parcel of land. See Figure 2.

# 3.B Surface Ownership

The land surface is owned by the federal government of the United States and is administered by the Department of the Interior, Bureau of Land Management (BLM). The BLM has the right to dispose of sand, gravel, and other mineral materials pursuant to the Act of July 31, 1947, as amended (30 U.S.C. 601 et. seq.), commonly referred to as the Materials Act. The BLM can award non-competitive or competitive sales

contracts pursuant to 43 CFR 3600. Included with such a contract is the right to occupy the land to the extent necessary for fulfillment of the contract.

# 3.C Use and Occupancy of Public Lands

As required by the BLM's regulations governing Use and Occupancy under the Materials Act, 43 CFR 3600, this section of the Plan of Operations describes the existing and proposed uses and occupancies of applicable public lands to be mined under this Plan of Operations. The types of existing and proposed uses and occupancies on public lands include portable buildings, portable storage facilities, and temporary fences. These proposed uses and occupancies are depicted on Figures 3A and 3B, and a typical cross-section is provided in Figure 4.

Portable buildings will be used for beneficiation operations, administrative, communications, maintenance, and security functions. Storage facilities will be used to secure, safely store, and protect mining equipment, supplies, and materials from improper or unauthorized use, theft, vandalism, and exposure to weather. Fences will be constructed to comply with Federal, State and local regulatory and safety requirements, to protect employees, the public, and wildlife, and to provide security for Pyramid's operations and the mining equipment, supplies, materials, and mineral products present on the site. More detailed descriptions of the particular uses and occupancies on public land are provided throughout Section 5.0 of this Plan of Operations.

The proposed AGO is approximately 45 miles east of El Centro, California, and roughly 15 miles northwest of Yuma, Arizona (Figure 1). Access to the site is via Interstate 8 to the Ogilby Road exit, traveling four miles north on paved Ogilby Road/State Route S34, and traveling three miles northeast from Ogilby Road along American Girl Mine Road, a county gravel road. Pyramid's mining-related uses and occupancies of public land will continue for the duration of the Project until reclamation is completed and approved by the Imperial County Planning Department located in El Centro, California.

#### PLAN OF OPERATIONS

### 4. HISTORIC MINING AND PRIOR DISTURBANCES

The proposed AGO is located in an area not previously surveyed by the United States Geological Survey (USGS) but that is estimated to be Section 19, Township 15 South Range 20 East, Imperial County, California on a portion of the former American Girl Mine-Padre Madre Operations. The associated water well is located in Section 25, Township 15 South Range 20 East, Imperial County, California. This district has a long history of mining-related activities including exploration, prospecting, pilot testing, and commercial production using both open pit and underground mining methods. Mining in the district dates back over 50 years with the most recent commercial production (American Girl Mine-Padre Madre) ceasing in 1996.

The proposed AGO plans to operate within the reclaimed land boundary and will not disturb any native ground (Figure 2). Instead, Pyramid plans to mine the existing overburden stockpiles remaining at the site and process these materials for sale as construction aggregate in the local Imperial County market. The project will reduce, reuse, and reclaim or recycle what are considered to be wastes, thus removing waste stockpiles and restoring the area to a more original land form.

#### 5. OPERATING PLAN

# **5.A** Summary of Proposed Operations

The proposed AGO will mine existing overburden stockpiles, at the site and process these materials for sale as construction aggregates in the local Imperial County market. The project objective is to reuse and reclaim all saleable resources via removal of the stockpiles within a minimum of two years and up to 10 years, depending on market conditions.

Pyramid projects a total of approximately one million cubic yards<sup>1</sup> of material are available for mining as construction aggregate materials within the 40-acre footprint of the operations and within the limits of the current contract with BLM. The maximum mining rate is established by 43 CFR 3600 and is dependent upon the BLM award of competitive mineral material contracts to Pyramid as well as approval of this Plan of Operations and associated Reclamation Plan (submitted to Imperial County under separate cover).

The operation is planned as a temporary construction site and will have no permanent foundations, structures, or support facilities. All materials, including sanitary and non-sanitary wastes, maintenance wastes, including waste oil, will be removed from the site on a daily or weekly basis or other logical frequency. All operating facilities will be temporary in nature and will be hauled in on over-the-road transports.

# 5.B Period of Operations

Mobilization of the proposed AGO will begin when applicable Federal, State, and local approvals have been obtained. Pyramid anticipates project mobilization and initial commercial sales to commence in the second quarter of 2008. Reclamation activities will occur in parallel with mining and material beneficiation operations with final reclamation planned for completion following the cessation of operations at the site. Based on the resource and extraction rates described in this Plan of Operations, the life of the proposed AGO is planned to be two years but may extend for up to 10 years. This operating life estimate is dependent upon a variety of economic variables, including production costs, material sales contracts, and commodity prices.

# **5.C** Project Access

Access to the proposed AGO will be over the existing county roads (i.e., same road originally used for access to the American Girl Mine- Padre Madre Operation). A short section of unpaved access road will require some dust control upgrades including the possible use of industry-standard chemical dust control treatments such as magnesium chloride (Figure 2). Additionally, a short section of road will be re-graded along the County route to provide access to the process plant and material load-out area as shown in Figure 2. The road will not be relocated but rather the grade of an approximately 300 foot section will be reduced to better accommodate haul trucks that will pass through the area. This process will not be achieved through blasting but rather "ripping" the grade with mining equipment. Excess materials resulting from this grade reduction will be processed as saleable material. Additionally, a small access road will be constructed for site access and

<sup>1</sup> Estimated available volume based on visual assessment, analytical data and field mapping. Estimate accurate to +/-50%.

the scale house. This road will be constructed within the confines of the property and will not affect the existing County road.

Based on communication with the United States Army Corps of Engineers (USACE), construction for this road will be performed under the authority of Nationwide Permit Number 14 and is therefore exempt from 404 and 401 permitting requirements. Further, since the former American Girl cyanide leach piles are not on the AGO parcel and there is no indication of cyanide being used historically along the roads related to the AGO parcel, the site is exempt from a Water Discharge Requirement (WDR) permit.

For potential discharges to surface waters outside of the site, the federal NPDES permit application Forms 1 and 2D will be completed and submitted to the California SWRCB.

### 5.D Proposed AGO

Pyramid proposes to mine and process all the overburden and stockpiled materials within a small portion of the confines of the formerly mined American Girl Mine-Padre Madre Mine Operation and will not disturb any native or previously undisturbed ground. The extraction of materials from these stockpiles will be accomplished with conventional mining methods using loaders and haul trucks. No blasting will be required. The operation will include mining, crushing, screening, and washing, with future provision for a portable asphalt batch plant.

Each of the stockpiles will be mined systematically in order to facilitate concurrent reclamation in parallel with the proposed operation. Approximately one million cubic yards of stockpiled material is estimated and planned for extraction under the current contract with BLM.

Material processing will include crushing and screening, and washing when necessary, to meet the required specification of the respective construction aggregates being sold. Some materials will require crushing and screening as well as washing to remove fines, while others may require only washing. All plant reject material will be temporarily stockpiled in the north portion of the site (Figure 3A) for eventual spreading over the reclamation areas and graded into the final contours.

### 5.D.1 Stockpile Excavation

All mining will occur at elevations above natural ground elevation (i.e., no new open pits will be created at the site as a result of the mining operation). The stockpile extraction will be accomplished with conventional surface mining equipment including front-end loaders, haul trucks, bulldozers, motor graders, and water trucks. Table 5-1 below lists the proposed mining equipment fleet. The maximum annual extraction rate is dictated by the BLM's material sales contract limitations and market demand. The maximum daily extraction rate is planned at 4,500 cubic yards.

Table 5-1. Proposed Mining Equipment					
Equipment Type	Model Equivalent	Quantity			
Front-End Loader – 7 cubic yards	CAT 980	1			
Motor Grader	CAT 140	1			
Haul Truck – 35 ton	CAT D350	3 (future)			
Buildozer	CAT D8	1			
Generator	Cummins QSX15-G9 (725 kW)	1			
Water truck	4,000 gallon	-1			
Water pull	5,000 gallon	1			

Approximate post-mining contours are depicted in Figure 5.

#### 5.D.2 Plant Reject Materials

Plant reject/wash material will be stored in a small sediment pond as shown in Figure 3A. All plant reject materials will be used as part of concurrent reclamation and graded into the final reclamation contours.

#### 5.D.3 Haulage and Access Roads

Haulage and access roadways will follow existing access and exploration roads. All mine roads will be developed to an operating width of 25 feet which is no greater than the current approximate width of the roads leading the site. Road grades will be limited to overall gradients of eight percent or less.

Roadway drainage will be intercepted by haul road drainage channels, which will be incorporated within the roadway construction to promote drainage along the inside edge of the roadway. These channels will route runoff from precipitation to the nearest sediment control best management practices (BMP). The combined use of these channels with additional stormwater BMPs, such as temporary straw bale diversion and/or sedimentation ponds, will control sediment transport during high precipitation events.

Ambient roadway dust emissions will be suppressed using water application and industry-standard chemical roadway dust suppressant agents (e.g., magnesium chloride) where necessary.

Construction techniques will ensure compliance with all Federal, State and local safety regulations.

### 5.D.4 Crushing and Screening Facility

A crushing and screening facility will be used to manufacture construction aggregate materials to meet specific market needs. Mined stockpile material will be delivered directly to the crushing plant feeder hopper. Material will be fed from the hopper into the jaw crusher and then conveyed to the portable screen plant and either routed to a product pile or to a secondary cone crusher, which returns material to the screen plant. The entire crushing and screening plant is designed as a portable system such that no permanent foundations are required, and the plant can be relocated as necessary. Table 5-2 below lists the anticipated crushing and screening equipment.

The plant production is limited on an annual basis by the BLM's material sales contract limitations and by market demand. The maximum daily production is planned to be 4,500 cubic yards.

Table 5-2. Proposed Process Equipment Including Equipment Type and Description	
- 3 144 Pioneer jaw crusher (1 50 HP)	
- 7' x 20' JCI triple deck screen, Model 7203-38 (50 HP)	
- 1400LS JCI cone crusher (300 HP)	
- 48" x 30'jaw under crusher conveyor (30 HP)	
- 42" x 60' conveyor (30 HP)	
- 60" x 25' screen conveyor (30 HP)	
- 36" x 25' screen conveyor ( 15 HP)	
- 36" x 1 5' screen conveyor ( I0 HP)	
- 42" x 30' cone crusher feed conveyor (30 HP)	
- 48" x 15' cone under crusher conveyor (20 HP)	
- 30" x 30' portable conveyor (I0 HP)	

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2- 30" x 60' portable con	veyors (15 HP each)
1- 30" x 100' radial stack	ing conveyor (25 HP)
1- 36" x 30' portable con	veyor ( I5 HP)
1- 36" x 60' portable con	veyor (20 HP)
1- 36" x 100' radial stack	
1- Caterpillar generator	set, powered by a Cat diesel-fueled engine, Model 3412CDITA, turbocharged, rated at 1,186 HP@ 1,800 rpn
1- JCI 7 x 20 Screening	Plants sin 2006165
1- Thor 36 x 150 telesco	pic portable radial
12- RF 36 x 60 stackabl	e conveyor
1 – riprap separator	
1 –Ford F800 (maintena	nce truck)

### 5.D.5 Material Washing

Product specifications may require washing of materials in order to remove fines. Plant reject/wash material will be stored in a small sediment pond as shown in Figure 3A. Once dried, the fines materials will be incorporated into soils used for final reclamation.

### 5.D.6 Fuel and Other Supply Transport and Storage

Fuel and other supplies to be used at the proposed AGO include diesel fuel, motor oil, and lubricating compounds. Fuels to be stored at the site will be contained in two 12,000-gallon diesel storage tanks (Figure 3A). A secondary containment area will be constructed around the storage tanks to hold 100 percent of the capacity of the largest single-walled tank as well as the area displaced by all other tanks in the secondary containment. This is in addition to calculated freeboard to accommodate the average daily rain event. All refueling of vehicles will occur within the bounds of the containment area. All appropriate State and local storage permits will be obtained prior to delivery to the project area.

Daily fuel consumption estimates are included in Table 5-3 below.

Equipment Type	Model Equivalent	Quantity	Estimated Fuel Consumption / Hr / Vehicle (gallons)	Hours of Operation Per Day	Estimated Fleet Fue Consumption / Bay (gallons)
Front-End Loader – 7 cubic yards1	CAT 980	1	11.25	8	90
Motor Grader <sup>1</sup>	CAT 140	1	5.05	8	40.4
Haul Truck - 35 ton1	CAT D350	3	9.25	8	222
Bulldozer <sup>1</sup>	CAT D8	1	8.75	8	70
Generator <sup>2</sup>	Cummins QSX15-G9 (725 kW)	1	39.3	8	314.4
Water truck1	4,000 gallon	1	5.8	8	46.4
Water pull1	5,000 gallon	1	6.5	8	52
	L	Total Dai	ly Consumption (gallons)		835.2

Source: (1) Cat Handbook, Edition 31 (assumes "medium" duty")

(2) Diesel Service and Supply, Brighton, Colorado (assumes 3/4 load

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A Spill Prevention Control and Countermeasure (SPCC) Plan will be prepared prior to start-up to comply with 40 CFR Part 112.

# **5.D.7** Offices and Support Facilities

The portable crushing and screening plant includes a small control room. No other office facilities are planned for the site. The site will operate as a construction site on an intermittent basis and no permanent facilities are planned. A maximum of 10 employees will be needed for the proposed project.

Equipment maintenance will be provided by owner or vendor service trucks. Temporary or permanent maintenance facilities are not required.

#### **5.D.8** Electrical Power

The proposed AGO will utilize a portable diesel generator for site power. The portable generator will be rated at approximately 725 kW and will operate at 480 volts. No permanent power lines are planned for the project. A maintenance service truck will refuel the generator on an as-needed basis using fuel stored in the 12,000 gallon tanks discussed above.

#### 5.D.9 Water Supply

The maximum daily water requirement is proposed to be 60,000 gallons, or approximately 42 gallons per minute.

Construction of a new alluvial well is proposed for the water source for the project. The location of the proposed well is approximately 1.5 miles southwest of the proposed AGO along the north side of American Girl Mine Road on Assessor's Parcel Number 0501200009000 (Figures 2, 3B). This location was chosen for its proximity to access roads, the proposed mine site and roads that will be subject to dust control measures. Several wells are currently or were historically located in this alluvial setting and reportedly produce up to four times the required volume for the proposed AGO.

Water extracted from this well will be transferred to two portable storage tanks at the well site and conveyed in water trucks to portable storage tanks to be located on the site (Figure 3A). Use of this well will require coordination with BLM for use and right-of-way access as well as a Conditional Use Permit from Imperial County.

For more detailed information on the location of the proposed water well, refer to the Well Siting Study provided as Appendix A to this Plan of Operations (Brown and Caldwell, 2008).

# 5.D.10 Refuse and Sewage Disposal

The proposed AGO is planned as a pack-it-in/pack-it-out project with no permanent on-site disposal facilities. All refuse will be required to be removed by the operating crew on a daily or weekly basis or some other reasonable interval. The refuse will be deposited in the dumpster located at the Pyramid offices in Heber, California.

Temporary sanitary facilities will be provided as rented portable toilets suitable in number to support the operating crews. Toilets will be maintained by the rental firm.

#### 5.D.11 Operation Period/Workforce

Pyramid plans to operate the proposed AGO on an intermittent basis, 12 months per year, for up to 10 years. The project will operate from 6 a.m. to 6 p.m. No night shifts are planned.

An intermittent work force of approximately five to 10 employees is planned for the life of the project. These workers are currently employed by Pyramid therefore an increase in workforce is not planned or anticipated.

# 5.D.12 Growth Medium Management

The proposed AGO will stockpile any growth medium soils and the limited topsoil present on the site encountered during mining in the north portion of the property (Figure 3A). These materials will be used during concurrent reclamation. More information on reclamation can be reviewed in the Reclamation Plan submitted to Imperial County under separate cover.

# 5.D.13 Reasonable Foreseeable Development

Possible future plans for the site include a portable asphalt plant and associated support facilities. The asphalt plant would run on an intermittent basis depending on specific project needs.

#### **5.D.14 Surface Waters**

Surface water consists of intermittent drainages, such as American Girl Wash. These drainages contain water only following major precipitation events. Sheet washing and flash flooding are common following heavy rainstorms.

Surface water issues will be addressed through the Storm Water Pollution Prevention Plan (SWPPP) and through the regular use of BMPs.

The proposed AGO will utilize a roadway under the authority of USACE National Permit Number 14. Under this national permit, the proposed AGO has been issued an exemption from 401 and 404 permitting requirements.

Surface water management will be performed under the authority of the California State Water Resources Control Board (SWRCB) Water Quality Order No. 97-03-DWQ and National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000001. A Storm Water Pollution Prevention Plan (SWPPP) will be prepared prior to operations start-up. Stormwater monitoring and visual inspections will be performed once the site is in operation, and appropriate BMPs will be installed, as necessary.

For potential discharges to surface waters outside of the site, the federal NPDES permit application Forms 1 and 2D will be completed and submitted to the California SWRCB. The proposed AGO is exempt from a Water Discharge Requirement (WDR) permit, due to the fact that the materials used for construction of the access road are free of cyanide. The cyanide leach piles from the previous mining activity are not located on the same property as the proposed AGO.

Surface water flow at the proposed AGO project area consists of ephemeral drainage, such as the American Girl Wash. These drainage ways only contain water following major precipitation events. The proposed AGO project is not within a flood hazard area according to the Flood Insurance Rate Map (FIRM) Community-Panel Number 060065 0900 B. The closest flood hazard designation zone is Zone C. The Zone C designation corresponds to areas outside the 1-percent annual chance floodplain.

#### 5.D.15 Safety and Fire Protection

The proposed AGO will operate in conformance with all Federal and State safety regulations. Site access will be restricted to employees, contractors, consultants, and authorized visitors. Fire protection equipment and a fire protection plan will be established in accordance with State and local standards.

### 5.D.16 Fencing and Site Security

Public access will be restricted within the proposed AGO site area by erecting a temporary fence around a portion of the property perimeter. The fence will be a minimum of six feet high, constructed of crossed wire, with a gate and keyed lock. Keys will be restricted to Pyramid crew assigned to the site. The access road to the facility will be roped off with high-visibility tape along its southern length, where the road forks toward the property, to direct traffic away from the wash to the south of the American Girl Mine Road (Figure 3A). The fence and gate will be removed following completion of site reclamation activities.

In addition to the above site-wide fencing, Pyramid will restrict access to the wetlands area from inside the property by erecting fencing on the inside perimeter of sensitive property thereby excluding the wetlands portion from the active portions of the property. The fencing, coupled with signage warning people away from the habitat, will help protect the wetlands from human and vehicle encroachment from inside the property, and will allow wildlife to reach the wetlands from outside the fenced area. Further, a 15-foot interior buffer zone will be established between the fence line and the active stockpile areas to provide additional protection. Once the project is complete, the fencing and signage will be removed as part of site reclamation.

### 5.E Control of Air Emissions

Because the area is largely undeveloped and uninhabited, the major air quality issues are particulate matter (PM) and ozone. PM standards pertain to the size of the particulates and are generally evaluated by their ability to be inhaled (e.g.,  $PM_{10}$ ).

The project area is located in a part of the Imperial Valley that is designated as an "unclassifiable attainment area" (any area that cannot be classified on the basis of available information as meeting or not meeting the national primary or secondary ambient air quality standard for the pollutant) for PM by the U. S. Environmental Protection Agency (USEPA) (USEPA 2004). The California Air Resources Board (2007) has indicated that the entire Imperial County is a state nonattainment area for PM<sub>10</sub> and unclassified for PM<sub>2.5</sub> under the California Health and Safety Code Section 39608.

USEPA found that Imperial County failed to attain the 8-hour ozone national ambient air quality standard that was required to be reached in June 2007, and has proposed that Imperial County be reclassified as a moderate 8-hour ozone nonattainment area (USEPA 2007).

Pyramid has committed to comply with the Imperial County Air Pollution Control District (APCD) standards for dust control within the mine site. In accordance with the Dust Plan submitted to the Imperial County APCD for this project, the active mining area will be watered by a water truck during all mining activities. The haul roads and access road will also receive water periodically, as needed, to control dust emissions. Pyramid may also apply an industry-standard dust palliative (magnesium chloride) to the access road that meets all environmental regulations upon approval from the BLM and Imperial County. Air quality will be addressed on an as-needed basis. If there is equipment that is not self-permitting, Pyramid will perform periodic monitoring and implement BMPs and products to reduce emissions as necessary to meet local, State and Federal standards.

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Imperial County Air Pollution Control District (ICAPCD) Rule 401 prohibits the emissions of plumes beyond a certain opacity. In general, the opacity that cannot be exceeded is No. 1 on the Ringlemann Chart, as published by the United States Bureau of Mines (USBM). This is determined visually/subjectively by a trained/certified person.

### 6. ENVIRONMENTAL STUDIES

# **6.A** Existing Studies

A Final Environmental Assessment/Environmental Impact Report (EIR) (BLM EA No. CA-067-88-65) was prepared for the former American Girl Mining Project. Environmental studies were previously conducted over a 2,100-acre Study Area, which includes the proposed 40-acre proposed AGO area. Thirteen environmental resource areas were studied in the previous assessment of impacts due to the former mining operations. The EIR states "In the context of the regional environment, none of the adverse impacts identified were determined to be significant." Based on the nature and scope of the proposed AGO project, impacts will be even less than those identified and documented for the former American Girl gold-mining operation, and none will be environmentally significant.

A summary of 13 key environmental resource areas has been addressed below with respect to the proposed AGO.

#### 6.A.1 Topography

The proposed project area is characterized by desert landscape and low mountain ranges with barren, rocky slopes interspersed with arroyos (washes) and alluvial plains. While the general views are expansive and marked by sparse development, the Cargo Muchacho Mountains have long been an area of active mining and the vistas in the project area reflect the associated surface disturbance.

While the proposed AGO will alter the landscape in the project area, the proposed operation will remove the "unnatural" landforms created and resulting from past mining activities. The project will reduce, reuse, and reclaim or recycle what are considered to be wastes, thus removing waste stockpiles and restoring the area to more natural surface contours.

### 6.A.2 Geology and Seismic Setting

The Cargo Muchacho Mountains are a small part of the Chocolate Mountain Range in the eastern portion of the Colorado Desert Geologic Province. Four geologic settings have been identified for this area: sheared rocks, linear zones trending north-northeast, chemically and physically altered Cenozoic metamorphosed rock, and fractured quartz in east-trending thrust faults. Highly mineralized zones, believed to have originated from hydrothermal activity in the area, are generally developed within shear zones. Many of the mineralized deposits are no longer in place as the entire region has been heavily mined for gold and associated metals.

The proposed project is located in the Imperial Valley at the southern end of the San Andreas Fault system, a seismically active area. Active and potentially active faults exist in the area, although no recently active faults were identified in the 1988 EA/EIR. Recent information indicates that the very active Imperial Fault lies roughly 42 miles west of the proposed AGO site. This fault experienced significant activity in 1940, 1966, 1968, 1971, 1977, and 1979. Some of this activity was surface ruptures and some was classified as triggered creep. Despite the very active nature of this fault, however, it falls outside of the Earthquake Fault Zone for the proposed project site as defined by the Alquist-Priolo Act (Hart 1994).

Soils in and around the project site are derived from the host granitic or meta-sedimentary substrate, either as weathered in place or as material deposited as shallow alluvium over bedrock. Soils in the project area are characterized as shallow and poorly developed. Native soils on the project site are covered with stockpiles from previous mining activity and are not generally exposed.

# 6.A.3 Air Quality and Climatology

Because the area is largely undeveloped and uninhabited, the major air quality issues are particulate matter (PM) and ozone. PM standards pertain to the size of the particulates and are generally evaluated by their ability to be inhaled (e.g.,  $PM_{10}$ ).

The project area is located in a part of the Imperial Valley that is designated as an "unclassifiable attainment area" (any area that cannot be classified on the basis of available information as meeting or not meeting the national primary or secondary ambient air quality standard for the pollutant) for PM by the U. S. Environmental Protection Agency (USEPA) (USEPA 2004). The California Air Resources Board (2007) has indicated that the entire Imperial County is a state nonattainment area for PM<sub>10</sub> and unclassified for PM<sub>25</sub> under the California Health and Safety Code Section 39608.

USEPA found that Imperial County failed to attain the 8-hour ozone national ambient air quality standard that was required to be reached in June 2007, and has proposed that Imperial County be reclassified as a moderate 8-hour ozone nonattainment area (USEPA 2007).

The proposed AGO will have fewer emissions than previous mining operations in the area since the overall mining rates and times of operation are significantly less. All equipment, if not self-permitting, will be permitted in accordance with Federal, State and local regulations.

The calculations for PM<sub>10</sub> for the proposed mining operation are based on "Modeling Fugitive Dust Sources", a guidance document from the National Stone, Sand & Gravel Association (NSSGA), and US EPA's AP-42 Handbook of Emission Factors. The estimates include PM<sub>10</sub> emissions from various processes/operations such as equipment (i.e. crushers, screens, and conveyors); customer truck traffic on unpaved roads within the property boundary; and stockpile emissions, including dust created from wind erosion, truck loading, and stockpile construction. Whenever applicable, the guidance document presents uncontrolled emissions in contrast to controlled emissions. Table 6-1 below contains variable diesel engine horsepower ratings and their corresponding emission output, including those for PM<sub>10</sub>.

Imperial County Air Pollution Control District (ICAPCD) Rule 401 prohibits the emissions of plumes beyond a certain opacity. In general, the opacity that cannot be exceeded is No. 1 on the Ringlemann Chart, as published by the United States Bureau of Mines (USBM). This is determined visually/subjectively by a trained/certified person.

A Dust Plan has been submitted under separate cover to and discussed with the ICAPCD. Air quality will be addressed on an as-needed basis. If there is equipment that is not self permitting, Pyramid will perform periodic monitoring and implement best management practices and products to reduce emissions as necessary to meet local, State and Federal standards.

Dust emissions associated with travel to and from the site on access roads and site roads will be regularly addressed with water suppression or industry-standard dust suppression chemicals such as magnesium chloride.

	476 44	100000	Table 6-1. A	nnual Pollutar	nt Emissions			
	10 HP	15 HP	20 HP	25 HP	30 HP	150 HP	300 HP	1186 HP
Pollutant	Emissions (ton/yr)							
PM <sub>10</sub>	0.1	0.14	0.19	0.24	0.29	1.45	2.89	11.43
SOx	0.09	0.13	0.18	0.22	0.27	1.35	2.69	10.65
	1.36	2.04	2.72	3.39	4.07	20.37	40.73	161.04
NOx			0.59	0.73	0.88	4.39	8.78	34.70
CO	0.29	0.44	0.09	0.75	2.00			_

#### 6.A.4 Noise

There is currently no regulated threshold for noise in the vicinity of the proposed AGO. The proposed project will not use blasting to mine mineral materials and there is no 24-hour per day milling or processing operation proposed.

The project area is largely uninhabited and undeveloped, so natural noise sources are generally limited to wind, rain, thunder, insects, birds, and other wildlife. Man-made noise in the area, when present, would be created by periodic vehicle travel along Ogilby Road, Sidewinder Road, and American Girl Mine Road, and is related mainly to haul trucks associated with mining or other sporadic vehicle travel including seasonal "snowbird" recreational vehicles that frequent the area in the winter months. Occasional light aircraft and military aircraft, such as fighter jets and helicopters, also produce minor noise. Mining activity will produce noise from generators and other aggregate processing equipment. These impacts will be mitigated through installation of MSHA-approved mufflers on necessary equipment to dampen noise if applicable as well as regular maintenance of all equipment.

# 6.A.5 Hydrologic Resources

A detailed groundwater evaluation was undertaken for the former 1988 Padre Madre EA/EIR. The Imperial Valley groundwater reservoir consists of Cenozoic-era valley fill deposits underlain by a basement complex of pre-Tertiary rock. Moderate to high groundwater yields have been obtained in the eastern part of the Imperial Valley by deep wells tapping into marginal alluvial deposits of the Colorado River. Regional groundwater recharge in Imperial Valley is controlled by the Colorado River, while underflow from tributary areas, direct precipitation, and local runoff are minor contributors to recharge. Flowing wells are common in the eastern Imperial Valley.

Alluvial aquifer waters are predominantly a sodium-chloride type. The water quality has been determined suitable for non-potable uses in mining and milling operations.

The proposed AGO will use less groundwater for the mining operation than the former American Girl—Padre Madre Mining Operation, currently estimated at roughly 60,000 gallons per day (gpd), and is not expected to appreciably impact groundwater supply. No chemical processes are necessary for the proposed AGO and therefore there will be no impacts to groundwater from potential process discharges.

Surface water issues will be addressed through the SWPPP (see Section 5.D.14 above) and through the regular use of BMPs.

#### 6.A.6 Cultural Resources

Cultural resources include both prehistoric and historic resources. The Imperial Valley area has a well-documented history of prehistoric occupation. Historic settlements and mining operations are also well known in the Valley.

A cultural resources site records search was conducted for this project in January 2008 by the Southeast Information Center, the state repository for Imperial County cultural resource information. A total of 11 sites and 10 field surveys have been recorded covering the project area up to a 1-mile radius of the project boundaries, indicating that the area has been well studied. One potentially significant historic mining feature was recorded in 1987 within 1 mile of the AGO project area: 4-IMP-3303-H, the town and mills of Obregon. This resource was considered eligible for the National Register of Historic Places.

One resource, 4-IMP-5300-H, was recorded in 1986 within the proposed AGO project boundaries. It consisted of a highly disturbed isolated artifact scatter and one group of disturbed historic features. As reported in the 1988 Draft EA/EIR, due to the disturbed nature of the resources, in 1987 the State Historic Preservation Officer concurred with the report recommendation that 4-IMP-5300-H was not National Register eligible. Therefore, 4-IMP-5300-H was not considered significant and no mitigation measures were required. Because the area was used subsequently for the American Girl-Padre Madre Mining Operation, the resource no longer exists.

A preliminary archaeological site visit was conducted by a Registered Professional Archaeologist (RPA) in March 2008 to evaluate the potential for undisturbed cultural resources remaining on the property. The RPA also consulted with an historic archaeologist (also an RPA) regarding potential historic resources in the project area. Based upon review of the site records search results, map information, aerial photographs of the project site, site visit, and historic consultation, it was concluded that the potential for cultural resources on the site is essentially nonexistent due to the extensive site disturbance caused by previous mining activity.

The two proposed well locations were also evaluated by aerial photo and were driven past during the site visit. It was concluded that the well and alternative well locations have no undisturbed surface and therefore no potential for undisturbed archeology in this area exists.

The segment of existing road proposed for lowering and regrading was also examined via map, aerial photo, and drive-over. It was concluded that the road is within the area previously surveyed for cultural resources in the past (as addressed in the 2008 site records search) and no cultural resources were located there. The letter report that addresses cultural resources is included as Appendix B Plan of Operations. The project area is not known to have religious/sacred or traditional cultural significance to local Native American groups.

### 6.A.7 Soils Resources

Soils in and around the project site are derived from the host granitic or meta-sedimentary substrate, either as weathered in place or as material deposited as shallow alluvium over bedrock. Soils in the project area are characterized as shallow and poorly developed. Native soils on the project site are covered with stockpiles from previous mining activity and are not generally exposed.

The proposed AGO will be removing the existing steep-sloped stockpiles and returning the area to near original contours or road base. The steepest planned slope will be 4:1, horizontal to vertical, and will help reduce any surface erosion potential from current conditions.

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#### 6.A.8 Wildlife Resources

No listed animal species were observed on the site during the biological reconnaissance. A search of the CNDDB revealed eight sensitive animal species known to occur in the general vicinity of the proposed AGO site, including three bat species (pallid bat, western mastiff bat, and California leaf-nosed bat). Because of the lack of suitable roosting habitat, the bats roost off site but may use the project area for foraging. No suitable on-site habitat exists to support the other five species (two beetles, two birds, and a lizard). The presence of one CDFG sensitive animal, the mule deer, was detected on the project site.

The desert tortoise, a federally and state-listed threatened species, is not known to occur in the project area; however, desert tortoise are known to occur about 2.5 miles north of the project site, according to the U.S. Fish & Wildlife database. Tortoises were not observed during the 2008 field survey. Because the project site is too disturbed and lacks appropriate burrowing and foraging habitat, desert tortoise are not expected to occur on the project site or proposed well locations. It is possible; however, that desert tortoise may traverse the access road area leading to the mine site.

The project site provides potential foraging habitat for raptors. However, suitable habitat for tree-nesting or cliff-nesting raptors does not occur on site as the trees present on the property are not tall enough to provide adequate protection for raptor nests.

Mitigation measures will be designed and enforced at proposed AGO to prevent on-site impacts to bats and desert tortoises by AGO personnel operating on site. These measures include education and avoidance. For a more thorough discussion of these measures, please refer to the Environmental Assessment submitted to the BLM under separate cover.

#### 6.A.9 Vegetation

The proposed AGO project area is highly disturbed from past mining activities and the site itself supports mostly disturbed Sonoran creosote bush scrub that has re-established on abandoned mine spoils and tailings. Due to the disturbed nature of the site, the Sonoran creosote scrub has little to very low wildlife habitat quality because the plants are widely spaced over open and uneven topography and provide no cover for animals. Of the plant communities observed in the project area, desert dry wash woodland is designated as sensitive habitat by California Department of Fish & Game (CDFG) and requires mitigation. Plants observed in this community include ironwood, cat-claw acacia, blue palo verde, creosote, brittlebush, and sweetbush. This habitat was observed along the wash in the southern portion of the property. This habitat and a small wetland located on the property are discussed in more detail in the Reclamation Plan and Environmental Assessment both submitted under separate cover.

No listed or sensitive plant species were observed on the site during the biological survey, nor are they expected to occur due to the disturbed nature of the site. Further, listed species are not known to occur in the general site vicinity according to the 2007 CDFG California Natural Diversity Database (CNDDB). Following cessation of construction aggregate extraction at the site, Pyramid plans to provide the same or greater level of re-vegetation as prescribed by SMARA. Re-vegetation is discussed in more detail, including planned vegetative density and seed mixes, in the Reclamation Plan submitted to Imperial County under separate cover.

#### 6.A.10 Visual Resources

The proposed project area is characterized by desert landscape and low mountain ranges with barren, rocky slopes interspersed with arroyos (washes) and alluvial plains. While the general views are expansive and marked by sparse development, the Cargo Muchacho Mountains have long been an area of active mining and the vistas in the project area reflect the associated surface disturbance.

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While the proposed AGO will alter the landscape in the project area, the proposed operation will remove the "unnatural" landforms created and resulting from past mining activities. The project will reduce, reuse, and reclaim or recycle what are considered to be wastes, thus removing waste stockpiles and restoring the area to more natural surface contours.

While the proposed AGO will alter the landscape in the project area, the proposed operation will remove the "unnatural" landforms created during former mining operations. As a result, the proposed aggregate extraction will return the previously mined areas to near-original surface contours.

### 6.A.11 Socioeconomics

According to the 1988 EA/EIR, mining employs about 1 percent or less of the employed population. Traditionally, mining in Imperial County has involved quarry products such as sand and gravel, stone, clay, gypsum, and limited precious metals production. Currently, there is no job activity on the project site and therefore no employees.

The largest residential center is El Centro, the Imperial County seat, about 45 miles west of the proposed project site. The largest residential center near the project site is Yuma, Arizona, located about 15 miles southeast.

The proposed AGO plans to utilize existing employees to operate the project; therefore, no impacts on the socioeconomics of the area are impacted.

# 6.A.12 Transportation

The largest transportation artery is Interstate 8, located less than five miles south of the project site. Interstate 8 passes through both El Centro and Yuma. The project site is reached from Interstate 8 by taking State Route 34/Ogilby Road north about four miles to American Girl Mine Road and travelling roughly two miles northeast on American Girl Mine Road. This road is a well-maintained County gravel road and also serves as public access to BLM lands.

The proposed AGO will have truck traffic associated with the removal of mineral materials related to the sale of construction aggregates. The anticipated maximum daily trip-count for aggregate trucks is 250.

Because the area is largely uninhabited there are no schools, parks, or other public facilities in the project area. Fire protection is provided by the Imperial County Fire Department/Office of Emergency Services and the California Department of Forestry. Police protection is provided by the Imperial County Sheriff's Department.

The proposed AGO plans to utilize the same roads already established in the area.

#### 6.A.13 Land Use

The Cargo Muchacho Mountains historically and presently are largely devoted to mining and mineral exploration. This area is designated as "Class M" or "Moderate" in use under the California Desert Conservation Act due to past, present, and potential future mining activities. Other land uses in the general area include military and Indian reservation lands.

The project site is zoned S-Open Space with Recreational Use under the Imperial County General Plan. The proposed AGO plans no modification to the intended land use once reclamation is complete and the land is returned to reclaimed land status.

# PLAN OF OPERATIONS

# 7. RECLAMATION PLAN

The Reclamation Plan (Brown and Caldwell, April 2008) describes the work necessary to reclaim the proposed AGO site. The Reclamation Plan has been prepared to comply with the requirements of Imperial County and the California SMARA of 1975, as amended, and has been submitted as a separate document to the Imperial County Planning/Building Department.

#### 8. LIMITATIONS

# **Report Limitations**

This document was prepared solely for Pyramid Construction and Aggregates, Incorporated in accordance with professional standards at the time the services were performed and in accordance with the contract between Pyramid Construction and Aggregates, Incorporated and Brown and Caldwell dated September 21, 2007. This document is governed by the specific scope of work authorized by Daryl Dickerson; it is not intended to be relied upon by any other party except regulatory authorities contemplated by the scope of work. We have relied on information or instructions provided by Pyramid Construction and Aggregates, Incorporated and, unless otherwise expressly indicated, have made no independent investigation as to the validity, completeness, or accuracy of such information.

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# PERSONS AND AGENCIES CONSULTED

# United States Bureau of Land Management, El Centro Field Office

Walter Todd, III – Environmental Assessment Daniel Steward – Biology Jesse Irwin – Biology Carrie Simmons – Cultural Resources

# United States Army Corps of Engineers

Laurie Monarres - 404/401 permit exemption

# California Regional Water Quality Control Board, Region 7

Joan Stormo – Waste Discharge Requirement waiver

#### County of Imperial Planning Department

Patricia Valenzuela - SMARA and Conditional Use Permit

#### County of Imperial Air Pollution Control District

Jesus Ramirez - Dust Plan

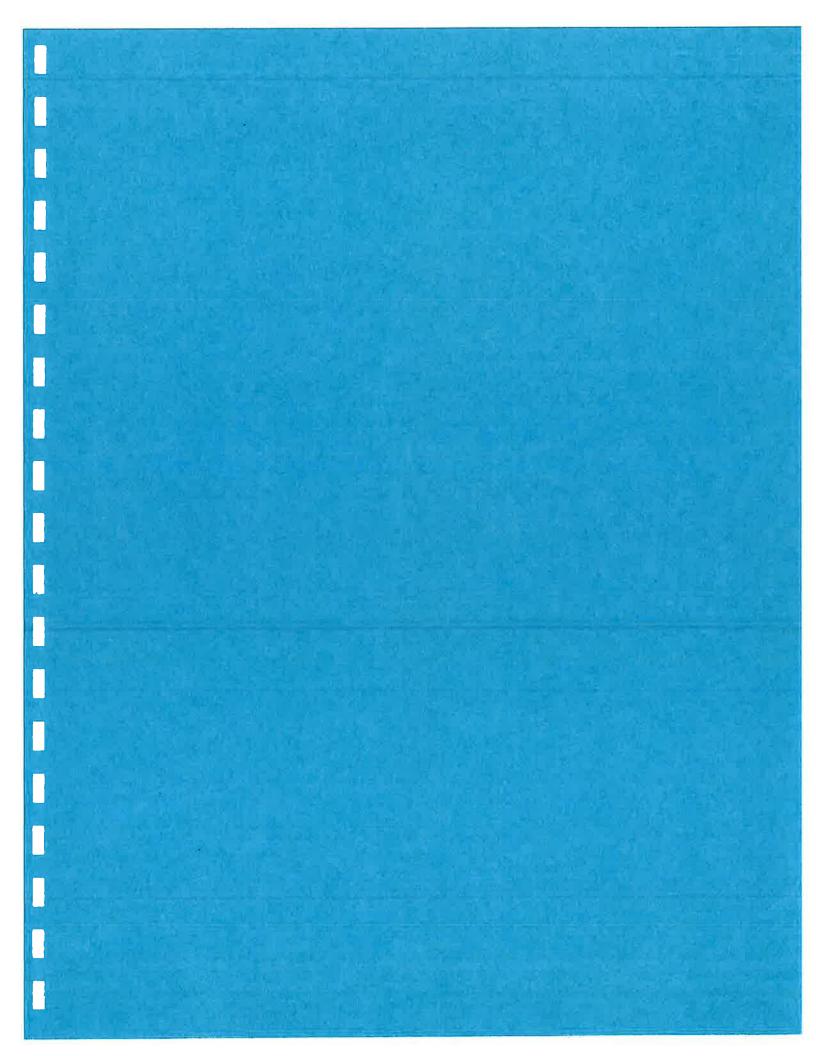
# **County of Imperial Public Works Department**

Joe Hernandez - Traffic Control Plan

RECTANDANTAL

# **FIGURES**

Figure 1. Vicinity Map
Figure 2. Site Map
Figure 3A. Existing Site Conditions
Figure 3B. Detail of Well Site
Figure 4. Cross-Sections
Figure 5. Post Reclamation Grading Plan



## PLAN OF OPERATIONS

Prepared for Pyramid Construction American Girl Imperial County, California April 11, 2008 United States Department of the Interior Bureau of Land Management Environmental Assessment CA-670-2008-76 Case File Number: CACA 49292

## **Decision Record**

Pyramid Construction Padre Madre Mineral Material Contract Imperial County, California

U.S. Department of the Interior Bureau of Land Management El Centro Field Office 1661 South 4<sup>th</sup> Street El Centro, CA 93342

November 2011



Decision Record
El Centro Field Office
Environmental Assessment CA-670-2008-76
Case File Number: CACA 49292

**Proposed Action Title/Type:** Mining and processing for sale of reclaimed overburden and stockpiled rock material generated from former Padre Madre mining operation (1988-1996) conducted on the site.

**Applicant/Proponent:** Pyramid Construction and Aggregates, Incorporated, 839 Dogwood Road, Heber, California 92249.

**Location of Proposed Action**: Portions of Section 19, Township 15 South., Range 21 East, SBBM, Ogilby 7.5-minute USGS topographic quadrangle, Imperial County, California.

#### 1.0 Introduction and Background

The El Centro Field Office, Bureau of Land Management (BLM), offered by competitive sale, 500,000 tons of rock from previous gold mining operations at the Padre-Madre mine in August 2007. Pyramid Construction and Aggregates, Incorporated (Pyramid) won the competitive mineral material sales contract which incorporates a portion of the waste rock dump resulting from over and inter-burden removal from the Padre Madre-open pit gold mine. The contract area is located on unencumbered public land in eastern Imperial County, California, within the western portion of the Chocolate Mountains (Figure 1). The contract would authorize Pyramid to mine and process rock from within an area encompassing approximately 40 acres for a period of 10 years. The competitive contract would give Pyramid the right to renew the contract after a 10 year term, or after materials contracted have been removed, subject to reappraisal. This mineral material disposal was authorized and is being processed in accordance with the 43 CFR 3600 regulations for mineral materials disposal.

Mining operations, the processing facility, and ancillary facilities such as a water well and access road would be operated under the name "American Girl Operation" (AGO). AGO is a proposed construction aggregate mining and processing operation that would extract and market previously mined overburden and rock, stockpiled on the east side of the west open pit. Mining operations would be conducted in a manner to allow for concurrent reclamation. All processing and ancillary facilities and improvements would be removed at the end of the mine life, and the sites reclaimed in compliance with BLM and Imperial County requirements. There are no mining claims or mineral leases encumbering the subject site, and the area has been reclaimed by the previous mine operator in compliance with BLM's surface management regulations at 43 CFR 3809 and the State of California Surface Mining and Reclamation Act of 1975 and promulgated regulations.

The proposed AGO is located in the Tumco gold mining district with mineral extraction to be conducted entirely on lands disturbed by previous mining activities, most notably the former American Girl Mining Joint Venture (AGMJV) Padre Madre operations. The proposed area of disturbance (Figure 2) was the subject of an Environmental Assessment/Environmental Impact Report (EA/EIR) and Finding of No Significant Impact (FONSI) for the Padre Madre Gold Mine Project Phase II (EA Number CA-067-88-65) in

1988. The most recent commercial production was associated with the Padre Madre mine, which was part of the American Girl Canyon Mining Area. Padre Madre gold mining activities were conducted in a phased manner and the most recent activity ceased in 1996. These areas were reclaimed over the next 5 years. Subsequent to mining activity at the Padre Madre site, all mining claim interests on public land held by the AMGJV have been abandoned. This project would involve mining in the previously reclaimed area.

In general, comments and concerns received during the draft review of the EA center around the issue that AGJV closed the American Girl Mine properties and reclaimed the Padre Madre Rock area with the expectation that the rock area would remain closed and in place in a reclaimed and stable condition. The previous operator of the Padre-Madre site is concerned about the potential liabilities that would be placed on them from the disturbance and off-site use of this material under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) as being a generator of the rock. CERCLA 1, attaches a perpetual liability to all parties who once "...owned, controlled, or facilitated the disposition of hazardous substances or other contaminants" (Hecla comments, January 2009). The previous operator has concerns that BLM has not met its burden of assuring that "...the proposed action is in the public interest, and that there are no hazards to public health and safety" (HECLA Comments).

While the area has been disturbed by previous gold mining and processing activities, the site had been reclaimed in compliance with approved reclamation plans. Reclamation of previous gold mining activity met visual line and form goals of the reclamation plans, the rock stockpile features have changed the landscape from the original line and form of the pre-gold mining area. Part of BLM's goal in the material contract is to soften and reduce, as much as possible, the reclaimed rock facility to conform as near as practicable to the line and form of pre-gold mining topography. While BLM recognizes the considerable work and associated costs AGJV expended in compliance with reclamation provisions of their approved reclamation plans for the Padre-Madre gold project, the United States has offered this material to meet regional demands for the resource. In addition, removal of most of the rock stockpile will provide a final topographic profile closer to the original profile before gold mining activity.

On January 5, 2009, the Bureau of Land Management, El Centro Field Office, released the "Pyramid Construction Environmental Assessment" (EA; No. CA-670-2008-76), assessing the plan of operation and reclamation plan resulting from the sale of 500,000 tons of stockpiled rock to Pyramid Construction Company. As a result of that review, Hecla (and AGMJV) had comments on the toxicity methods applied in the November 2008 Mineral Report (Appendix B of the EA) and still considered secondary uses a liability placed on them under the CERCLA.

Hazardous waste disposal and cleanup is an area that is controlled under two main statutes, the Resource Conservation and Recovery Act (RCRA) and the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA). RCRA's goals are to protect human health and the environment from the potential hazards of waste disposal, conserve energy and natural resources, reducing the amount of waste generated, and ensure that wastes are managed in an environmentally-sound manner. RCRA's extensive tracking afrom generation to disposal of a hazardous waste, the process results in a "cradle to grave" system. CERCLA establishes a legal liability system for the cleanup of inactive or abandoned sites when there has been a release, or a significant threat of a release, of a hazardous substance.

Rock stockpiled from mining operations was not a permitted activity under the Resource Conservation Recovery Act (RCRA) by the state lead agency as hazardous or toxic materials. No arguments at the time were addressed concerning the toxic or hazardous potential of the rock. Based on analysis of samples collected from the rock stockpile in October 2008, and further work in January 2009 and August 2011, the rock is not considered a toxic or hazardous material. The rock does not meet any threshold limits for any of the 17 metallic elements of concern to the state of California. Mining of the rock from the Pyramid contract site would have no deleterious effect on humans or the natural environments when used as an aggregate admixture to concrete and asphalt concretes, or used as fill, rip-rap, or ballast applications.

Prior to release of the 2009 Decision Record, BLM had completed specific tests on the mineral material at the Padre-Madre site in an effort to characterize the material for potential toxicity in compliance with standard protocols of the Environmental Protection Agency and state of California. BLM completed the California approved standard test method for determining whether a solid material is susceptible to extraction of heavy metals into the human and natural environment. The Waste Extraction Test (WET) was done on the samples as collected and results did not indicate that the rock material had the characteristics of toxicity. Results of the WET were included in a supplemental mineral report, and a new table compiled that would replace Table 5 of the 2009 Environmental Assessment (EA). Neither the table or supplemental mineral report were included in the case file record on subsequent appeal, and information from the WET testing was not considered in the 2009 environmental assessment and decision record. In July 2011, in compliance with the direction from the Interior Board of Land Appeals in their July 14, 2010, decision (179 IBLA299) to take a hard look at the CERCLA issues that may result from disposal of the rock material, BLM conducted a further WET on crushed and classified rock material greater than 10 mesh screen that would typically be removed from the site as product. Testing did not indicate that the classified material has the characteristics of toxicity. Table 5 of the Final EA reflects all testing of the rock material.

Material is characterized as a non-hazardous waste if it does not exhibit a characteristic by either testing or applying knowledge of the material (40 CFR 262.11; defined in 40 CFR 261.2), or the material is specifically excluded from regulation under 40 CFR 261.4. If the material is not specifically excluded, hazardous characteristics determined by either testing the material according to the methods set forth in subpart C of 40 CFR part 261, or to an equivalent method approved by the EPA Administrator under 40 CFR 260.21.

Solid wastes, that are not hazardous wastes, include mining overburden returned to the mine site (40 CFR 261.4 (b) (3) (Exclusions)). This is the condition of the subject rock material under the AGMJV mine permitting process. The Total Toxics Limits Concentration (TTLC) analysis determines the total concentration of certain regulated metallic elements in the material. When any sample exceeds the TTLC limits, the material is classified as toxic and/or hazardous. Based on analyses, none of the rock stockpile exceeds the TTLC threshold for toxicity.

If a substance's TTLC is equal to or greater than ten times the Soluble Threshold Limit Concentration (STLC) regulatory limit, the Waste Extraction Test (WET) is required to determine if the material is toxic. If the TTLC results do not exceed 10 times the STLC

limit then normally no further analysis is required. If any substance in the waste extract is equal to or greater than the STLC value, it is considered a hazardous toxic waste.

Toxic Characteristic Leaching Procedure (TCLP) and WET are test methods used in California to determine whether a waste is a toxic hazardous waste. If the TTLC results do not exceed 10 times the STLC limit then normally no further analysis is required. Fours of the samples exceeded 10 times the STLC threshold and required further analyses. Based on the results of the California WET test, none of the rock stockpile material exceeded the standards that will characterize the material as toxic or hazardous. Absent this characterization, as well as the lack of information provided by Hecla and AGMJV that the material should be characterized as toxic and or hazardous, I do not believe that the material will pose any risk to the human or natural environment when use for encapsulated or non-encapsulated crushed rock products.

A supplental mineral report (EA Appendix B and Appendix B1) provides a description analytic processes conducted on the rock stockpile material. Table A of the supplental mineral report reflects additional work conducted in January 2009 and August 2011; Table A also replaces Table 5 of the 2009 EA.

#### 2.0 Decision

#### 2.1 Alternatives Considered

Alternative A, the Proposed Action:

The AGO proposes to mine and process overburden and stockpiled materials within the 40-acre confines of the project site within the scope of the mineral material contract (Figure 2). Saleable aggregate materials would be extracted and processed on public lands at and proximal to the west rock dump.

#### Alternative B:

Under this alternative, mining would be allowed without associated processing of rock and unusable material at the AGO site. This alternative would require that all processing operations be moved to another area of the county, away from the Cargo Muchacho site.

Alternative C. No Action:

Under the No Action Alternative, the BLM would deny the proposed AGO mine and reclamation plan in the project application and proposed reclamation of rock stockpiles would not be conducted.

#### 2.2 Actions Considered but Eliminated from Further Consideration

#### **Reduced Mining**

The reduced mining alternative would limit mining and processing of mineral material from AGO to less than 4,500 tons per day, to approximately 250 tons per day. This amount is the maximum tonnage spread over the 10-year contract period over a 220 day

working year. Under this alternative, production would be sustained to minimize truck traffic along American Girl road and the Ogilby road to a level consistent with moderate recreation use in the area.

This alternative places an increased burden on the operator by not optimizing mining and production equipment to normal market needs. The alternative increases carbon emissions in the mine area as well as processing area by underutilizing equipment, and well as requiring an increase in worker transits to the site, increasing carbon emissions and wasting fossil fuels.

This alternative will not be considered further in this analysis because in comparison with the proposed action, would create more environmental impacts and increased hazards to public health and safety.

#### 2.3 Decision and Rationale

Based on information in the EA and consultation with my staff, I have decided to implement the proposed action as described in the EA. Allowing aggregate production in this area provides mineral materials for construction projects without disturbing new areas, and will contribute to further reclamation of a disturbed area.

Alternative A (proposed action) is preferred over Alternative B or Alternative C for the following reasons:

- Mining and processing material at the American Girl site would be much more energy and cost efficient than hauling the material off sight to process.
- With the mitigation measures listed below, the adverse environmental impacts of Alternative A are not significant and will be only nominally greater than those attributable to Alternative B or C.
- Removing the rock piles will contribute to restoration of natural contours in the formerly mined site and contribute to increased value as wildlife habitat.

The following measures are designed to reduce the likelihood of impacts to natural resources by AGO personnel operating on the site:

#### Measures to protect Desert Tortoise and Tortoise Habitat

The mine operator shall designate a field contact representative (FCR) who would be responsible for overseeing compliance with protective stipulations for the desert tortoise and for authority to halt all mining activities that are in violation of the stipulations. The FCR shall have a copy of all stipulations when work is being conducted on the site. The FCR may be the mine operator, the mine manager, any other mine employee, or a contracted biologist.

- An employee education program must be received, reviewed, and approved by the Bureau at least fifteen days prior to the presentation of the program. The program may consist of a class or video presented by a qualified biologist (Bureau or contracted) or a video. Wallet-sized cards with important information for workers to carry are recommended. All mine employees shall participate in the desert tortoise education program prior to initiation of mining activities. The operator is responsible for ensuring that the education program is developed and presented prior to conducting activities. New employees shall receive formal, approved training prior to working onsite. The program shall cover the following topics at a minimum:
  - Distribution of the desert tortoise.
  - General behavior and ecology of the desert tortoise,
  - Sensitivity to human activities,
  - Legal protection,
  - · Penalties for violations of State or Federal laws,
  - · Reporting requirements, and
  - Project protective migration measures.
- Only Biologists authorized by the Service and the Bureau shall handle desert tortoises. The Bureau or mine operator shall submit the name(s) of the proposed authorized biologist(s) to the Service for review and approval at least fifteen days prior to the onset of activities. No mining activities shall begin until an authorized biologist is approved. Authorization for handling shall be granted under auspices of this Section 7 consultation.
- The authorized biologist shall be required on-site during the initial construction activities. This biologist shall have authority from the operator to halt any action that might result in harm to a desert tortoise.
- Post-construction, the authorized biologist shall be required to be available on any day at any time during work hours, to respond to a request from the applicant or BLM to translocate a desert tortoise which is found to be in harm's way. Annual summaries of desert tortoise sightings, mortalities, and burrows shall be provided to BLM and to the Service in accordance with the requirements of the Small Mining Biological Opinion.
- The area of disturbance shall be confined to the smallest practical area, considering topography, placement of facilities, location of burrows, public health and safety, and other limiting factors. Work area boundaries shall be delineated with flagging or other marking to minimize surface disturbance associated with vehicle straying. Special habitat features, such as burrows, identified by the qualified biologist shall be avoided to the extent possible. To the extent possible, previously disturbed areas within the mining site shall be utilized for the stockpiling of excavated material, storage of equipment, digging of slurry pits, location of office trailers, and vehicle parking. The qualified biologist, in consultation with the mine operator, shall ensure compliance with this measure.
- Where practical, no access road shall be bladed for exploratory work. Cross-country access shall be the standard for temporary activities. For development activities, a short driveway (no more than 0.3 miles) from the nearest access road may be constructed if necessary. To the extent possible, access to the mine site shall be restricted to designated "open" routes of travel. A qualified biologist shall select and

flag the access route, whether cross-country or bladed, to avoid burrows and to minimize disturbance of vegetation.

- Except when absolutely required by the operation and as explicitly stated in the Plan
  of Operations, cross-country vehicle use by mine employees is prohibited during work
  and non-work hours.
- To prevent desert tortoises from falling in, test holes shall be either fenced or covered as much of the time as possible and at all times when not attended.
- For mine development where the mine site is in desert tortoise habitat, the entire site shall be enclosed within a desert tortoise-proof fence. The fence shall be constructed under the direction of a qualified biologist. The fence shall be located to avoid all desert tortoise burrows; to the extent possible, burrows shall be placed on the outside of the enclosure. The fence shall be constructed of ½-inch mesh hardware cloth. It shall extend 18 inches above ground and 12 inches below ground. Where burial of the fence is not possible, the lower 12 inches shall be folded outward against the ground and fastened to the ground so as to prevent desert tortoise entry. The fence shall be supported sufficiently to maintain its integrity. The gate shall remain closed except for the immediate passage of vehicles. The fence shall be checked at least monthly and maintained when necessary by the mine operator to ensure its integrity.
- After fence installation, the authorized biologist shall conduct a thorough survey for desert tortoises within the mine site. All desert tortoises found shall be marked and removed from the enclosure and placed outside the nearest fence. If the removal is during the season of above-ground activity, the desert tortoises shall be placed beside a nearby burrow of appropriate size. If the removal is not in the season of above-ground activity, the desert tortoise shall be moved (dug out of burrow if necessary) on a seasonably warm day and placed at the mouth of a nearby burrow of the appropriate size. If the desert tortoise does not enter the burrow, an artificial burrow may be needed. The authorized biologist shall be allowed some judgment and discretion to ensure that survival of the desert tortoise is likely.
- Desert tortoises moved from within a fenced site shall be marked for future identification. An identification number using the acrylics paint/epoxy covering technique shall be placed on the fourth left costal scute. 35-mm slide photographs of the carapace, plastron, and the fourth costal scute shall be taken. No notching is authorized.
- Desert tortoises may be handled only by the authorized biologist and only when necessary. New latex gloves shall be used when handling each desert tortoise to avoid the transfer of infectious diseases between animals. Aside from the initial site clearance, any desert tortoise moved shall be placed in the shade of a shrub in the direction in which it was facing when found or at the entrance to a burrow if hibernating. In general, desert tortoises should be moved the minimum distance possible to ensure their safety.
- The authorized biologist shall maintain a record of all desert tortoises handled. This information shall include for each desert tortoise:
  - The location (narrative and maps) and dates of observations;
  - General condition and health, including injuries and state of healing and whether animals voided their bladders;
  - · Location moved from and location moved to; and
  - Diagnostic markings (i.e., identification numbers or marked lateral scutes).

- No later than 90 days after completion of construction, the FCR and authorized biologist shall prepare a report for the BLM. The report shall document the effectiveness and practicality of the mitigation measures, the number of desert tortoises excavated from burrows, the number of desert tortoises killed or injured. The report shall make recommendations for modifying the stipulations to enhance desert tortoise protection or to make it more workable for the operator. The report shall provide an estimate of the actual acreage distributed by various aspects of the operation.
- Upon locating a dead or injured desert tortoise, the operator is to notify the BLM. The BLM must then notify the appropriate field office (Carlsbad or Ventura) of the Service by telephone within three days of the finding. Written notification must be made within fifteen days of the finding. The information provided must include the data and time of the finding or incident (if known), location of the carcass, a photograph, cause of death, if known, and other pertinent information. Desert tortoise remains shall be collected, frozen, and delivered to the BLM as soon as possible. Injured animals shall be transported to a qualified veterinarian for treatment at the expense of the project proponent. If an injured animal recovers, the Service should be contacted for final disposition of the animal.
- Except on county-maintained roads, vehicle speeds shall not exceed 20 miles per hour through desert tortoise habitat.
- If it is necessary for a worker to park temporarily outside of the cleared enclosure, the worker shall inspect for desert tortoises under the vehicle prior to moving it. If a desert tortoise is present, the worker shall carefully move the vehicle only when necessary or shall wait for the desert tortoise to move out from under the vehicle.
- All dogs shall be restrained either by enclosure in a kennel or by chaining to a point within the desert tortoise enclosure.
- All trash and food items shall be promptly contained within closed, raven-proof containers. These shall be regularly removed from the project site to reduce the attractiveness of the area to ravens and other desert tortoise predators. All refuse generated on site will be removed by the operating crew on a regular basis and deposited in the dumpster located at Pyramid's office in Heber, California.
- Structures that may function as raven nesting or perching sites are not authorized except as specifically stated in the Plan of Operation. The project proponent shall describe anticipated structures to the BLM during initial project review.
- Final reclamation will include surface scalloping to enhance vegetative growth.
- At the end of the project, disturbed areas, including new access roads, shall be recontoured and re-seeded with an appropriate mixture of native plant species according to the Reclamation Plan submitted to the imperial County Planning Department and State Office of Mine Reclamation under separate cover.
- All areas developed under the contract will be reclaimed to 1:4 slope (1 vertical to 4 horizontal; 25 percent slope).
- All desert tortoise-proof fencing shall be removed after site reclamation.

#### Measures to Control Invasive/Non-Native Species

• Mine employees shall routinely inspect work areas for tamarisk. In the event new infestations are discovered, the operator shall consult BLM and remove the plants.

### Measures to protect Wetland and Wash Habitat including Microphyll Woodlands

- Pyramid will avoid the wetlands completely. Access to the wetlands area from inside the property will be prevented by erecting fencing around the property perimeter, as discussed above, but excluding the wetlands portion of the property. The fencing, coupled with signage warning people away from the habitat, will help protect the wetlands from human and vehicle encroachment from inside the property, and will allow wildlife to reach the wetlands from outside the fenced area. Further, a 15-foot interior buffer zone would be established between the fence line and the active stockpile areas to provide additional protection. Once the project is complete, the fencing and signage will be removed as part of site reclamation.
- Microphyll woodland habitat will be avoided as these areas are likely foraging habitat for birds and bats. Pyramid will reduce the liklyhood of impacts to the sensitive habitats by confining its activities to the portions of the proposed AGO site away from the habitats. This includes vehicle activity, stockpile movement, or other surface disturbance.
- The access road to the property is American Girl Road, a county road, which runs adjacent to American Girl Wash. The access road will be roped off with high-visibility tape along its southern length, where the road forks toward the property, to direct traffic away from the wash.
- Operations will be restricted to daytime (one-half hour before sunrise to one-half hour after sunset). Artificial lighting will be directed at the ground away from washes and woodlands as well as mountain slopes.

#### Measures to Protect Archaeological Resources

The mitigation measures to be implemented are avoidance (for AGO Site 1 and AGO Site 6) and monitoring (of all resources) during road widening/grading and well-construction activities. Avoidance of AGO Site 1 is feasible since it falls outside the APE. Avoidance of AGO Site 6 can be achieved by conducting grading for road widening on the south side of the access road. Monitoring during construction would be conducted by a qualified archaeologist under permit from the El Centro Field Office.

#### Measures to Protect Public Health and Safety

- In the unlikely chance that solid waste is encountered during excavation operations, Pyramid would contact the BLM El centro Office to take any necessary steps to properly dispose of the materials.
- Place temporary fences within the processing area of operations.
- Place gated fences in areas where there are access points to mine areas. Assure gated areas are secured (e.g., locked) during periods on non-operation.
- Unless equipment is secured from unauthorized use by other means acceptable to
  the authorized officer of the BLM, security personnel will be on mine and processing
  sites to limit public access to heavy equipment. Mining is recommended to be
  conducted in campaigns to minimize the number of days idle equipment is left
  unattended on mine and processing sites.

- All portable mine and processing equipment will be removed from mine and processing sites during periods of extended non-operation. A period of extended non-operation will exist when operations are idle for more than 90 consecutive days, or greater than 90 days as approved by the authorized officer. The operator will maintain public lands within the project area, including structures, in a safe and clean condition, and take all steps necessary to prevent unnecessary or undue degradation to public lands and resources during periods of extended non-operation.
- Haul truck travel along American Girl and mine access roads will be no more than 25 miles per hour.
- All over-the-road haul truck operators will obey all California vehicle laws, codes, regulations, and limits.
- All fines and sand (natural or manufactured) will be disposed of on site by spreading the material and integrating it with remaining rock material within the area of disturbance.
- Mining shall commence at the southern end of the rock stockpile and shall be mined in sequence northward. Operations are to excavate to the ground level as specified by the Authorized Officer of the BLM. Ground level elevation shall be maintained as mining progresses north into the stockpile. The excavated slope shall not be less than 1 horizontal to1 vertical (1:1), or 100 percent slope as measured from the horizontal during periods where mining operations are being conducted. Final reclamation profile, and profile of all slope surfaces during periods of non-occupation over 90 days, 90 consecutive days, or greater than 90 days as approved by the authorized officer, shall not be greater (slope angle) than 4 horizontal to 1 vertical (4:1; 25 percent slope).
- Except for material encapsulated in Portland or asphalt cement products, all material leaving the site may be sampled and analyzed in compliance with any of the following protocols by the BLM or other appropriate agency.

#### 3.0 Consultation and Coordination

The proposed project is located within the range of the Federally Threatened Desert Tortoise. Since it is possible that tortoises may traverse the project area, there is a possibility of "take" under the Endangered Species Act. The USFWS issued a Biological Opinion (BO) for Small Mining and Exploration Operations in the California Desert (3809 6840 CA-063-.50 (CA-932.50)). The BLM contacted the service on July 3, 2008 to inform them of the project and to determine if this project would fall within the scope of the programmatic BO. The service issued a letter on January 23, 2009 concurring with BLM that this project is covered under this BO.

#### 4.0 Public Involvement

The EA was available for a 30 day public comment in December 2008 and January 2009. The comment period ended on January 5, 2009. An electronic notice of availability of the EA was forwarded to known interested parties.

Attachment A includes comments in response to EA, mine and reclamation plan by Mr. Jim Good, representing M.K. Resources Company (formerly M.K. Gold), its affiliate

AGMJV, and, M.K. and Eastmaque Gold Mines (U.S.) Corp., formerly a wholly owned subsidiary of Hecla Limited (herein all referred to as "Hecla"). Attachment B includes the responses to those comments.

Generally, Hecla's comments and concerns on the draft (January 2009) center on the issue that AGMJV closed the American Girl Mine properties and reclaimed the Padre Madre West Waste Rock area with the expectation that the rock area would remain closed and in place in a reclaimed and stable condition. Hecla is concerned that potential liabilities would be placed on them from the disturbance and off-site use of this material under the CERCLA as being a generator of the rock.

#### 5.0 Consistency with Land Use Plans, Regulations and Policies

Based on information in the EA, the project record, and recommendations from BLM specialists, I conclude that this decision is consistent with the following Land Use Plans: California Desert Conservation Area Plan, 1980 (as amended), Northern and Eastern Colorado Coordinated Management Plan.

The Proposed Action is consistent with the National Energy Policy Act of 2005 and the BLM's National Energy Policy Implementation Plan; the Endangered Species Act; the Native American Religious Freedom Act; other cultural resource management laws and regulations; Executive Order 12898 regarding Environmental Justice; and Executive Order 13212 regarding potential adverse impacts to energy development, production, supply and/or distribution.

#### 6.0 Administrative Remedies

Administrative remedies may be available to those who believe they will be adversely affected by this decision. Appeals may be made to the Office of Hearings and Appeals, Office of the Secretary, U.S. Department of Interior, Board of Land Appeals (Board) in accordance with the regulations in 43 CFR Part 4, and the enclosed form 1842-1. Notices of appeal must be filed in this office within 30 days after publication of this decision. If a notice of appeal does not include a statement of reasons, such statement must be filed with this office and the Board within 30 days after the notice of appeal is filed. The notice of appeal and any statement of reasons, written arguments, or briefs must also be served upon the Regional Solicitor, Pacific Southwest Region, U.S. Department of Interior, 2800 Cottage Way, E-1712, Sacramento, CA 95825.

The effective date of this decision (and the date initiating the appeal period) will be the date this notice of decision is posted on BLM's (El Centro Field Office) internet website.

Margaret L. Goodro, Field Manager

El Centro Field Office

# ATTACHMENT "E" - RP#22-0001 RE-ENTITLEMENT REQUEST

General Engineering Contractor

December 23, 2022

Imperial County Planning Department Attn: Michael Abraham

801 Main Street, El Centro, CA 92243

Reference: American Girl Mine Reclamation RP08-0001

Dear Mr. Abraham:

Pyramid Construction and Aggregates, Inc has fully complied and will continue to comply with the terms, general and specific conditions of the project as specified in the Reclamation plan

If you have any questions, please feel free to contact me at (760) 337-5839.

Sincerely,

Pyramid Construction and Aggregates, Inc.

Seather Sucherini

Heather Dickerson

## General Engineering Contractor State Contractor Lia, No. 866533

December 23, 2022

Imperial County Planning Department Attn: Michael Abraham 801 Main Street, El Centro, CA 92243

Reference: American Girl Mine Reclamation RP08-0001

Dear Mr. Abraham:

The original reclamation plan was written for 10 years starting in 2008, but we did not start operations on site at American Girl Mine until 2012. The reclamation plan was not recorded with the County Recorder and the State until 2012. I've attached evidence from Imperial County Clerk Recorder of our plan approval and date which shows November 06,2012.

Therefore, on the new application we are submitting we have included that change on life of reclamation with the official start date of November 06, 2012, and not May 1, 2008. With the project start date in 2012, the expected project duration was to be 10 years as originally approved. Consequently, the reclamation plan would be in effect until November 01, 2022.

Pyramid Construction and Aggregates Inc has paid all fees required to get this matter addressed. Please see attached receipt from Planning and Development for the \$6,500.00 reclamation plan application fee. Please let us know if anything else is required for the captioned application.

If you have any questions, please feel free to contact me at (760) 337-5839.

Sincerely,

Pyramid Construction and Aggregates, Inc.

Seather Acheisin

Heather Dickerson



JURG HEUBERGER AICP, CEP, CBO PLANNING & DEVELOPMENT SERVICES DIRECTOR

## **NOTIFICATION OF ACTION**

DATE OF DECISION: August 27, 2008
DECISION MADE BY:
BY THE PLANNING COMMISSION BY THE BOARD OF SUPERVISORS BY THE PLANNING DIRECTOR
APPLICANT:
Pyramid Construction 839 Dogwood Road Heber, CA 92249
PROJECT TYPE: Pyramid Construction Reclamation Plan #08-0001
Dear Applicant/Engineer/Architect:
On <u>8-27-08</u> the <u>X</u> Imperial County Planning Commission, the <u>Board of Supervisors, the Planning Director, through the public hearing process took the following action on your project.</u>
(NOTICE: All Planning Director and Planning Commission actions have a ten (10) day appeal period during which time the decision may be appealed to the Planning & Development Services Department, and no further permitting of any type may be allowed by the Department)
APPROVED THE PROJECT:
The <u>X</u> Planning Commission, the <u>Board of Supervisors</u> , approved your project subject to all the conditions discussed with you during the hearing process. (A copy of the CONDITIONS are attached hereto).
DENIED THE PROJECT:
You may have the right to appeal the decision of the Planning Director to the Planning Commission. You may have the right to appeal the decision of the Planning Commission to the Board of Supervisors. If you wish to file an appeal with the Planning Director which must include the payment of the appeals fee (\$650.00) within ten (10) days from the date shown above. If no appeal is filed within ten (10) days, all rights to further administrative relief are waived.  MAIN OFFICE: 801 MAIN ST. EL CENTRO, CA 92243 (760) 482-4236 FAX: (760) 353-8338 E-MAIL-planning@mpcralcounce.

(760) 482-4900

ECON. DEV. OFFICE:

836 MAIN ST., EL CENTRO, CA 92243

FAX: (760) 337-8907

E-MAIL: planning@imperialcounty net

(AN EQUAL OPPORTUNITY EMPLOYER)

#### PLEASE READ AND FOLLOW THE INSTRUCTIONS BELOW:

amounts are deter	mined by the findings of the project. Your project requires:
X	a Negative Declaration, the fee is <b>\$1,926.75</b> (\$1876.75 for Negative Declaration and \$50.00 documentary handling fee); or,
	an Environmental Impact Report (EIR), the fee is <b>\$2656.75</b> (\$2606.75 for the EIR and \$50.00 documentary handling fee); or,
	a "De Minimus" finding was determined or your project was exempt

These

In addition, the following additional amounts are required for your project.

These fees are to be made payable to the **Imperial County Clerk Department**. Please note that these fees should be submitted to the Imperial County Planning & Development Services Department as soon as possible for further processing of your Reclamation Plan.

## LEGAL RIGHT PLEASE READ THE FOLLOWING STATEMENT - CAREFULLY:

"The time within which judicial review of this decision must be sought is governed by the Code of Civil Procedure 1094.6, which has been made applicable to the County of Imperial and any Commission, Board, including the Imperial County Board of Supervisors, the Planning Commission, agency, officer, or agent of the County by resolution. Any petition or other paper seeking judicial review must be filed in the appropriate court no later than ninety (90) days following the date on which this decision becomes final; however, if within ten (10) days after the decision becomes final, a request for the record of the proceedings is filed and the required deposit in the amount sufficient to cover the estimated cost of preparation of such record is timely deposited, the time within which such petition may be filed in court is extended to no later than the thirty (30) days following the date on which the record is either personally delivered or mailed to the party or his attorney of record, if he/she has one. A written request for the preparation of the record of the proceedings shall be filed with Jurg Heuberger, Planning Director, County of Imperial, 801 Main Street, El Centro, California, 92243. For purposes of this notice, the decision becomes final upon the expiration of the period during which an appeal may be sought; provided that if an appeal is sought, the decision is final for purposes of this notice on the date the appeal is denied."

If you have any questions, please feel free to call this Department at (760) 482-4236.

Sincerely,

Jurg Heuberger, AICP
Planning & Development Services Director

ATTACHMENT(S): CUP Agreement

JH/S:\APN FILES\050\320\31\PYRAMID\NOTICEOFACT (RP08-0001) 082108 DB.DOC

Finase return to:

Imperial County
Planning & Development Services
801 Main Street
El Centro, California 92243

## RECEIVED

NOV 0 6 2012

BY\_\_\_\_\_\_IMPERIAL COUNTY CLERK-RECORDER

Assessors Parcel No. 050-320-031-000 FOR RECORDER'S USE ONLY

NOTICE OF RECLAMATION PLAN APPROVAL PYRAMID CONSTRUCTION AND AGGREGATES, INC. AMERICAN GIRL EAST MINE OPERATION RP08-0001

Pursuant to California Public Resources Code Section 2772.7 the County of Imperial, a political subdivision of the State of California hereby gives notice that mining operations conducted on the hereinafter described property are subject to a Reclamation Plan approved by the Imperial County a copy of which is on file with the Planning and Development Services Department of said Imperial County. The property which is subject to the Reclamation Plan is described on Exhibit A which is attached to this Notice and is hereby incorporated herein by this reference. This Reclamation Plan dated August 27, 2008 supersedes any previous versions that may have been recorded. The approved Reclamation Plan #08-0001 is on file at the Imperial County Planning and Development Services Department.

COUNTY OF IMPERIAL, a political subdivision of the STATE OF CALIFORNIA

ARMANDO VILLA, Planning and Development Services Director

STATE OF CALIFORNIA }
COUNTY OF IMPERIAL 3

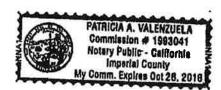
On October 302012 before me, Patricia A. Valenzuela a Notary Public In and for said County and State, personally appeared Armando Villa, who proved to me on the basis of satisfactory evidence to be the person(x) whose name(x) is/ale subscribed to the within instrument and know ledged to me that he/she/they executed the same in his/ha/r/their authorized capacity(iss), and that be his/ha/r/their signature(x) on the instrument the person(x), or the entity upon behalf of which the person(x) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

Notary Public In and For the

State of California

PAVIS:APN Files/003/050/015Wolfice of Reclamation Approval (RP06-0002).doc



A. J. J. S. S.

## **RECLAMATION PLAN**

### Prepared for

Pyramid Construction and Aggregates, Inc.
American Girl Operations
Imperial County, California
July 2, 2008



BROWN AND CALDWELL

9665 Chesapeake Drive, Suite 201 San Diego, California 92123

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## IMPERIAL COUNTY RECLAMATION PLAN APPLICATION

#### **OWNER, OPERATOR AND AGENT:**

1. Applicant (Name, Mailing Address and Telephone Number):

Pyramid Construction and Aggregates Incorporated 839 Dogwood Road Heber, California 92249

Telephone: (760) 337-5839

2. Property Owner(s), or owner of Surface Rights (Name, Mailing Address and Telephone Number): [if different from applicant]

United States Bureau of Land Management

El Centro Area Office Attn: Walter Todd III

1661 South 4th Street

El Centro, California 92243 Telephone: (760) 337-4400

3. Owner of Mineral Rights (Name, Mailing Address and Telephone Number): [if different than applicant]

United States Bureau of Land Management

El Centro Area Office

Attn: Walter Todd III

1661 South 4th Street

El Centro, California 92243

Telephone: (760) 337-4400

4. Lessee (Name, Mailing Address and Telephone Number):

Pyramid Construction and Aggregates Incorporated

839 Dogwood Road Heber, California 92249

Telephone: (760) 337-5839

5. Operator (Name, Mailing Address and Telephone Number): [if different than applicant]

Pyramid Construction and Aggregates Incorporated

839 Dogwood Road Heber, California 92249

Telephone: (760) 337-5839

#### 6. Agent of Process (Name, Mailing Address and Telephone Number):

Brown and Caldwell 9665 Chesapeake Drive, Suite 201 San Diego, California 92123 Telephone: (858) 514-8822 Project Number: 133384

#### **LOCATION:**

#### 7. Legal Description: (must be full legal)

This area of Imperial County is not formally surveyed by the United States Geological Survey. The proposed American Girl Operation (AGO) is located in what is estimated to be Section 19, Township 15 South Range 21 East.

Legal Description of Proposed AGO				
Assessor Parcel No.:	050320031000			
Longitude:	114°47'45.50" W			
Latitude:	32°50'38.35" N			
Elevation:	550 to 650 feet above mean sea level			

The proposed well site is located in Section 25, Township 15 South Range 20 East.

Legal Description of Proposed AGO Well Site				
Assessor Parcel No.:	050120009000			
Longitude:	114º49'18.38" W			
Latitude:	32°49'38,63" N			
Elevation:	420 to 435 feet above mean sea level			

#### 8. Size of the land(s) that will be affected by mining operation. Total acreage:

The estimated total acreage affected by the proposed operation is 40 acres, 39.5 acres for the mining area, and 0.5 acre for the water well area. The mining disturbance associated with the proposed AGO will affect previously mine (and subsequently reclaimed) lands and will be focused on mine overburden stockpiles created by historic mining operations. Mining these stockpiles will reuse and recycle the material while returning the area to a more natural topography.

#### 9. Describe existing and proposed access to the mine site: (please be specific)

The proposed AGO is located in an uninhabited area of the southern Cargo Muchacho Mountains (about 15 miles northwest of Yuma, Arizona, and 45 miles east of El Centro, California) in an unsurveyed portion of Section 19, Township 15 South Range 20 East, of Imperial County, California (Figure 1). The proposed AGO is located entirely upon previously disturbed lands associated with the former American Girl Mine-Padre Madre Mining Operation, which was part of the American Girl Canyon Mining Area. The proposed AGO will mine a portion of existing overburden stockpiles

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EMAIL planning@icoe.k12.ca.us		FAX (760) 353-8338

remaining at the site and process these materials for sale as construction aggregate in the local Imperial County market. The project will reduce, reuse, and reclaim or recycle what are considered to be wastes, thus removing waste stockpiles and restoring the area to near-original surface contours.

Access to the proposed AGO will be over the existing county roads (i.e., same road originally used for access to the American Girl Mine- Padre Madre Operation). A short section of unpaved access road will require some dust control upgrades including the possible use of industry-standard chemical dust control treatments such as magnesium chloride (Figure 2). Additionally, a short section of road will be re-graded to provide more level access to the process plant and material load-out area as shown in Figure 2. The road will not be relocated but rather the grade of an approximately 300 foot section will be reduced to better accommodate haul trucks that will pass through the area. This process will not be achieved through blasting but rather "ripping" the grade with mining equipment. Excess materials resulting from this grade reduction will be processed as saleable material. Additionally, a small access road will be constructed for site access and the scale house. This road will be constructed within the confines of the property and will not affect the existing County road.

Based on communication with the United States Army Corps of Engineers (USACE), construction for this road will be performed under the authority of Nationwide Permit Number 14 and is therefore exempt from 404 and 401 permitting requirements. Further, since the former American Girl cyanide leach piles are not on the proposed AGO parcel and there is no indication of cyanide being used historically along the roads related to the proposed AGO parcel, the site is exempt from a Water Discharge Requirement (WDR) permit.

For potential discharges to surface waters outside of the site, the federal NPDES permit application Forms 1 and 2D will be completed and submitted to the California SWRCB.

#### **GEOLOGICAL BACKGROUND:**

#### 10. Mineral commodity to be mined:

Materials to be mined include sand and gravel.

#### 11. General Geological description of the area:

The site is located in the eastern portion of the Colorado Desert Geologic Province of California, which is generally characterized by extensional mountain ranges and alluviated valleys bordering the Salton Trough. The area is dominated by the San Andreas Fault system. The main geologic formation in the area is the Pelona and Orocopia Schist, which was metamorphosed during Mesozoic thrust faulting. Locally, the Cargo Muchacho Mountains, part of the larger Chocolate Mountain Range, historically exhibited highly mineralized zones that originated from hydrothermal activity in the area. The predominant feature in the Cargo Muchacho Mountains is the highly fractured quartz. Many of the mineralized deposits are no longer in place as the entire region has been heavily mined for gold and other associated metals in the past.

#### 12. Detailed description of the geology of the actual site in which surface mining is to be conducted:

The site is located in the Cargo Muchacho Mountains, which are a small part of the Chocolate Mountain Range in the eastern portion of the Colorado Desert Geologic Province. Little site-specific geological interpretation has been conducted of the Cargo Muchacho Mountains. However, based on documentation of past mining activities, it is known that this area had, in the past, highly mineralized zones as a result of hydrothermal activity. Four geologic settings have been identified for this area. These include sheared rocks, linear zones trending north-northeast, chemically and physically altered Cenozoic metamorphosed rocks as well as fractured quartz in east trending thrust faults.

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El Centro CA 92243 (760) 482-4236 FAX (760) 353-8338 The geology at the site has been highly altered due to past surface and subsurface mining activities. Currently, the site is covered with stockpiles of alluvium and waste rock material that resulted from these mining activities (Figure 2). The stockpiled resource is a composite of all materials mined at the site in the past and cannot, therefore, be characterized easily.

13. Brief description of the environmental setting of the site and the surrounding areas. Existing land uses, soil, vegetation, groundwater elevation and surface water characteristics.

Pyramid's proposed AGO is located on the western side of the Cargo Muchacho Mountains and east of Pilot Knob Mesa. The topography ranges from approximately 500 to 700 feet above mean sea level (amsl) (Figure 1). The Site is a previously mined area, which operated as the American Girl Mine associated with the American Girl Canyon Permit area. The American Girl Mine was an open pit gold mine with heap leach processing and overburden disposal operated by the AGMJV.

The climate in this area is extremely hot and arid and receives approximately 2.14 inches of precipitation per year based on data collected by AGMJV during the mine operation. This precipitation usually occurs during the late fall and early winter months. Two types of rainfall patterns occur in this region and will affect the revegetation and reclamation efforts. Frontal storms from the west in the winter months give gentle, relatively longer periods of rain, while episodic convectional thunderstorms with short intense periods of rain occur in the late summer. This Reclamation Plan includes procedures to take advantage of each kind of rainfall.

Surface water is limited in the proposed AGO area and occurs in the shallow alluvium of each wash, and in the deeper alluvium west of the project area. The water supply for the project will be from a proposed well located in the alluvial fill southwest of the project area. The water quality of the supply well does not meet the California Drinking Water Standards, but is suitable for the non-potable industrial requirements of the proposed AGO.

The proposed AGO is located in an uninhibited area of the southern Cargo Muchacho Mountains (about 15 miles northwest of Yuma, Arizona, and 50 miles east-northeast of El Centro, California) in an area that has not been formally surveyed by the USGS but is interpreted to be located in Section 25, T15S, R20E, of Imperial County, California. The proposed AGO is partially coincident with the previous American Girl Mining Operation, which was a portion of the American Girl Canyon Mining Area. The proposed AGO is located entirely upon lands related to the former American Girl Mining Operation, which was a portion of the American Girl Canyon Mining Area, and will utilize existing roads for site access.

For a more complete discussion of the environmental setting of the proposed AGO, please refer to Section 3.0 of this Reclamation Plan which covers topics including but not limited to topography and geology/soils, air quality and climatology, hydrologic resources, visual resources and land use, and transportation.

#### MINING OPERATION AND PRODUCTION:

#### 14. Proposed starting date of operation:

Mobilization of the proposed AGO will begin when applicable Federal, State and local approvals have been obtained. Pyramid anticipates project mobilization and initial commercial sales to commence on May 1, 2008. Reclamation activities will occur in parallel with mining and material beneficiation operations with final reclamation planned for completion following the cessation of operations at the site. Based on the resource extraction rates described in the Plan of Operations (submitted to the Bureau of Land Management [BLM] under separate cover), the life of the proposed AGO is planned to be two

years but may extend for up to 10 years. This operating life estimate is dependent upon a variety of economic variables, including production costs, material sales contracts, and commodity prices.

Estimated Start and Finish Date of Operation				
Estimated Start Date	May 1, 2008			
Estimated life of operation:	10 years			
Termination Date:	May 1, 2018			
Duration of first phase:	10 years			

#### 15. Operation will be (include days and hours of operation):

Pyramid plans to operate the proposed AGO on an intermittent basis, 12 months a year, for up to 10 years. The project will typically operate only during daylight hours, up to six days a week. No night shifts are planned.

An intermittent work force of approximately five to 10 employees is planned for the life of the project. These workers are currently employed by Pyramid therefore an increase in work force is not planned or anticipated.

Hours of Operation				
Continuous:	10 hours a day, 6 days a week			
Intermittent:				
Seasonal:				

#### 16. Maximum anticipated annual production (Tons or Cubic Yards):

Production at the proposed AGO is limited on an annual basis by the BLMs material sales contract limitations and by market demand. The maximum daily production is planned to be 4,500 cubic yards. The annual extraction is estimated at 500,000 cubic yards.

#### 17. Total anticipated production:

Pyramid projects a total of approximately one million cubic yards<sup>1</sup> of material are available for mining as construction aggregate materials within the approximately 40-acre footprint of the operations and within the limits of the current contract with BLM. The maximum mining rate is established by 43 CFR 3600 and is dependent upon the BLM award of competitive mineral material contracts to Pyramid as well as approval of this Reclamation Plan and associated Plan of Operations (submitted to the BLM under separate cover).

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<sup>&</sup>lt;sup>1</sup> Estimated available volume based on visual assessment, analytical data and field mapping. Estimate accurate to +/-50%.

Total Anticipated Production					
Minerals:	Construction Aggregates	~ 500,000	cubic yards		
Tailings retained on site:		~ 500,000	cubic yards/tons		
Tailings disposed off site:		0	cubic yards/tons		

#### Maximum anticipated depth (indicate on map location of benchmarks to verify mine depth):

Pyramid proposes to mine and process all the overburden and stockpiled materials within a small portion of the confines of the formerly mined American Girl Mine-Padre Madre Mine Operation and will not disturb any native or previously undisturbed ground. The extraction of materials from these stockpiles will be accomplished with conventional mining methods using loaders and haul trucks. No blasting will be required. All mining will occur at elevations above natural ground elevation (i.e., no new open pits will be created at the site as a result of the mining operation).

#### 18. Describe mining method:

Pyramid proposes to mine and process all the overburden and stockpiled materials within a small portion of the confines of the formerly mined American Girl Mine-Padre Madre Mine Operation and will not disturb any native or previously undisturbed ground. The extraction of materials from these stockpiles will be accomplished with conventional mining methods using loaders and haul trucks. No blasting will be required. The operation will include mining, crushing, screening, and washing, with future provision for a portable asphalt batch plant.

Each of the stockpiles will be mined systematically in order to facilitate concurrent reclamation in parallel with the proposed operation. Approximately one million cubic yards of stockpiled material is estimated and planned for extraction under the current contract with BLM.

#### 19. Describe nature of processing and explain disposal of tailings or waste.

Material processing will include crushing and screening, and washing when necessary, to meet the required specification of the respective construction aggregates being sold. Some materials will require crushing and screening as well as washing to remove fines, while others may require only washing. All plant reject material will be temporarily stockpiled in the north portion of the site (Figure 3A) for eventual spreading over the reclamation areas and graded into the final contours.

Plant reject/wash material will be stored in a small sediment pond as shown in Figure 3A. All plant reject materials will be used as part of concurrent reclamation and graded into the final reclamation contours.

#### 20. Do you plan to use cyanide or other toxic materials in your operations?

No.

#### Do you plan to use or store petroleum products or other hazardous materials on the site?

Fuel and other supplies to be used at the proposed AGO include diesel fuel, motor oil, and lubricating compounds. Fuels to be stored at the site will be contained in two 12,000-gallon diesel storage tanks (Figure 3A). A secondary containment area will be constructed around the storage tanks to hold 100 percent of the capacity of the largest single-walled tank as well as the area displaced by all other tanks in the secondary containment. This is in addition to calculated freeboard to accommodate the average daily rain event. All refueling of vehicles will occur within the bounds of the containment area. All appropriate State and local storage permits will be obtained prior to delivery to the project area.

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Daily fuel	consumption	estimates	are includ	ded in	the	table below.
------------	-------------	-----------	------------	--------	-----	--------------

Estimated Fuel Consumption						
Equipment Type	Model Equivalent	Quantity	Estimated Fuel Consumption / Hr / Vehicle (gallons)	Hours of Operation Per Day	Estimated Fleet Fuel Consumption / Bay (gallons)	
Front-End Loader – 7 cubic yards <sup>1</sup>	CAT 980	1	11.25	8	90	
Motor Grader <sup>1</sup>	CAT 140	1	5.05	8	40.4	
Haul Truck – 35 ton <sup>1</sup>	CAT D350	3	9.25	8	222	
Bulldozer <sup>1</sup>	CAT D8	1	8.75	8	70	
Generator <sup>2</sup>	Cummins QSX15-G9 (725 kW)	1	39.3	8	314.4	
Water truck1	4,000 gallon	1	5.8	8	46,4	
Water pull <sup>1</sup>	5,000 gallon	1	6.5	8	52	
		Total	Daily Consumption (gallons)		835.2	

Source:

A Spill Prevention Control and Countermeasure (SPCC) Plan will be prepared prior to start-up to comply with 40 CFR Part 112.

#### Describe refueling and maintenance of vehicles.

All refueling of vehicles will occur within the bounds of the containment area as outlined above.

Equipment maintenance will be provided by owner or vendor service trucks. Temporary or permanent maintenance facilities are not required.

21. Indicate the quantity of water to be used, source of water, method of conveyance to the mine site, the quantity, quality and method of disposal of used and/or surplus water. Indicate if water well to be used for mine operation (drilling, reactivation, changing use or increasing volume of water well may require Conditional use Permit approval).

The maximum daily water requirement is proposed to be 60,000 gallons, or approximately 42 gallons per minute.

Construction of a new alluvial well is proposed for the water source for the project. The location of the proposed well is approximately 1.5 miles southwest of the proposed AGO along the north side of American Girl Mine Road on Assessor's Parcel Number 0501200009000 (Figures 2, 3B). This location was chosen for its proximity to access roads, the proposed mine site as well as roads that will be subject to dust control measures. Several wells are currently or were historically located in this alluvial setting and reportedly produce up to four times the required volume for the proposed AGO.

Water extracted from this well will be transferred to two portable storage tanks at the well site and conveyed in water trucks to portable storage tanks to be located on the site (Figure 3A). Use of this well will require coordination with BLM for use and right-of-way access as well as a Conditional Use Permit from Imperial County.

<sup>(1)</sup> Cat Handbook, Edition 31 (assumes "medium" duty")

<sup>(2)</sup> Diesel Service and Supply, Brighton, Colorado (assumes 3/4 load

## 22. Describe phases of mining if applicable and concurrent reclamation including time schedule for concurrent activities.

The estimated areas of disturbance associated with the project are listed in the table below and are shown on Figure 2. The mining disturbance associated with the proposed AGO will affect previously reclaimed lands and will be focused on mine overburden stockpiles created by historic mining operations. Mining of these stockpiles will return the area to near original land surface contours or road base elevation.

Estimated Areas of Disturbance / Year Reclaimed					
Location	Acres	Year Reclaimed			
Plant Site	5	Concurrent			
Haul Road Year 1-5	3	END			
Year 1 Mining	25	2			
Year 2-3 Mining (including well location)	4.5	4			
Year 4-5 Mining	0	6			
Year 5-10 Mining	0	N/A			
Water Well	1	N/A			
Access Road	1	END			
Well*	0.5	END			
Long-term Monitoring	N/A	Post-Reclamation			
Project Total	40				

<sup>\*</sup>The proposed well is located on a non-contiguous parcel of land. See Figure 2.

Revegetation activities will be timed to take advantage of climatic conditions ideal for seed germination conditions, primarily in the winter/spring months. Since the success of revegetation is typically tied directly to precipitation events and cooler ambient temperatures, all revegetation efforts will occur between October and April each year.

The monitoring program for determining vegetative cover and density will be conducted at an appropriate time of year during the mine operation/reclamation period. The reclaimed areas will be monitored at periodic intervals depending on precipitation and plant germination and growth cycles, but at a minimum of once a year. The monitoring period is proposed to extend to the point of creating a self-sustaining ecosystem but in any event, no longer than 10 years.

Pyramid proposes to conduct reclamation concurrent with mining. In this way the project will minimize overall un-reclaimed surface disturbance and overall reclamation liability. The reclamation will occur following aggregate extraction in discrete areas of sufficient size and there is adequate operating area to complete reclamation.

## 23. Describe the types of equipment that will be used in the operating, including the estimated average daily trips (ADT) that will be generated by the operation.

All mining will occur at elevations above natural ground elevation (i.e., no new open pits will be created at the site as a result of the mining operation). The stockpile extraction will be accomplished with conventional surface mining equipment including front-end loaders, haul trucks, bulldozers, motor graders, and water trucks. The table below lists the proposed mining equipment fleet.

Proposed Mining Equipment				
Equipment Type	Model Equivalent	Quantity		
Front-End Loader – 7 cubic yards	CAT 980	1		
Motor Grader	CAT 140	1		
Haul Truck – 35 ton	CAT D350	3 (future)		
Bulldozer	CAT D8	1		
Generator	Cummins QSX15-G9 (725 kW)	1		
Water truck	4,000 gallon	1		
Water pull	5,000 gallon	1		

A crushing and screening facility will be used to manufacture construction aggregate materials to meet specific market needs. Mined stockpile material will be delivered directly to the crushing plant feeder hopper. Material will be fed from the hopper into the jaw crusher and then conveyed to the portable screen plant and either routed to a product pile or to a secondary cone crusher, which returns material to the screen plant. The entire crushing and screening plant is designed as a portable system such that no permanent foundations are required, and the plant can be relocated as necessary. The table below lists the anticipated crushing and screening equipment.

1- 3 144 Pioneer jaw crusher (1 50 HP) 1- 7' x 20' JCI triple deck screen, Model 7203-38 (50 HP) 1- 1400LS JCI cone crusher (300 HP) 1- 48" x 30'jaw under crusher conveyor (30 HP) 1- 42" x 60' conveyor (30 HP) 1- 60" x 25' screen conveyor (30 HP) 1- 36" x 25' screen conveyor (15 HP)
1- 1400LS JCI cone crusher (300 HP) 1- 48" x 30'jaw under crusher conveyor (30 HP) 1- 42" x 60' conveyor (30 HP) 1- 60" x 25' screen conveyor (30 HP)
1- 48" x 30'jaw under crusher conveyor (30 HP) 1- 42" x 60' conveyor (30 HP) 1- 60" x 25' screen conveyor (30 HP)
1- 42" x 60' conveyor (30 HP) 1- 60" x 25' screen conveyor (30 HP)
1- 60" x 25' screen conveyor (30 HP)
1- 36" x 25' screen conveyor ( I5 HP)
1- 36" x 1 5' screen conveyor ( I0 HP)
1-42" x 30' cone crusher feed conveyor (30 HP)
1- 48" x 15' cone under crusher conveyor (20 HP)
1- 30" x 30' portable conveyor (I0 HP)
2- 30" x 60' portable conveyors (15 HP each)
1- 30" x 100' radial stacking conveyor (25 HP)
1- 36" x 30' portable conveyor ( I5 HP)
1- 36" x 60' portable conveyor (20 HP)
1- 36" x 100' radial stacking conveyor (30 HP)
1- Caterpillar generator set, powered by a Cat diesel-fueled engine, Model 3412CDITA, turbocharged, rated at 1,186 HP@ 1,800 rpm
1- JCl 7 x 20 Screening Plants sln 2006165
1- Thor 36 x 150 telescopic portable radial
12- RF 36 x 60 stackable conveyor
1 – riprap separator
1 –Ford F800 (maintenance truck)

The proposed AGO will have truck traffic associated with the removal of mineral materials related to the sale of construction aggregates. The anticipated maximum daily trip-count for aggregate trucks is 250.

- 24. Include the following maps: (NOTE: Without these the application is automatically incomplete.)
  - (1) Topographic Map with overlay showing proposed area to be mined. (Please see Figure 3A.)
  - (2) Site Plan showing mine layout and dimensions. (Please see Figure 2.)
  - (3) General Vicinity Map showing the location of the mine site in Imperial County. (Please see Figure 1.)
  - (4) Cross Section Map. (Please see Figure 4.)

The following additional figures are included in this Reclamation Plan:

- (5) Detail of proposed well site associated with the proposed AGO. (Please see Figure 3B.)
- (6) Site Plan showing approximate post reclamation grading contours. (Please see Figure 5.)

#### **RECLAMATION:**

25. Indicate by overlay of map of Item No. 24, or by color or symbol on map those areas to be covered by the reclamation plan:

The estimated total acreage affected by the proposed operation is 40 acres, 39.5 acres for the mining area, and 0.5 acre for the water well area. The mining disturbance associated with the proposed AGO will affect previously mine (and subsequently reclaimed) lands and will be focused on mine overburden stockpiles created by historic mining operations. Mining these stockpiles will reuse and recycle the material while returning the area to a more natural topography. Figures 2 and 3A illustrate the area affected by the proposed AGO.

26. Describe the ultimate physical condition of the site and specify the proposed use(s) or potential uses of the land after reclamation. Explain if utilities, haul or access roads will be removed or reclaimed.

For a detailed description of the site including discussion of geologic and seismic setting, hydrologic resources, air quality, socioeconomics, land uses and more, please refer to Section 3.0 of the attached Reclamation Plan.

- 27. Describe relationship of the interim uses mining and the ultimate physical condition to:
  - (a) Imperial County Zoning Ordinance
  - (b) Imperial County General Plan

The proposed AGO activities conform with Imperial County's General Plan Design (Open Space/Recreation) and Zoning (S-Open Space with mining allowed, subject to Conditional Use Permit [CUP] approval). This area is designated as "Class M" or "Moderate" use under the California Desert Conservation Act (CDCA) of 1980, as amended, due to past, present, and potential future mining activities.

28. Notarized statement that all owners of the possessory interest in the land have been notified of the proposed uses or potential uses identified in Item No. 25 (see Attachment "A").

Please refer to Attachment A following this Application.

29. Describe soil conditions and proposed topsoil salvage plan.

Soils in and around the project site are derived from the host granitic or meta-sedimentary substrate, either as weathered in place or as material deposited as shallow alluvium over bedrock. Soils in the project area are characterized as shallow and poorly developed. Native soils on the project site are covered with stockpiles from previous mining activity and are not generally exposed. Therefore, native topsoil is not available for reclamation efforts. However, Pyramid will stockpile materials that appear to

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El Centro CA 92243 (760) 482-4236 FAX (760) 353-8338 support abundant vegetative life encountered during mining operations for use during reclamation on the north side of the property (Figure 3A).

For more information on the reclamation and revegetation process, please refer to Section 6 of the attached Reclamation Plan.

- 30. Describe the methods, their sequence and timing, to be used in bringing the reclamation of the land to its end state. Indicate on map (Item Nos. 24 and 25) or on diagrams as necessary. Include discussion of the pertinent items listed below.
  - (a) Backfilling and grading
  - (b) Stabilization of slopes
  - (c) Stabilization of permanent waste dumps, tailings, etc.
  - (d) Rehabilitation of pre-mining drainage
  - (e) Removal, disposal or utilization of residual equipment, structure, refuse, etc.
  - (f) Control and disposal of contaminants, especially with regard to surface runoff and ground water.
  - (g) Treatment of streambeds and streambanks to control erosion and sedimentation
  - (h) Removal or minimization of residual hazards
  - (i) Re-soiling, revegetation with evidence that selected plants can survive given the site's topography, soil and climate:

For a detailed description of the reclamation process, please refer to Section 6 of the attached Reclamation Plan.

31. If applicant has selected a short term phasing of his reclamation, describe in detail the specific reclamation to be accomplished during the first phase:

The proposed AGO plans to conduct reclamation on a concurrent basis as the resource is extracted and sufficient area to perform reclamation is developed. Reclamation earthwork will occur over a period of months in order to allow seed sowing to occur between October and April in the reclamation areas. This methodology will provide the best opportunity for seed germination and maximize the chances for successful revegetation of the reclaimed areas.

32. Describe how reclamation of this site in this manner may affect future mining at this site and in the surrounding area:

The proposed AGO, under its current contract with the BLM and under this Reclamation Plan, will not deplete the existing aggregate resource remaining from past mining activities. It is estimated that several million cubic yards will remain on the property for viable extraction and sale. Notwithstanding that, the reclamation for the proposed AGO will proceed without consideration to potential future mining activities but will regrade to create a more natural topographic profile on the property.

33. Notarized statement that the person submitting the plan accepts responsibility for reclaiming the mined land in accordance with the Reclamation Plan (Attachment "B"):

Please refer to Attachment B following this Application.

#### 34. Include Reclamation Cost Calculations as Attachment "C":

Please refer to Section 8.0 of the attached Reclamation Plan for a detailed breakdown of Reclamation Cost Calculations for the proposed AGO.

#### 35. Describe proposed Revegetation Plan (attach as "Attachment D" if necessary):

Please refer to Section 6.0 of this Reclamation Plan for a full and detailed discussion of the Revegetation Plan for the proposed AGO.

## ATTACHMENT "A" STATEMENT OF NOTIFICATION

I, the undersigned, have notified all owners of the possessory interest in the land of the proposed use (s) or potential uses identified in Item No. 26 of the Reclamation Plan.<sup>2</sup>

Signed this	day of	, 2008.
Operator or Operat	or's Agent	

<sup>2</sup>Imperial County and the BLM have been notified per instructions from Mr. Walter Todd III, BLM.

# ATTACHMENT "B" STATEMENT OF RESPONSIBILITY

I, the undersigned, hereby agree to accept full responsibility for reclaiming all mined lands as described and submitted herein with any modifications requested by the County of Imperial as conditions of approval.

Signed this	day of	, 2008.
Operator or Opera	tor's Agent	

## ATTACHMENT "C" RECLAMATION COST ANALYSIS

Please refer to Section 8.0 of the attached Reclamation Plan for a detailed breakdown of Reclamation Cost Calculations for the proposed AGO.

# ATTACHMENT "D" REVEGETATION PLAN

Please refer to Section 6.0 of this Reclamation Plan.

## RECLAMATION PLAN

## 1. INTRODUCTION

This Reclamation Plan (Plan) is for the proposed Pyramid American Girl Operation (AGO), to be operated by Pyramid Construction and Aggregates Incorporated (Pyramid), at the previously mined American Girl Mine—Padre Madre Operations, located in Imperial County, California. The American Girl Mine was owned and operated by the American Girl Mining Joint Venture (AGMJV) and was closed in 1996.

The proposed AGO will mine a portion of existing overburden stockpiles remaining at the site and process these materials for sale as construction aggregate in the local Imperial County market. The project will reduce, reuse, and reclaim or recycle what are considered to be wastes, thus removing waste stockpiles resulting from previous precious metals mining and restoring the area to near-original surface contours. This Reclamation Plan describes the work necessary to reclaim the mining area disturbed as a result of the construction aggregate operation including but not limited to the removal of all structures and operational equipment prior to site closure, abandonment of the water well, regrading, and revegetation. This Plan has been prepared to comply with the requirements of the Surface Mining and Reclamation Act of 1975 (SMARA), as amended.

Land within the proposed AGO site is under the jurisdiction of both Imperial County, California, and the United States Department of the Interior, Bureau of Land Management (BLM). Imperial County is the lead agency for reclamation permitting and oversight, while the BLM is the lead agency for administering the mineral material contracts. BLM requires a mining Plan of Operations be prepared and submitted to support the request for award of a mineral material contract. This required document has been submitted to the BLM under separate cover.

## RECLAMATION PLAN

## 2. PROJECT OVERVIEW

Pyramid's proposed AGO is a construction aggregate mining operation located in Imperial County, California (Figure 1). A Plan of Operations has been submitted to the BLM as required by Title 43 CFR Part 3600 under separate cover. The proposed AGO will include mining of existing stockpiles, processing of the material for use as construction aggregate products, commercial sales of construction aggregates, and future provision for an asphalt batch plant. The mining sequence is planned to support concurrent reclamation while maintaining operational flexibility for the extraction of the stockpiled materials. The maximum anticipated annual mining and processing rate is capped at 500,000 cubic yards as stipulated in 43 CFR Part 3602 and will vary below or up to that limit depending on cost of production and local market conditions.

Access to the proposed AGO will be over existing county roads (i.e., the same road originally used for access to the former American Girl Mine-Padre Madre Operations). Haul and access roads will follow existing access and exploration roads. A short section of road will be modified or reduced in grade to provide level access to the process plant and material load-out area (Figure 2). A maximum of 250 truck trips per day (25 trucks at 10 trips per day) is projected during periods of peak activity.

Haulage and access roadways will follow existing access and exploration roads. All mine roads will be developed to an operating width of 25 feet which is no greater than the current approximate width of the roads leading the site. Road grades will be limited to overall gradients of eight percent or less.

Approximately 39.5 acres of previously disturbed land will be mined over a period of approximately two to 10 years (Figure 3). The remaining 0.5 acres is a well site located roughly 1.5 miles southwest of the proposed site and on the northern edge of American Girl Mine Road. The reclamation will be concurrent with the mining activities in order to minimize final reclamation activities and costs.

#### 3. ENVIRONMENTAL SETTING

The proposed AGO is located on the western side of the Cargo Muchacho Mountains and east of Pilot Knob Mesa. The topography ranges from approximately 500 to 700 feet above mean sea level (amsl) (Figure 1). The Site is a previously mined area, which operated as the American Girl Mine associated with the American Girl Canyon Permit area. The American Girl Mine was an open pit gold mine with heap leach processing and overburden disposal operated by the AGMJV.

The climate in this area is extremely hot and arid and receives approximately 2.14 inches of precipitation per year based on data collected by AGMJV during the mine operation. This precipitation usually occurs during the late fall and early winter months. Two types of rainfall patterns occur in this region and will affect the revegetation and reclamation efforts. Frontal storms from the west in the winter months give gentle, relatively longer periods of rain, while episodic convectional thunderstorms with short intense periods of rain occur in the late summer. This Reclamation Plan includes procedures to take advantage of each kind of rainfall.

Surface water is limited in the proposed AGO area and occurs in both the shallow alluvium of each wash and in the deeper alluvium west of the project area. The water supply for the project will be from a proposed well located in the alluvial fill southwest of the project area. The water quality of the supply well does not meet the California Drinking Water Standards, but is suitable for the non-potable industrial requirements of the proposed AGO.

The proposed AGO is located in an uninhibited area of the southern Cargo Muchacho Mountains (about 15 miles northwest of Yuma, Arizona, and 50 miles east-northeast of El Centro, California) in an area that has not been formally surveyed by the USGS but is interpreted to be located in Section 19, Township 15 South Range 21 East, of Imperial County, California. The proposed AGO is partially coincident with the previous American Girl Mining Operation, which was a portion of the American Girl Canyon Mining Area. The proposed AGO is located entirely upon lands related to the former American Girl Mining Operation, which was a portion of the American Girl Canyon Mining Area, and will utilize existing roads for site access.

## 3.A Existing Studies

A Final Environmental Assessment/Environmental Impact Report (EIR) (BLM EA No. CA-067-88-65) was prepared for the former American Girl Mining Project. Environmental studies were previously conducted over a 2,100-acre Study Area, which includes the proposed 40-acre proposed AGO area. Thirteen environmental resource areas were studied in the previous assessment of impacts due to the former mining operations. The EIR states "In the context of the regional environment, none of the adverse impacts identified were determined to be significant." Based on the nature and scope of the proposed AGO project, impacts will be even less than those identified and documented for the former American Girl gold-mining operation, and none will be environmentally significant.

A summary of 13 key environmental resource areas has been addressed below with respect to the proposed AGO.

## 3.B Topography

The proposed project area is characterized by desert landscape and low mountain ranges with barren, rocky slopes interspersed with arroyos (washes) and alluvial plains. While the general views are expansive and marked by sparse development, the Cargo Muchacho Mountains have long been an area of active mining and the vistas in the project area reflect the associated surface disturbance.

While the proposed AGO will alter the landscape in the project area, the proposed operation will remove the "unnatural" landforms created and resulting from past mining activities. The project will reduce, reuse, and reclaim or recycle what are considered to be wastes, thus removing waste stockpiles and restoring the area to more natural surface contours.

## 3.C Geology and Seismic Setting

The Cargo Muchacho Mountains are a small part of the Chocolate Mountain Range in the eastern portion of the Colorado Desert Geologic Province. Four geologic settings have been identified for this area: sheared rocks, linear zones trending north-northeast, chemically and physically altered Cenozoic metamorphosed rock, and fractured quartz in east-trending thrust faults. Highly mineralized zones, believed to have originated from hydrothermal activity in the area, are generally developed within shear zones. Many of the mineralized deposits are no longer in place as the entire region has been heavily mined for gold and associated metals.

The proposed project is located in the Imperial Valley at the southern end of the San Andreas Fault system, a seismically active area. Active and potentially active faults exist in the area, although no recently active faults were identified in the 1988 EA/EIR. Recent information indicates that the very active Imperial Fault lies roughly 42 miles west of the proposed AGO site. This fault experienced significant activity in 1940, 1966, 1968, 1971, 1977, and 1979. Some of this activity was surface ruptures and some was classified as triggered creep. Despite the very active nature of this fault, however, it falls outside of the Earthquake Fault Zone for the proposed project site as defined by the Alquist-Priolo Act (Hart 1994).

Soils in and around the project site are derived from the host granitic or meta-sedimentary substrate, either as weathered in place or as material deposited as shallow alluvium over bedrock. Soils in the project area are characterized as shallow and poorly developed. Native soils on the project site are covered with stockpiles from previous mining activity and are not generally exposed.

## 3.D Air Quality and Climatology

Because the area is largely undeveloped and uninhabited, the major air quality issues are particulate matter (PM) and ozone. PM standards pertain to the size of the particulates and are generally evaluated by their ability to be inhaled (e.g.,  $PM_{10}$ ).

The project area is located in a part of the Imperial Valley that is designated as an "unclassifiable attainment area" (any area that cannot be classified on the basis of available information as meeting or not meeting the national primary or secondary ambient air quality standard for the pollutant) for PM by the U. S. Environmental Protection Agency (USEPA) (USEPA 2004). The California Air Resources Board (2007) has indicated that the entire Imperial County is a state nonattainment area for PM<sub>10</sub> and unclassified for PM<sub>2.5</sub> under the California Health and Safety Code Section 39608.

USEPA found that Imperial County failed to attain the 8-hour ozone national ambient air quality standard that was required to be reached in June 2007, and has proposed that Imperial County be reclassified as a moderate 8-hour ozone nonattainment area (USEPA 2007).

The proposed AGO will have fewer emissions than previous mining operations in the area since the overall mining rates and times of operation are significantly less. All equipment, if not self-permitting, will be permitted in accordance with Federal, State and local regulations.

The calculations for PM<sub>10</sub> for the proposed mining operation are based on "Modeling Fugitive Dust Sources", a guidance document from the National Stone, Sand & Gravel Association (NSSGA), and US EPA's AP-42 Handbook of Emission Factors. The estimates include PM<sub>10</sub> emissions from various processes/operations such as equipment (i.e. crushers, screens, and conveyors); customer truck traffic on unpaved roads within the property boundary; and stockpile emissions, including dust created from wind erosion, truck loading, and stockpile construction. Whenever applicable, the guidance document presents uncontrolled emissions in contrast to controlled emissions. The table below contains variable diesel engine horsepower ratings and their corresponding emission output, including those for PM<sub>10</sub>.

15. 18 E.	Table 3-1. Annual Pollutant Emissions							
Dellutant	10 HP	15 HP	20 HP	25 HP	30 HP	150 HP	300 HP	1186 HP
Pollutant				Emission	ns (ton/yr)			
PM <sub>10</sub>	0.1	0.14	0.19	0.24	0.29	1.45	2,89	11.43
SOx	0.09	0.13	0.18	0.22	0.27	1.35	2.69	10.65
NOx	1.36	2.04	2.72	3.39	4.07	20.37	40.73	161.04
СО	0.29	0.44	0.59	0.73	0.88	4.39	8.78	34.70

Imperial County Air Pollution Control District (ICAPCD) Rule 401 prohibits the emissions of plumes beyond a certain opacity. In general, the opacity that cannot be exceeded is No. 1 on the Ringlemann Chart, as published by the United States Bureau of Mines (USBM). This is determined visually/subjectively by a trained/certified person.

A Fugitive VIII Dust Plan has been submitted under separate cover to and discussed with the ICAPCD. Air quality will be addressed on an as-needed basis. If there is equipment that is not self permitting, Pyramid will perform periodic monitoring and implement best management practices and products to reduce emissions as necessary to meet local, State and Federal standards.

Air quality will be addressed on an as-needed basis. If there is equipment that is not self permitting, Pyramid will perform periodic monitoring and implement best management practices and products to reduce emissions as necessary to meet local, State and Federal standards.

#### 3.E Noise

There is currently no regulated threshold for noise in the vicinity of the proposed AGO. The proposed project will not use blasting to mine mineral materials and there is no 24-hour per day milling or processing operation proposed.

The project area is largely uninhabited and undeveloped, so natural noise sources are generally limited to wind, rain, thunder, insects, birds, and other wildlife. Man-made noise in the area, when present, would be created by periodic vehicle travel along Ogilby Road, Sidewinder Road, and American Girl Mine Road, and is related mainly to haul trucks associated with mining or other sporadic vehicle travel including seasonal "snowbird" recreational vehicles that frequent the area in the winter months. Occasional light aircraft and military aircraft, such as fighter jets and helicopters, also produce minor noise. Mining activity will produce noise from generators and other aggregate processing equipment. These impacts will be mitigated through installation of MSHA-approved mufflers on necessary equipment to dampen noise if applicable as well as regular maintenance of all equipment.

## 3.F Hydrologic Resources

A detailed groundwater evaluation was undertaken for the former 1988 Padre Madre EA/EIR. The Imperial Valley groundwater reservoir consists of Cenozoic-era valley fill deposits underlain by a basement complex of pre-Tertiary rock. Moderate to high groundwater yields have been obtained in the eastern part of the Imperial Valley by deep wells tapping into marginal alluvial deposits of the Colorado River. Regional groundwater recharge in Imperial Valley is controlled by the Colorado River, while underflow from tributary areas, direct precipitation, and local runoff are minor contributors to recharge. Flowing wells are common in the eastern Imperial Valley.

Alluvial aquifer waters are predominantly a sodium-chloride type. The water quality has been determined suitable for non-potable uses in mining and milling operations.

The proposed AGO will use less groundwater for the mining operation than the former American Girl—Padre Madre Mining Operation, currently estimated at roughly 60,000 gallons per day (gpd), and is not expected to appreciably impact groundwater supply. No chemical processes are necessary for the proposed AGO and therefore there will be no impacts to groundwater from potential process discharges. For more discussion related to the proposed water well, refer to the Well Siting Study included as Appendix A to this Reclamation Plan and submitted to Imperial County under separate cover (Brown and Caldwell, 2008)

Surface water issues will be addressed through the SWPPP and through the regular use of BMP's.

### 3.G Cultural Resources

Cultural resources include both prehistoric and historic resources. The Imperial Valley area has a well-documented history of prehistoric occupation. Historic settlements and mining operations are also well known in the Valley.

A cultural resources site records search was conducted for this project in January 2008 by the Southeast Information Center, the state repository for Imperial County cultural resource information. A total of 11 sites and 10 field surveys have been recorded covering the project area up to a 1-mile radius of the project boundaries, indicating that the area has been well studied. One potentially significant historic mining feature was recorded in 1987 within 1 mile of the AGO project area: 4-IMP-3303-H, the town and mills of Obregon. This resource was considered eligible for the National Register of Historic Places.

One resource, 4-IMP-5300-H, was recorded in 1986 within the proposed AGO project boundaries. It consisted of a highly disturbed isolated artifact scatter and one group of disturbed historic features. As reported in the 1988 Draft EA/EIR, due to the disturbed nature of the resources, in 1987 the State Historic Preservation Officer concurred with the report recommendation that 4-IMP-5300-H was not National Register eligible. Therefore, 4-IMP-5300-H was not considered significant and no mitigation measures were required. Because the area was used subsequently for the American Girl-Padre Madre Mining Operation, the resource no longer exists.

A preliminary archaeological site visit was conducted by a Registered Professional Archaeologist (RPA) in March 2008 to evaluate the potential for undisturbed cultural resources remaining on the property. The RPA also consulted with an historic archaeologist (also an RPA) regarding potential historic resources in the project area. Based upon review of the site records search results, map information, aerial photographs of the project site, site visit, and historic consultation, it was concluded that the potential for cultural resources on the site is essentially nonexistent due to the extensive site disturbance caused by previous mining activity.

The two proposed well locations were also evaluated by aerial photo and were driven past during the site visit. It was concluded that the well and alternative well locations have no undisturbed surface and therefore no potential for undisturbed archeology in this area exists.

The segment of existing road proposed for lowering and regrading was also examined via map, aerial photo, and drive-over. It was concluded that the road is within the area previously surveyed for cultural resources in the past (as addressed in the 2008 site records search) and no cultural resources were located there. The letter report that addresses cultural resources is included as Appendix B to this Reclamation Plan. The project area is not known to have religious/sacred or traditional cultural significance to local Native American groups.

## 3.H Soils Resources

Soils in and around the project site are derived from the host granitic or meta-sedimentary substrate, either as weathered in place or as material deposited as shallow alluvium over bedrock. Soils in the project area are characterized as shallow and poorly developed. Native soils on the project site are covered with stockpiles from previous mining activity and are not generally exposed.

The proposed AGO will be removing the existing steep-sloped stockpiles and returning the area to near original contours or road base. The steepest planned slope will be 4:1, horizontal to vertical, and will help reduce any surface erosion potential from current conditions.

Erosion and sedimentation will be controlled during all phases of construction, operation, reclamation and closure of a surface mining operation to minimize siltation. Surface runoff and drainage from surface mining activities will be controlled by berms, silt fences, sediment ponds, revegetation, have bales, or other erosion control measures, to ensure that surrounding land and water resources are protected from erosion, gullying, sedimentation, and contamination. Erosion control methods will be designed and maintained to accommodate runoff from a 20 year intensity storm that lasts approximately one hour.

#### 3.1 Wildlife Resources

No listed animal species were observed on the site during the biological reconnaissance. A search of the CNDDB revealed eight sensitive animal species known to occur in the general vicinity of the proposed AGO site, including three bat species (pallid bat, western mastiff bat, and California leaf-nosed bat). Because of the lack of suitable roosting habitat, the bats roost off site but may use the project area for foraging. No suitable on-site habitat exists to support the other five species (two beetles, two birds, and a lizard). The presence of one CDFG sensitive animal, the mule deer, was detected on the project site.

The desert tortoise, a federally and state-listed threatened species, is not known to occur in the project area; however, desert tortoise are known to occur about 2.5 miles north of the project site, according to the U.S. Fish & Wildlife database. Tortoises were not observed during the 2008 field survey. Because the project site is too disturbed and lacks appropriate burrowing and foraging habitat, desert tortoise are not expected to occur on the project site or proposed well locations. It is possible; however, that desert tortoise may traverse the access road area leading to the mine site.

The project site provides potential foraging habitat for raptors. However, suitable habitat for tree-nesting or cliff-nesting raptors does not occur on site as the trees present on the property are not tall enough to provide adequate protection for raptor nests.

Mitigation measures will be designed and enforced at proposed AGO to prevent on-site impacts to bats and desert tortoises by AGO personnel operating on site. These measures include education and avoidance. For a more thorough discussion of these measures, please refer to the Environmental Assessment submitted to the BLM under separate cover.

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## 3.J Vegetation

The proposed AGO project area is highly disturbed from past mining activities and the site itself supports mostly disturbed Sonoran creosote bush scrub that has re-established on abandoned mine spoils and tailings. Due to the disturbed nature of the site, the Sonoran creosote scrub has little to very low wildlife habitat quality because the plants are widely spaced over open and uneven topography and provide no cover for animals. Of the plant communities observed in the project area, desert dry wash woodland is designated as sensitive habitat by California Department of Fish & Game (CDFG) and requires mitigation. Plants observed in this community include ironwood, cat-claw acacia, blue palo verde, creosote, brittlebush, and sweetbush. This habitat was observed along the wash in the southern portion of the property. This habitat and a small wetland located on the property are discussed in more detail in the Reclamation Plan and Environmental Assessment both submitted under separate cover.

No listed or sensitive plant species were observed on the site during the biological survey, nor are they expected to occur due to the disturbed nature of the site. Further, listed species are not known to occur in the general site vicinity according to the 2007 CDFG California Natural Diversity Database (CNDDB). Following cessation of construction aggregate extraction at the site, Pyramid plans to provide the same or greater level of re-vegetation as prescribed by SMARA. Re-vegetation is discussed in more detail, including planned vegetative density and seed mixes, in the Reclamation Plan submitted to Imperial County under separate cover.

#### 3.K Visual Resources

The proposed project area is characterized by desert landscape and low mountain ranges with barren, rocky slopes interspersed with arroyos (washes) and alluvial plains. While the general views are expansive and marked by sparse development, the Cargo Muchacho Mountains have long been an area of active mining and the vistas in the project area reflect the associated surface disturbance.

While the proposed AGO will alter the landscape in the project area, the proposed operation will remove the "unnatural" landforms created and resulting from past mining activities. The project will reduce, reuse, and reclaim or recycle what are considered to be wastes, thus removing waste stockpiles and restoring the area to more natural surface contours.

While the proposed AGO will alter the landscape in the project area, the proposed operation will remove the "unnatural" landforms created during former mining operations. As a result, the proposed aggregate extraction will return the previously mined areas to more a natural topographic profile (Figures 4 and 5).

#### 3.L Socioeconomics

According to the 1988 EA/EIR, mining employs about 1 percent or less of the employed population. Traditionally, mining in Imperial County has involved quarry products such as sand and gravel, stone, clay, gypsum, and limited precious metals production. Currently, there is no job activity on the project site and therefore no employees.

The largest residential center is El Centro, the Imperial County seat, about 45 miles west of the proposed project site. The largest residential center near the project site is Yuma, Arizona, located about 15 miles southeast.

The proposed AGO plans to utilize existing employees to operate the project; therefore, no impacts on the socioeconomics of the area are impacted.

## 3.M Transportation

The largest transportation artery is Interstate 8, located less than five miles south of the project site. Interstate 8 passes through both El Centro and Yuma. The project site is reached from Interstate 8 by taking State Route 34/Ogilby Road north about four miles to American Girl Mine Road and travelling roughly two miles northeast on American Girl Mine Road. This road is a well-maintained County gravel road and also serves as public access to BLM lands.

The proposed AGO will have truck traffic associated with the removal of mineral materials related to the sale of construction aggregates. The anticipated maximum daily trip-count for aggregate trucks is 250.

Because the area is largely uninhabited there are no schools, parks, or other public facilities in the project area. Fire protection is provided by the Imperial County Fire Department/Office of Emergency Services and the California Department of Forestry. Police protection is provided by the Imperial County Sheriff's Department.

The proposed AGO plans to utilize the same roads already established in the area.

#### 3.N Land Use

The Cargo Muchacho Mountains historically and presently are largely devoted to mining and mineral exploration. This area is designated as "Class M" or "Moderate" in use under the California Desert Conservation Act due to past, present, and potential future mining activities. Other land uses in the general area include military and Indian reservation lands.

The project site is zoned S-Open Space with Recreational Use under the Imperial County General Plan. The proposed AGO plans no modification to the intended land use once reclamation is complete and the land is returned to reclaimed land status.

### 4. RECLAMATION APPROACH

The proposed reclamation approach for the proposed AGO will generally follow the standards of practice and care currently required by SMARA. The Reclamation Plan is based on the five components:

- Establish stable surface and drainage conditions that are compatible with the surrounding landscape; this will be accomplished during operations by material placement and grading.
- Where possible, create surface and substrate conditions using water catchment basins and topographic control that are conducive to seed germination, natural plant regeneration, and native plant establishment.
- Use seed of native plant species from local sources and sow into specially prepared locations. These revegetation plots will provide continued natural revegetation on the entire reclaimed site.
- Leave some slopes as talus-like slopes to resemble the surrounding rocky hillsides. These surfaces may be re-contoured for erosion and drainage control, and for slope stability. Partial revegetation will occur through natural plant establishment.
- Consideration of public safety through the stabilization, removal, and/or fencing of structures or landforms that could constitute a public hazard. The proposed AGO will be lowering the un-natural landforms created by the previous mining operation to a more natural topographic profile.

Surface stabilization will focus on contouring and drainage control due to the sparse vegetation cover in this desert region. The contouring will be done in a manner that promotes local runoff into catchment areas and provides localized concentrations of water during precipitation events for use in vegetation establishment. These localized areas will concentrate vegetation and provide similar wildlife habitat as the undisturbed areas around the project site.

## 4.A Reclamation Requirements/Standards for Success

The standards for reclamation success and bond release will be based on the adherence to this Reclamation Plan and the applicable SMARA Sections.

## RECLAMATION PLAN

### 5. RECLAMATION SCHEDULING

Revegetation activities will be timed to take advantage of climatic conditions ideal for seed germination conditions, primarily in the winter/spring months. Since the success of revegetation is typically tied directly to precipitation events and cooler ambient temperatures, all revegetation efforts will occur between October and April each year.

The monitoring program for determining vegetative cover and density will be conducted at an appropriate time of year during the mine operation/reclamation period. The reclaimed areas will be monitored at periodic intervals depending on precipitation and plant germination and growth cycles, but at a minimum of once a year. The monitoring period is proposed to extend to the point of creating a self-sustaining ecosystem but in any event, no longer than 10 years.

Pyramid proposes to conduct reclamation concurrent with mining. In this way the project will minimize overall un-reclaimed surface disturbance and overall reclamation liability. The reclamation will occur following aggregate extraction in discrete areas of sufficient size and there is adequate operating area to complete reclamation.

## 6. GENERAL RECLAMATION PROCEDURES

The reclamation and revegetation procedures presented are intended to generally follow the standards of practice and care currently required by SMARA. The general procedures include the following items:

- Fine grading of disturbed reclaimed areas to establish water catchment basins;
- Preparing soil surfaces and establishing plots for seeding of native plant species;
- Optimal planning season for perennial shrubs and trees;
- Determining sources of native species seeds;
- Sowing seeds in plots and observations of the appropriate season for best germination and survival;
- Using the appropriate types of heavy equipment and tools needed for revegetation procedures; and
- Calculating the time and costs of revegetation procedures.

### 6.A Baseline Data

The proposed AGO project area is highly disturbed from past mining activities and the site itself supports mostly disturbed Sonoran creosote bush scrub that has re-established on abandoned mine spoils and tailings. Due to the disturbed nature of the site, the Sonoran creosote scrub has little to very low wildlife habitat quality because the plants are widely spaced over open and uneven topography and provide no cover for animals.

Current vegetation cover at the site can be characterized as very light to sparse. Vegetation such as ocotillo and mesquite has been noted in scarce amounts on the 40 acre parcel. The few plants present on site are the result of the reclamation efforts of the former American Girl Canyon Mining Operations.

## 6.B Site Preparation - Prior to Mining

The previous mine operator implemented a transplant program and had limited success due to the harsh desert climate. The proposed AGO will be mining through the previously disturbed areas and will disrupt some of these transplanted species; however, it is not practical to attempt a second transplant operation for these relatively young plants. Since no new disturbance outside the previously disturbed lands is planned, there will not be a supply of transplants generated by the proposed project.

## 6.C Site Preparation – Prior to Revegetation

**Clearing.** Following all mining activities and prior to any final grading or revegetation efforts, Pyramid will clear the site of all structures and operational equipment including but not limited to office trailers, conveyor belts, crushing equipment, vehicles, fencing and temporary bollards. Additionally, Pyramid will abandon the water well installed to support the daily operation of the facility.

**Grading.** Surface preparation prior to planting or transplanting is critical to the success of the revegetation effort. Areas of revegetation will include the catchment basins and slopes or stockpiles. All disturbed areas will be graded along the contour and scarified to break up compacted soil. The roughened surface will aid in the accumulation of seeds by wind and water.

The revegetation plot areas should be prepared as soon as possible after grading the catchment basins. Plot preparation will consist of loosening approximately 100 square feet of material at the bottom of the catchment basin and then planting seeds.

Fine grading will occur on a concurrent basis in the area mined the preceding season. The intent of the fine grading is to provide water catchment areas of approximately 5,000 square feet. Each of these basins becomes a local source of water collection to stimulate seed germination and revegetation. To prevent disturbance, these areas will be identified with signs that state, "Topsoil – Do Not Disturb". Testing by the previous mine operator determined that the shape of the basins was not critical to the success of plant germination. Therefore, various shapes will be used to achieve a more natural reclaimed surface and provide the necessary water basin profile. The basins will be graded in such a way as to capture a 2-inch rainfall and will take on different basin profiles depending on the slope of the area being reclaimed. In general, the proposed AGO will be removing unnatural stockpiles and the associated slopes and returning them to a more natural topographic profile. The majority of the final reclaimed area will be relatively flat areas in which the water catchment basins will be developed.

Since seed germination depends heavily on the time of year planted, Pyramid intends to have the previous season's mining area graded and planted by no later than October of the next season. In this way, precipitation from the winter/spring months should be available to promote revegetation success.

## **6.D Revegetation Methods**

Soils in and around the project site are derived from the host granitic or meta-sedimentary substrate, either as weathered in place or as material deposited as shallow alluvium over bedrock. Soils in the project area are characterized as shallow and poorly developed. Native soils on the project site are covered with stockpiles from previous mining activity and are not generally exposed. Therefore, native topsoil is not available for reclamation efforts. However, Pyramid will stockpile materials that appear to support abundant vegetative life encountered during mining operations for use during reclamation on the north side of the property (Figure 3A).

Extensive testing by the previous mine operator indicated that soil amendments had little or no effect in the success of the revegetation efforts at the Site. Therefore, the proposed AGO does not plan to utilize soil amendments since there is no evidence that any benefit will be achieved. In addition, no pest or disease control is planned. Further, since the proposed AGO will not be disturbing any new, natural ground they will rely on direct purchase of seeds for the appropriate native mix.

Broadcast seeding with equipment tracking will be utilized to revegetate all disturbed areas. A random pattern of pockets and mounds up to three to six inches high will be created via equipment tracking. The broadcasted seed mix will be augmented by seed naturally transported by wind and water. Commercially available native seed species will be used. Broadcast seeding will occur in October to take advantage of winter precipitation and reduce the need for on-site irrigation.

The site appears to support a typical bush scrub in a rocky wash environment. Broadcast seeding will occur over the disturbed areas with the native species and rates shown in the table below. The average precipitation in the area during the wet season should be sufficient for seed germination and root establishment. In order to avoid non-native invasive plants, site irrigation is not encouraged but may be necessary.

Table 6-1. Proposed Plant Species and Seeding Rates				
Plant Species	Minimum Purity/Germination	Seeding Rate (Pounds/Acre)		
South American creosote bush (Larrea tridentate)	90/40	8		
Burbush, White bursage, burro-weed (Ambrosia dumosa)	80/50	6		
Cheesebush, burrobrush (Hymenoclea salsola)	90/60	4		
Ocotillo (Fouquieria splendens)	50/60	4		
Sweetbush (Bebbia juncea)	50/60	4		

The proposed AGO shall establish, at a minimum, four 100-square meter test plots including two control (no seed) areas. The plots areas will represent a disturbed mining area and will be maintained and monitored. Observations will be included in an annual monitoring report. The initial tests shall compare:

- equipment tracking with reapplied surface material;
- broadcast seeding with reapplied surface material;
- reapplication of surface material only; and
- scarification only (no reapplication of surface material).

The sowing of the seed will require coordination with the grading efforts. The sowing will occur between October and April during the same season as the grading is completed. If the seed is not sown within one year of the completion of grading in an area it will be necessary to hand rake or loosen the soil by another approved method prior to planting.

## 6.E Types of Heavy Equipment and Tools Needed

Pyramid proposes to utilize the equipment listed in the table below and test plot techniques to accomplish the reclamation effort.

Table 6-2. Types of Heavy Equipment And Tools			
Equipment	Activity		
Bulldozer	Re-grading mined areas, fine grading for catchment basins, re-grading/chiseling haul road		
Motor Grader	Forming catchment basins on roads and flat surfaces, surface drainage ditching and control		
Front-end loader	Construct large berms		
Water Truck	Dust Suppression and initial seeding water distribution		
Pickup Truck	Transport seed and personnel		
Shovel, hand rake, seed spreader	For seeding plots		

### 6.F Weed Control Plan

The occurrence of non-native plant species may invade the site where active and natural revegetation is taking place. Non-native species can compete with native plant species for available moisture and nutrients. Weed or non-native species of concern may include Russian thistle (tumbleweed), tamarisk, or salt cedar. None of these species were observed during the recent site visit.

The project area is heavily disturbed and the site itself supports mostly disturbed plant species that have reestablished themselves on the abandoned mine spoils and tailings. The issue of invasive or non-native weed

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species does not apply to the proposed AGO project. However, as a precaution, weed occurrence at the proposed AGO will be monitored by periodic visual inspection. If inspection reveals that weeds are becoming established at the proposed AGO, then removal will begin. The visual inspections will be performed in conjunction with revegetation monitoring.

If necessary, weed removal will be accomplished through various methods depending on how the weeds have established. For example, solitary numbers of tree-like species (e.g., tamarisk) will be manually removed and the stumps sprayed with an approved weed killer.

## 6.G Monitoring

The Annual Monitoring Report will measure revegetation efforts, including revegetated areas and areas where revegetation is beginning or being planned for in the future. The Annual Monitoring Report will be kept on file at the proposed AGO and will be submitted to the lead agency as part of overall compliance with the Reclamation Plan and associated conditions at the end of reclamation or as requested by the lead agency. Revegetated areas will be assessed using success criteria discussed in the next section.

Revegetation efforts will be monitored annually in the late spring (e.g., towards the end of the wet season) for a minimum of five years after seeding. During the first two years of revegetation, qualitative assessments will be made by Pyramid to determine the need for re-seeding, weed control and/or plant-specific fencing. Following two years of revegetation efforts, the surviving native species will be evaluated quantitatively for relative success as determined by diversity and density success criteria. Plant transects will be carried out in order to determine the species richness, vegetation cover, and shrub density of each native plant species. Each transect line will be 100 meters long and one meter wide. Densities will be estimated along each transect by counting each perennial species within a one square meter area adjacent to each one meter segment. These data will be compared to the baseline data to determine success of the revegetation effort.

If the monitoring indicates revegetation is not successful, individual specimens or areas will be remediated. Remedial actions may include removal of non-native weed species, reseeding, and herbivore protection. This procedure will be performed annually thereafter for years three through five and will continue until revegetation is consistent with success criteria. The revegetation effort must also be self-sustaining. A minimum of five years has been selected as the length of time appropriate to ascertain the stability and ultimate sustainability of the revegetated plant community. As part of the overall monitoring program, observations will be summarized annually. This schedule may change depending on the revegetation results and whether or not success was attained. Monitoring and revegetation results will be reporting to the lead agency as necessary as well as in any Annual Monitoring Report requested by the lead agency.

#### 6.H Success Criteria

Section 3705 (m) of the California SMARA Policies and Procedures states the following:

"Success of revegetation shall be judged based upon the effectiveness of the vegetation of the approved end use, and by comparing the quantified measures of vegetative cover, density, and species-richness of the reclaimed mined-lands to similar parameters of naturally occurring vegetation in the area...80% confidence level on a site-by-site basis..."

Based on the definition above, success criteria will be founded on the revegetation results compared to the baseline vegetation data. Natural variation in desert environments is significant. At the time of the site visit, vegetative coverage on the proposed AGO site was visually estimated to be less than 10%. When revegetation is completed for a given area, the density will be assessed and compared to the 80% confidence level of the baseline per SMARA Section 3705 (m). The surviving perennial plant species will be evaluated

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annually for five years for relative growth as measured by plant diversity and density. Areas will receive remedial attention as necessary.

Successful revegetation will be attained when the reseeded areas have accomplished the following within the transect areas:

- 15 percent cover by native species (higher than the estimated baseline);
- 25 percent diversity or a minimum of 2 perennial native plant shrub species;
- 15 percent density;
- Less than 15 percent cover of non-native plant species; and
- Recruitment of seedlings of native plant species demonstrating a positive trend in cover and diversity.

## RECLAMATION PLAN

## 7. RECLAMATION IMPLEMENTATION

The proposed AGO plans to conduct reclamation on a concurrent basis as the resource is extracted and sufficient area to perform reclamation is developed. Reclamation earthwork will occur over a period of months in order to allow seed sowing to occur between October and April in the reclamation areas. This methodology will provide the best opportunity for seed germination and maximize the chances for successful revegetation of the reclaimed areas. It should be noted that prior to any regrading or revegetation, structures and operational equipment will be removed from the site.

## 8. ESTIMATED RECLAMATION COSTS

A reclamation cost estimate has been prepared to quantify the annual reclamation liability for the purpose of supporting the financial assurance requirement as defined in SMARA §2773.1.

The reclamation cost estimate is based on third party execution of the work in order to ensure that adequate funds are available in the event Pyramid is unable to fulfill their reclamation responsibilities. The labor rates are based on published United States Department of Labor rates for Imperial County and equipment production cost rates published by RS Means. Professional labor is based on current industry rates.

The reclamation cost estimates provided in this section include but are not limited to the following activities: reclamation grading, abandonment of the water well, revegetation, and removal of all structures and operational equipment.

#### 8.A Labor Cost Data

The labor rates are based on the United States Department of Labor rates for Imperial County dated November 23, 2007. The wage rate burden includes Federal Unemployment, State Unemployment, California Workman's Compensation, and Federal Insurance Contributions Act taxes (FICA). Fringe benefits include but are not limited to items such as health care, retirement, and vacation, as established by the United States Department of Labor. The wage rates used for the reclamation calculation are included in Table 8-1.

Table 8-1. Imperial County Prevailing Wage Rates (Dated November 23, 2007)				
	Base Wage (\$/Hr)	Fringes (\$/Hr)	Hourly Rate (Rounded To Nearest \$)	
Labor Rates				
Laborer (laborer group 2)	\$25.18	\$13.25	\$38	
Power Equipment Operator (labor group 13)	\$36.93	\$15.82	\$52	
Dozer Operator (power equipment operator Group 8)	\$36.54	\$15.82	\$52	
Motor Grader Operator (power equipment operator Group 10)	\$36.66	\$15.82	\$52	
Front End Loader Operator (power equipment operator Group 13)	\$36.93	\$15.82	\$52	
Backhoe Operator (power equipment operator Group 4)	\$36.21	\$15.82	\$52	
Professional Labor <sup>1</sup>				
Revegetation Specialist			\$100.00	
Drilling Contractor			\$50.00	

<sup>&</sup>lt;sup>1</sup>Based on consultant rates

8: Estimated Reclamation Costs Reclamation Plan

## 8.B Equipment Cost Data

The equipment rates used for the reclamation cost estimate are based on Ownership Operating Rates as published in the RS Means- Facilities Construction Cost Data (2004) and adjusted for inflation to 2008 using the Consumer Price Index Multiplier of 15 per cent. The rates are based on average terrain and ground conditions since the majority of the reclamation will be on shallow sloping terrain and previously disturbed ground. Table 8-2 lists the equipment type planned for the reclamation work and the rates used for the reclamation cost estimate.

Table 8-2. Equipment Rate Data – RS Means 2004			
Туре	Model/Size	Hourly Operating Cost (rounded to the nearest \$)	
Bulldozer	CAT D-8	\$53	
Motor Grader	CAT 140	\$42	
Front End Loader	CAT-980	\$66	
Backhoe	CAT-428	\$19	
Water Truck	N/A	\$48	
Pickup-Truck <sup>1</sup>	N/A	\$21	
Drill Rig	N/A	\$2,500 <sup>1,2</sup>	
Highway Flatbed	N/A	\$63	

<sup>&</sup>lt;sup>1</sup>Estimate, not from RS Means.

## 8.C Crew and Equipment Cost Assumptions

The crew and equipment cost combines the labor and equipment cost data to provide a crew cost for each type of crew. Table 8-3 lists the crews by number and includes a description of the crew make-up.

	Table 8-3. Labor and Equipment (cost p	er nour)
Crew	Crew Make-Up	Labor & Equipment Cost/Hou (rounded to the nearest \$)
1	Bulldozer with Operator	\$105
2	Motor Grader with Operator	\$94
3	Front End Loader with Operator	\$118
4	Backhoe with Operator	\$71
5	Water Truck with Operator	\$100
6	Pickup and 2 Laborers	\$97
7	Revegetation Specialist	\$100
8	Drill Rig and 1 Drilling Contractor	\$2,550
9	Highway Flatbed and 2 Laborers	\$139

#### 8.D Reclamation Unit Production Rates

The unit production rates are estimated for mined areas, plant/road areas, and the well parcel separately. The crew number and associated tasks are listed in Table 8-4.

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<sup>&</sup>lt;sub>2</sub>Estimate based on abandonment production of 50 feet per hour

8: Estimated Reclamation Costs Reclamation Plan

	Table 8-4. Equipment and Manpower Units (hrs)/acre					
Crew	Tasks	Mined Area	Plant/Road Area	Well Parcel		
1	Re-contour, catchment basins, ripping	2	1.5	0		
2	Re-grading, catchment basins	2	2	0		
3	Large berms	0	2	0		
4	Fence removal, small berms	2	0	7		
5	Dust Suppression and Watering	4	4	Ą		
6	Labor, seeding	4	4	0		
7	Monitoring, vegetation inspection	2	2	0		
8	Well Abandonment	0	0	8		
9	Structure and Operational Equipment Removal	5	0	0.5		

## 8.E Reclamation Schedule and Cost Estimates

The reclamation plan is developed around a concurrent reclamation process which allows previously mined areas to be reclaimed prior to the end of mine life. It is important to note that well abandonment is not included in the per acre costs but rather follows as a lump sum cost.

The direct costs per acre are presented in Table 8-5.

Table 8-5. Direct Costs Per Acre				
Crew#	Costs Per A (rounded to	Lump Sum Cost (rounded to the nearest \$)		
	Mine Area	Plant/Road Area	Well Parcel	
1	\$210	\$158	\$0	
2	\$188	\$188	\$0	
3	\$0	\$236	\$0	
4	\$142	\$0	\$71	
5	\$400	\$400	\$100	
6	\$388	\$388	\$0	
7	\$200	\$200	\$0	
8	\$0	\$0	\$20,400	
9	\$695	\$0	\$70	
Seed (lump sum)	\$110	\$110	\$0	
TOTAL DIRECT COSTS	\$2,333	\$1,726	\$20,641	

Indirect costs are added on a percentage basis as outlined in the SMARA financial assurance guidelines Appendix A-1. The inclusion of indirect costs as a percentage of direct costs is outlined in Table 8-6.

Table 8-6. Indirect Costs/Total Cost Per Acre					
Indirect Costs	Costs Per A	Lump Sum Cost			
Per Acre	Mine Area	Plant/Road Area	Well Parcel		
Direct costs per acre	\$2,333	\$1,680	\$20,641		
Supervision – 6%	\$140	\$101	\$1,238		
Profit & overhead – 13%	\$303	\$218	\$2,683		
Contingency – 10%	\$233	\$168	\$2,064		
TOTAL COSTS	\$3,009	\$2,167	\$26,626		

The reclamation costs and schedule are summarized by area in Table 8-7.

Table 8-7. Reclamation Schedule And Cost Estimates				
Location	Acres	Cost	Year Reclaimed	
Plant Site	5	\$15,045	END	
Haul Road Year 1-10	3	\$6,501	6	
Year 1 Mining	25	\$75,225	2	
Year 2 Mining (including well parcel)	5	\$41,671	4	
Year 3-10 Mining	0	\$0		
Access Road	1	\$2,167	END	
Long-term Monitoring—10 years	N/A	\$80,0001	Post-Reclamation	
PROJECT TOTAL	40	\$220,609		

<sup>1</sup>Estimate based on 80 hours of monitoring annually for 10 years, \$100/hour.

## **8.F** Financial Assurance

Pyramid Construction will submit an Irrevocable Letter of Credit from Rabobank, N.A. (1498 West Main Street, El Centro, California 92243) for the 10-year reclamation cost estimate of not less than \$220,609.

## 9. LIMITATIONS

## **Report Limitations**

This document was prepared solely for Pyramid Construction in accordance with professional standards at the time the services were performed and in accordance with the contract between Pyramid Construction and Brown and Caldwell dated September 21, 2007. This document is governed by the specific scope of work authorized by Daryl Dickerson; it is not intended to be relied upon by any other party except for regulatory authorities contemplated by the scope of work. We have relied on information or instructions provided by Pyramid Construction and, unless otherwise expressly indicated, have made no independent investigation as to the validity, completeness, or accuracy of such information.

## REFERENCES

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United States Department of Labor, November 23, 2007. Department of Labor Rate for Imperial County, California.

## PERSONS AND AGENCIES CONSULTED

#### United States Bureau of Land Management, El Centro Field Office

Walter Todd, III – Environmental Assessment Daniel Steward – Biology Jesse Irwin – Biology Carrie Simmons – Cultural Resources

#### **United States Army Corps of Engineers**

Laurie Monarres - 404/401 permit exemption

### California Regional Water Quality Control Board, Region 7

Joan Stormo - Waste Discharge Requirement waiver

#### **County of Imperial Planning Department**

Patricia Valenzuela - SMARA and Conditional Use Permit

#### **County of Imperial Air Pollution Control District**

Jesus Ramirez – Dust Plan

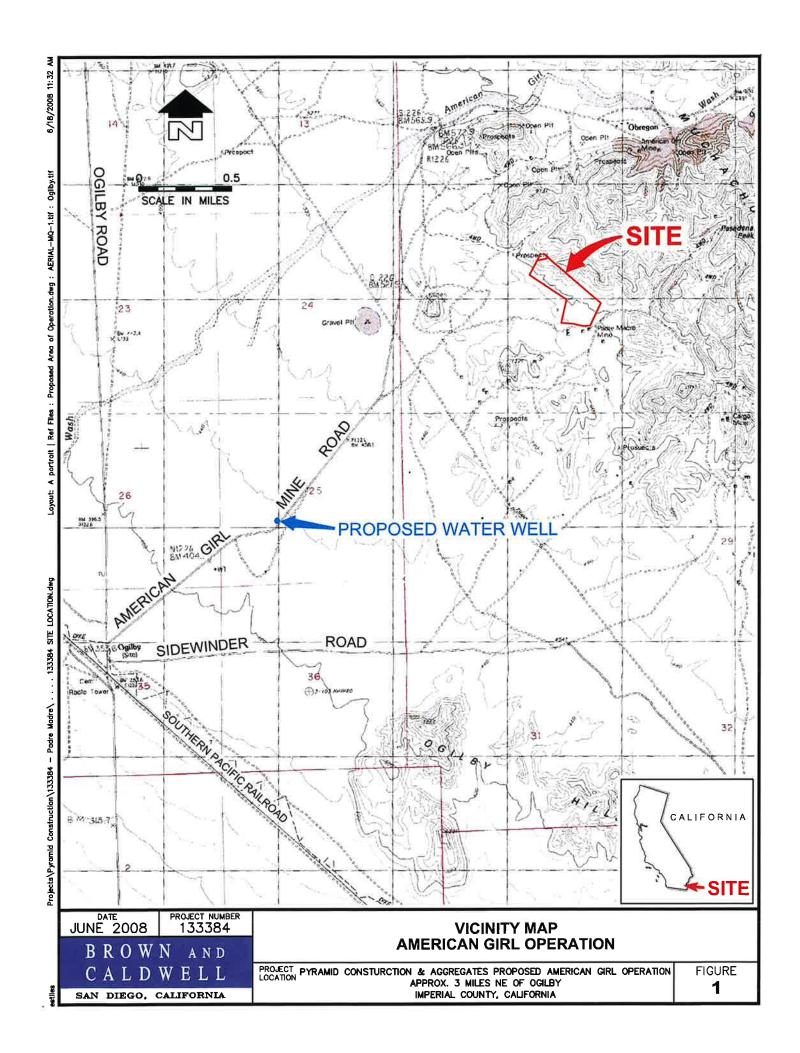
#### **County of Imperial Public Works Department**

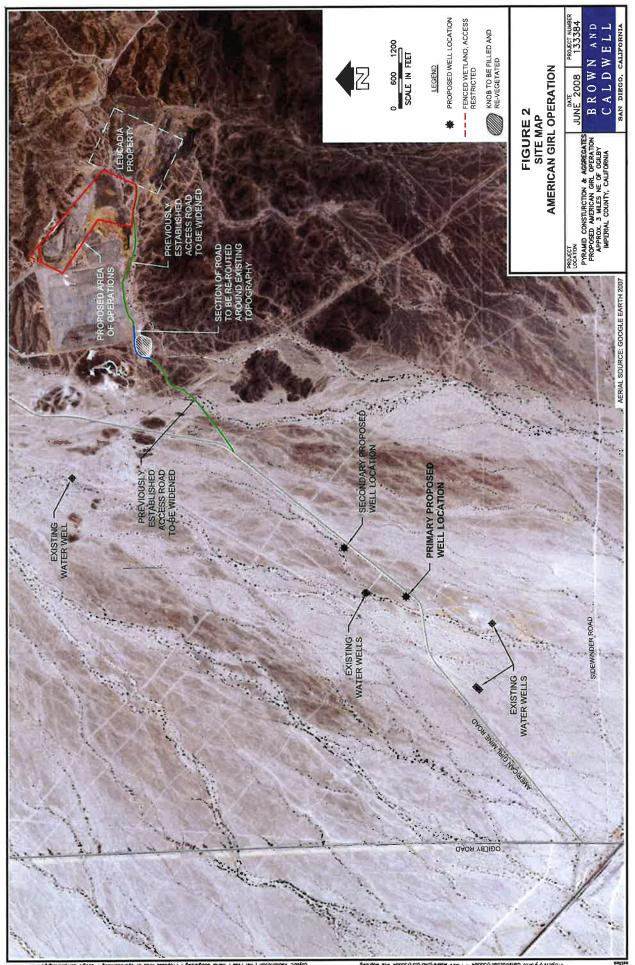
Joe Hernandez - Traffic Control Plan

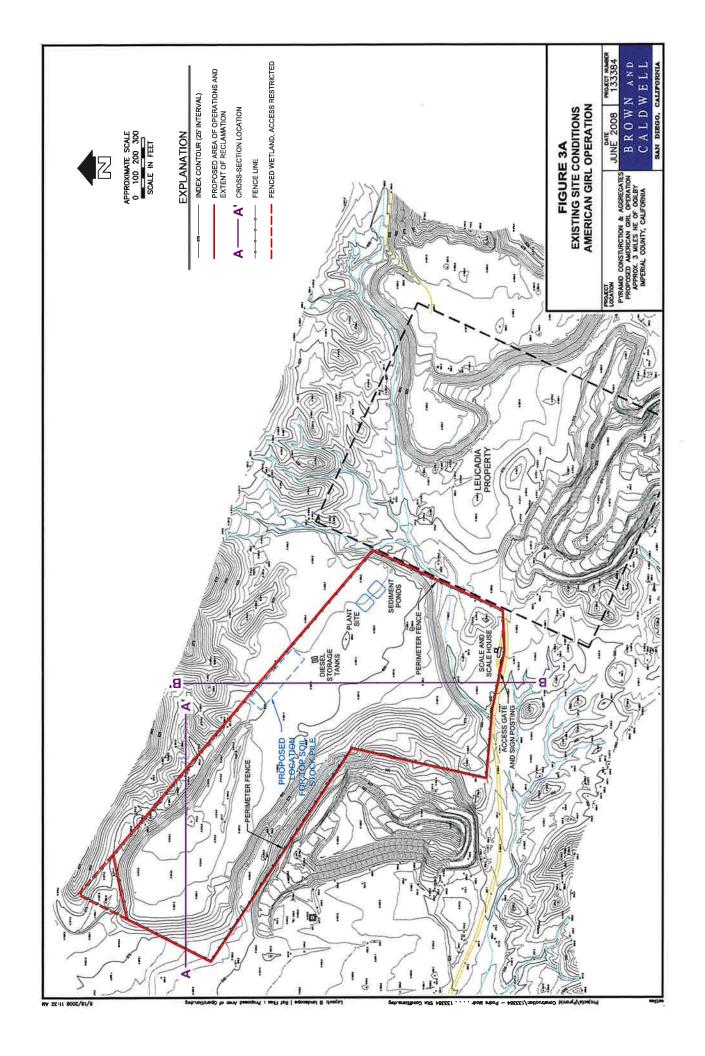
## **FIGURES**

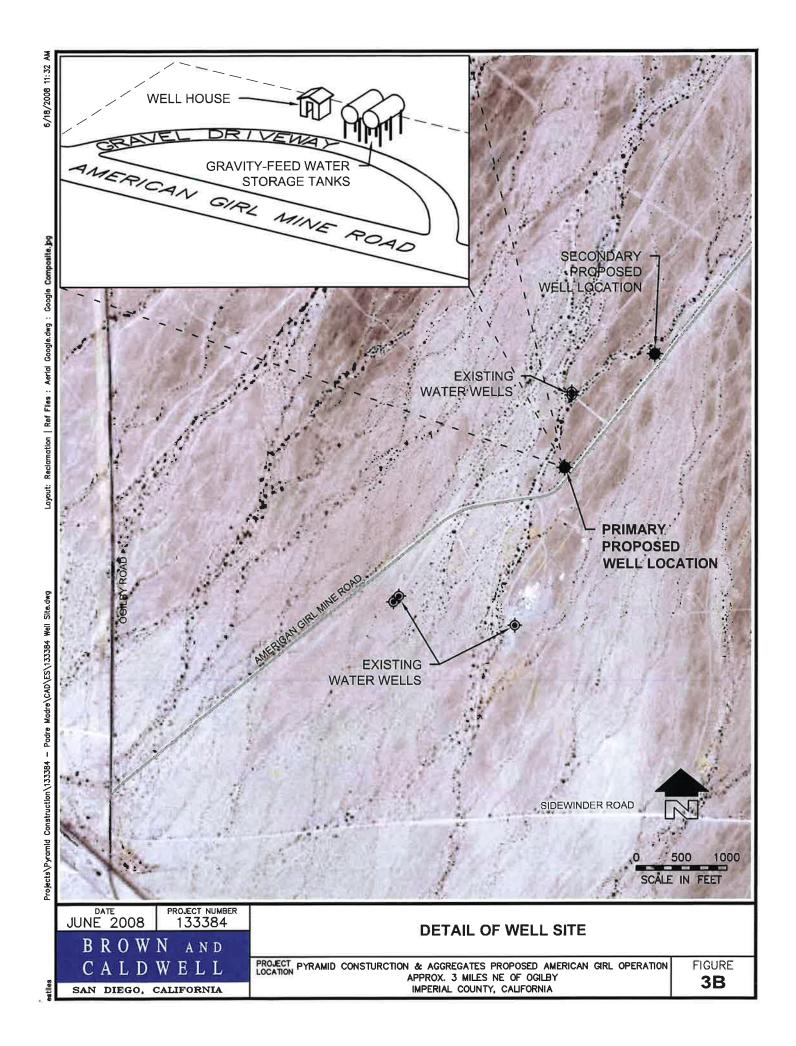
Figure 1. Vicinity Map
Figure 2. Site Map
Figure 3A. Existing Site Conditions
Figure 3B. Detail of Well Site
Figure 4. Cross-Sections
Figure 5. Post Reclamation Grading Plan

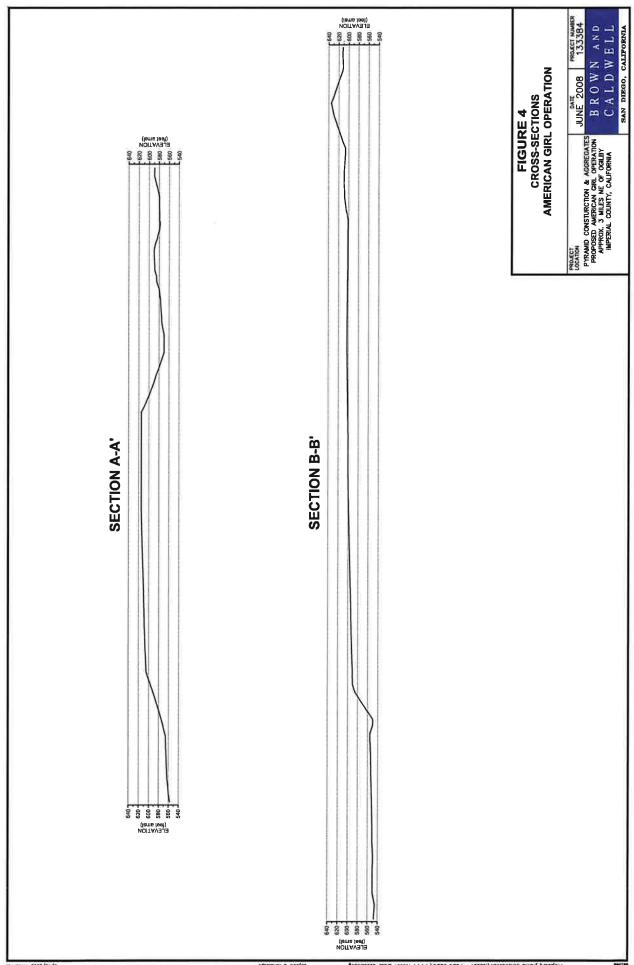
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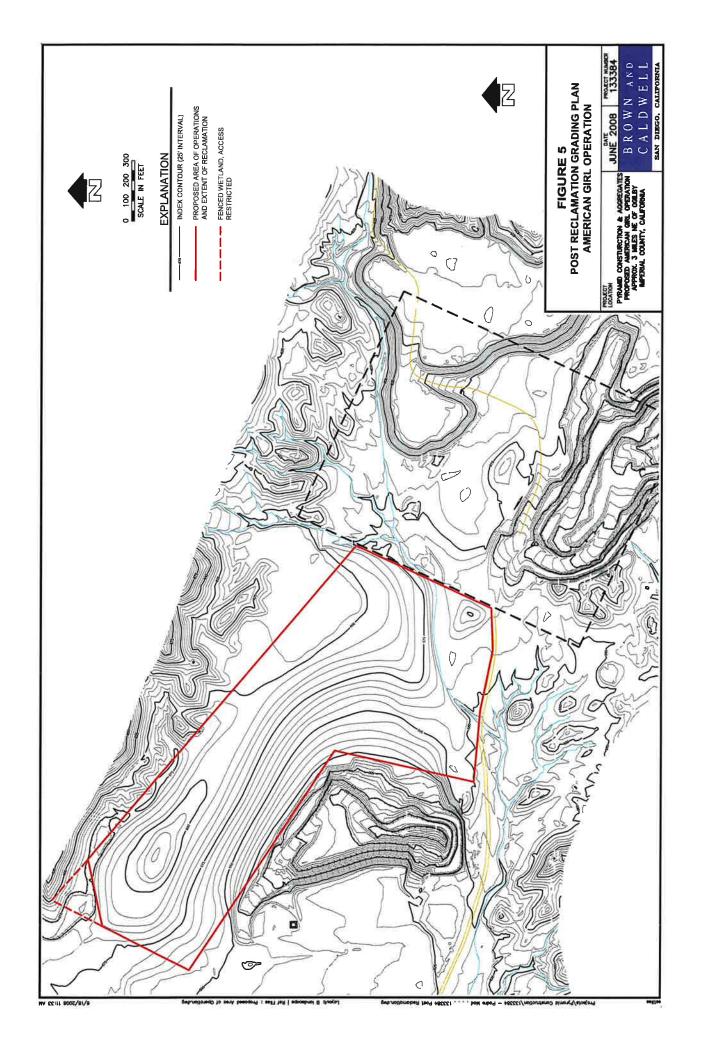












ATTACHMENT "F" - COMMENT LETTERS



## United States Department of the Interior

BUREAU OF LAND MANAGEMENT

El Centro Field Office 1661 S. 4th Street El Centro CA 92243 www.blm.gov/office/el-centro-field-office



November 23, 2022

In Reply Refer To: CACA-058965/3600 CAD07000.28

#### TRANSMITTED ELECTRONICALLY

Imperial County Planning & Development Services Attn: Diana Robinson 801 Main St. El Centro, CA 92243

Dear Ms. Robinson:

On October 24, 2022, the Bureau of Land Management (BLM) El Centro Field Office was notified by Pyramid Construction and Aggregates, Inc. (Pyramid) of the recent expiration of reclamation plan number 08-0001 for mine ID 91-13-0112. This sand and gravel quarry, referred to as the American Girl material site, is located on federal land under BLM jurisdiction in Section 19 of Township 15 South, Range 20 East, SBBM, in Imperial County, California.

On May 5, 2020, the BLM issued Pyramid a negotiated noncompetitive contract for the removal and extraction of 300,000 tons of sand and gravel at the American Girl material site over a three-year period. For this contract, the BLM established a case recordation number of CACA-058965. Contract CACA-058965 will expire on May 5, 2023, and is subject to renewal under the federal regulations found at 43 CFR 3602.27. To date, Pyramid has extracted approximately fifty percent of the sand and gravel contracted under CACA-058965, therefore the BLM does not object to the tenyear Reclamation Plan extension requested by Pyramid.

If you have any questions, please feel free to contact Mayra Martinez, El Centro Field Office Geologist, at (760) 337-4428 or mymartinez@blm.gov.

Sincerely,

Digitally signed by CARRIE SAHAGUN Date: 2022.11.23 09:14:05

-08'00'

Carrie Sahagun Acting Field Manager

cc: Michael Abraham, Imperial County

#### **Gerardo Quero**

From: Jill McCormick < historic preservation@quechantribe.com>

Sent: Tuesday, 10 January, 2023 11:36 AM

To: Michael Abraham

**Subject:** FW: [EXTERNAL]:RP22-0001 Requests for Comments

## CAUTION: This email originated outside our organization; please use caution.

In accordance with Section 21080.3.1 (d) of the PRC, we are requesting consultation for the request to continue the operation of an existing mining operation under RP#22-0001 for a ten year term. I will act as the lead contact person for this project.

## Thank you, H. Gill McCormick, M.A.

Quechan Indian Tribe Historic Preservation Officer P.O. Box 1899

Yuma, AZ 85366-1899 Office: 760-572-2423 Cell: 928-261-0254

E-mail: historicpreservation@quechantribe.com



From: Jill McCormick

Sent: Monday, January 09, 2023 8:39 AM

To: Melina Rizo <melinarizo@co.imperial.ca.us>; michaelabraham@co.imperial.ca.gov

Cc: ICPDScommentletters@co.imperial.ca.us

Subject: RE: [EXTERNAL]:RP22-0001 Requests for Comments

In accordance with Section 21080.3.1 (d) of the PRC, we are requesting consultation for the request to continue the operation of an existing mining operation under RP#22-0001 for a ten year term. I will act as the lead contact person for this project.

Thank you, H. Jill McCormick, M.A. Quechan Indian Tribe Historic Preservation Officer P.O. Box 1899

Yuma, AZ 85366-1899 Office: 760-572-2423 Cell: 928-261-0254

E-mail: historicpreservation@quechantribe.com



From: Melina Rizo < melinarizo@co.imperial.ca.us >

Sent: Friday, January 06, 2023 12:58 PM

To: Alphonso Andrade <<u>AlphonsoAndrade@co.imperial.ca.us</u>>; Ana L Gomez <<u>analgomez@co.imperial.ca.us</u>>; Andrew

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Sahagun, Carrie L < csahagun@blm.gov>

Cc: Jim Minnick < <u>JimMinnick@co.imperial.ca.us</u>>; Michael Abraham < <u>MichaelAbraham@co.imperial.ca.us</u>>; Diana

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<melinarizo@co.imperial.ca.us>; Rosa Soto <RosaSoto@co.imperial.ca.us>

Subject: [EXTERNAL]:RP22-0001 Requests for Comments

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

## Good Morning,

Please see attached Request for Comments packet for RP#22-0001 APN 050-320-031

Comments are due by January 17th, 2023 at 5:00PM.

In an effort to increase the efficiency at which information is distributed and reduce paper usage, the Request for Comments packet is being sent to you via this email.

Should you have any questions, please feel free to contact Michael Abraham at (442) 265-1736, or submit your comment letters to <a href="mailto:ICPDScommentletters@co.imperial.ca.us">ICPDScommentletters@co.imperial.ca.us</a>.

Thank you,



Account Clerk III
Imperial County Planning & Development Services
801 Main St.
El Centro, CA 92243
(442)265-1736

