
Executive Summary

ES.1 Introduction

This Final Environmental Impact Report/Environmental Impact Statement (Final EIR/EIS) has been prepared in compliance with the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA) to inform the public and to meet the needs of local, State, and Federal permitting agencies to consider the project proposed by United States Gypsum Company (USG). Its purpose is to address the environmental impacts of the expansion/modernization of the existing USG gypsum processing and wallboard manufacturing facility and gypsum quarry in the Imperial County, California.

ES.2 CEQA/NEPA Compliance

The final processes for completion of CEQA and NEPA are described separately below:

CEQA

The County of Imperial (County) is the CEQA Lead Agency. To certify the Final EIR/EIS, the County must find that:

- the Final EIR/EIS has been completed in compliance with CEQA; and
- the Final EIR/EIS was presented to the decision-making body of the lead agency, and the decision-making body considered and reviewed the information contained in the Final EIR/EIS prior to approving the project; and
- the Final EIR/EIS reflects the lead agency's independent judgment and analysis (State CEQA Guidelines, Section 15090).

After the County certifies the Final EIR/EIS, the County may decide whether and how to approve the Project and must adopt findings of fact regarding the significant effects identified in the Final EIR/EIS (State CEQA Guidelines, Sections 15091-15093).

NEPA

The Bureau of Land Management (BLM) is the NEPA Lead Agency. The Final EIR/EIS will be filed with the U.S. Environmental Protection Agency (EPA), and the Notice of Availability (NOA) will be published in the Federal Register announcing the availability of the Final EIR/EIS. After a minimum 30-day waiting period, BLM will issue a Record of Decision (ROD) stating the decision and describing the alternatives considered; the environmentally preferred alternative; the factors considered with respect to the alternatives, environmental commitments, and mitigation measures to be applied to the action; any monitoring and enforcement program to be established; any significant comments received on the Final EIR/EIS; and responses to those comments.

ES.3 Public Review and Consultation Process

In accordance with both the specific requirements and the intent of CEQA, the environmental review process for the proposed Project has included substantial opportunities for public and agency review and comment on the environmental evaluations. As a result of the degree of public interest in the Project, a substantial number of comments were submitted on the Draft EIR/EIS during the public review period. Approximately 557 comment letters were submitted. In addition, commenters presented verbal comments at the scoping meeting. Written comments are contained in Section 5.0, Response to Comments, of this Final EIR/EIS.

The public comments received did not change the analyses or conclusions regarding environmental impacts of the Project presented in the Draft EIR/EIS. Instead, the input resulted in the adoption of some modification of mitigation measures described in the Draft EIR/EIS. These modified mitigation measures are included in Table ES-1.

The majority of submitted comments were general in nature and expressed concern regarding traffic, hydrology, air quality, and noise, as well as potential effects on area roads and compatibility of the Project with agricultural use and biological concerns. Few of these commenters asked questions that had not already been evaluated in the Draft EIR/EIS. Individual responses are in Section 5.0 and are also cross referenced to specific collective responses in Section 4.0 for clarification and consistency.

These general concerns are collectively addressed as summarized responses in Section 4.0, Collective Responses. Clarification on the environmental evaluations and recommendations in the Draft EIR/EIS is provided.

A number of agencies, organizations, businesses, and individuals submitted specific comments or opinions based on review of the Draft EIR/EIS. The majority of these comments requested clarification on specific points addressed, while some provided suggestions on the evaluation of impacts and determination of specific mitigation measures. Replies to comments from agencies, businesses and organizations are provided in Section 5.0. Responses to individuals whose concerns were representative of public comment or who had detailed questions or suggestions regarding the Project are presented in Table 5.0-2, Private Citizens.

ES.4 Proposed Project

The proposed Project is modernization/expansion of USG's manufacturing facilities at its Plaster City Plant (Plant) and gypsum quarrying operations at its Plaster City Quarry (Quarry) that supports the Plant. A new 10-inch diameter water pipeline 8.5-miles long would replace the worn 8 inch water pipeline from the wells at Ocotillo to the Plant. The new 10-inch pipe would provide a more reliable water supply, minimizing line surges and associated leaks/ruptures, providing a quicker water system recovery after waterline breaks/leaks or maintenance, and improving fire protection at the Plant. Installation of an approximate 14.4 megawatt (MW) cogeneration unit is also proposed to provide heat to the Plant to dry wallboard as well as provide electrical power for the Plant. This unit would be sized to provide electrical power for the entire Plant while delivering waste heat to the No. 3 kiln to assist in drying wallboard, reducing the amount of heat needed by the kiln. The natural gas would be delivered through the existing pipeline.

Part of the modernization/expansion Project includes an off-specification material recycling system. This system is designed to chop up out-of-specification wallboard from the Inert Material Storage Area (IMSA) and feed it back into the Plant production process with raw gypsum rock.

The proposed Project at the Quarry consists of the improvements already made to the crushing and loading facilities plus additional components identified here. A new production water well (for on-site activities), proposed Well No. 3, would be drilled and water transported by a pipeline installed alongside of the existing alignment of the narrow-gauge railroad to the Quarry facilities. In conjunction with the development of the pipeline, USG would install an electric supply to serve the well pump. The proposed Project also includes a reclamation plan for the extent of USG mineral holdings.

Federal policy favors maintaining a viable mining industry for the development of domestic mineral resources. To help assure satisfaction of the nation's industrial and security needs, federal policies encourage private enterprise in the economic development of domestic mineral resources. The Mining Law of 1872 (20 USC 22 *et seq.*) opened the public lands to exploration and development, granting a person who discovers valuable mineral deposits the right to extract and sell these minerals. This policy was reaffirmed in the Mining and Minerals Policy Act of 1970 and the National Materials and Minerals Policy, Research and Development Act of 1980. The 1970 Legislation stated that an "economically sound" mining industry was important for both economic and national security reasons. The 1980 Act noted the need to encourage mineral exploration. Quarrying of gypsum has been occurring at the Plaster City Quarry since 1921. USG has been quarrying gypsum at the site since 1946.

ES.5 Project Location

Regional Location

Imperial County is within the Colorado Desert, marked by land with relatively low elevations, some areas even below sea-level. The western portion of Imperial County is characterized by a series of low lying mountain ranges opening to the Salton Sea and Imperial Valley.

Plant

USG produces wallboard and related gypsum products at the Plaster City Plant located at 3810 West Highway 80, Plaster City, California, approximately 18 miles west of the City of El Centro. Access to the Plant is via Highway 80, immediately north of Interstate 8.

Water Supply

Water for processing and manufacturing purposes at the Plaster City Plant is currently delivered via an 8-inch diameter pipeline from a well field located approximately 8 miles west of Plaster City in the Ocotillo-Coyote Wells Groundwater Basin (Basin). USG proposes the replacement of this existing aging pipeline with a new pipeline.

Quarry

The Quarry and ore crushing facilities supplying the raw material to the Plant are located approximately 26 miles north of Plaster City, at the Plaster City quarry.

Lands used for mining by USG encompass approximately 1,640 acres of private lands and 380 acres of claims on federal lands currently administered by the BLM and 28 acres of mill sites. USG has applied for patenting of these claims.

The Quarry is located at 7801 Split Mountain Road near Ocotillo Wells. Access to the Quarry is via State Highway 78 from San Diego County and Imperial County. The Quarry is approximately 9 miles south of the intersection of Highway 78 and Split Mountain Road.

Transport of ore from the Quarry and crushing operation to the Plant is via a USG owned narrow-gauge railroad.

ES.6 Project Objectives

USG's Objectives

The overall goals of the Proposed Action are to:

- Maximize use of known resources;
- Expand production facilities, equipment and personnel; and
- Maximize the return on capital investment.

The Proposed Action consists of three (3) general components: (1) the Plaster City Plant upgrade and expansion; (2) the increased water usage for quarrying and processing purposes; and (3) the expansion of the mining operation at the Plaster City Quarry. The applicant's objectives in these three areas are as follows:

Plant

- Meet current and future residential and commercial building products demand in the southwestern United States.
- Fulfill estimated operational design life of the Plant.
- Replace an older, less-efficient production line with a new state-of-the-art high speed wallboard line.

- Provide continued employment for people in a sparsely populated County where industrial jobs are limited.

Water Supply

- Obtain an adequate water supply for operations.
- Potentially replace an old and leaky pipeline.
- Increase water usage to up to 767 acre-feet annually.

Quarry

- Secure permits and approvals on the Quarry containing high quality gypsum resources.
- Provide for an annual production level of 1.92 million tons per year (TPY).
- Maximize recovery of known gypsum reserves needed for the Plant to fulfill its estimated operational design life.
- Develop Quarry operations to limit disturbed areas.
- Implement a reclamation plan designed to minimize erosion, reestablish vegetation, reduce aesthetic impacts, and eliminate public safety concerns.
- Reclaim Quarry for post-mining uses including open space.

ES.7 Alternatives Considered

CEQA Guidelines Section 15126.6(c) provides for the selection of a range of reasonable alternatives. The range of potential alternatives to the Proposed Action included those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects.

Similarly, NEPA requires that an EIS identify and objectively evaluate a reasonable range of alternatives to a proposed action. Under both CEQA and NEPA, the selection of alternatives for discussion is governed by a “rule of reason.” The following alternatives to the Proposed Action were considered:

No Action Alternative

The No Action Alternative assumes that no element of the Proposed Action would be implemented. Specifically, no expansion/modernization of the Plant or Quarry, and no replacement of the existing water pipeline, would occur.

Partial Use of Water from Imperial Irrigation District

This alternative would supply the Plant with a portion of the water needed for operations from USG's existing wells in Ocotillo. The balance of the water needed for operations would be supplied by the Imperial Irrigation District (IID).

Under this alternative, water from IID would be blended with water from Ocotillo as needed to achieve the level of water quality and consistency necessary for use in manufacturing wallboard without the need for further treatment of the process water. As stated below, the quality of Colorado River water varies over time. Thus, the amount of water that USG would need to extract from the well at Ocotillo would vary over time. However, this alternative assumes that over the life of the Project, the amount of water extracted from the existing wells at Ocotillo would average 400 acre-feet per year (AF/Yr). Water in excess of 400 AF/Yr would be provided by IID under a water service agreement with USG (assuming such a water service agreement can be obtained).

This alternative would entail the construction and operation of a new water pipeline extending from the Westside Main Canal to the Plaster City Plant a distance of approximately 5.5 miles. The likely routes for the pipeline include: (1) along the north or south side of Evan Hewes Highway (S-80), or (2) the north side of the commercial railroad tracks that parallel Evan Hewes Highway.

In addition to the pipeline itself, this alternative would require the construction of a pumping station near the canal, access roads for the pipeline, and water storage facilities at the Plant. Storage and treatment facilities at the Plant would include two settling/storage basins such as 150 foot by 150 foot reservoirs on USG property to settle out silt and solids from the water prior to use. These settling/storage basins with a total capacity of about 1 million gallons would be located adjacent to the USG manufacturing facility on Plant property, most likely south of the Plant. From the settling ponds the water would be pumped to the manufacturing facility, blended with Ocotillo well water to further dilute impurities and used in the manufacturing process.

Under this alternative, once all of the approvals and improvements necessary to convey IID water to the Plant are completed, USG would continue to use water from the existing wells at Ocotillo at pre project levels. Assuming that all necessary approvals can be obtained to implement this alternative (including a service agreement with the IID), the process of obtaining these approvals would likely require a minimum of 1 to 3 years. Additionally, the construction of the pipeline and related improvements would require a minimum of 2 additional years. Thus, for purposes of evaluating the potential

environmental effects of this alternative, it is assumed that IID water would not be available for use at the Plant until at least 2010 or 2012.

Full Use of Water from Imperial Irrigation District

This alternative is similar to the partial use alternative discussed above, except that 100 percent of the water needed for Plant operations would be supplied by IID under a water service agreement with USG. This alternative would entail the construction and operation of a new water pipeline as described above in the Partial Use alternative extending from the Westside Main Canal to the Plant.

Water/settling storage facilities would be larger than that described above under the partial use alternative to provide the Plant with a 7 day on-site storage in the event of water delivery interruptions. Under this alternative, it is anticipated that there would be two settling/storage reservoirs, each would be about 225 feet by 225 feet. The storage capacity of each reservoir would be about 4.5 million gallons. Settling ponds would be utilized to settle solids out of the water and sized to store a 7 day supply of water for Plant operations. Water would also need to be filtered and treated to provide the Plant with potable water.

The quality of Colorado River water varies significantly over time. This variation in salinity creates a problem in the process of making wallboard. While a range of salinity can be managed by changing formulations to account for salinity changes, this cannot be accomplished quickly. In other words, the water used to manufacture wallboard must be maintained with a constant salinity or solids. In short, USG would need to treat Colorado River water not only if salinity levels are high, but simply because the levels vary. At times when the salinity levels are relatively low, it may be possible to use Colorado River water to manufacture wallboard in both the existing No. 1 board line and the new high speed No. 3 board line without further treatment. However, when salinity levels are relatively high, the water would not be suitable for use in the manufacture of wallboard unless it is first treated by Reverse Osmosis (RO). The treatment process would require the construction of a desalinization facility, along with wastewater treatment facilities to handle the wastewater from the RO process. It is assumed that the RO units could be limited to about one quarter of the flow and that the treated water would be blended with settled canal water to reach the acceptable levels of purity. For example, if the supply from IID were to be 866 AF/Yr it would be necessary to take in about 266 AF to the RO plant to produce 200 AF/Yr of low salinity water. This water would be blended with about 600 AF/Yr of settled canal water to

produce water acceptable for board manufacture. The waste stream would be 66 AF/Yr, which would require on-site evaporation ponds of about 11 acres.

In addition to the RO unit, a treatment facility would be needed to supply potable water for the Plant. While the quantity of water needed for this purpose is relatively small, the unit would require attention and service. The Plant would also be required to isolate the potable system from the industrial use supply system.

ES.8 Summary of Impacts and Mitigation Measures

The impacts of the proposed Project, proposed mitigation, and significance conclusions are discussed in detail in the Draft EIR/EIS, as revised in this document. Table ES-1 summarizes the revised impacts, mitigation measures, and levels of significance identified in this document (strike out and underlined).

**Table ES-1
Summary of Revised Potential Impacts and Mitigation Measures**

| Potential Impact | LOS Before Mit | Mitigation Measures | LOS After Mit |
|---|----------------|---|---------------|
| Hydrology and Water Quality | | | |
| Increased pumping of USG wells could reduce water levels, increasing the cost of pumping groundwater and, causing some wells to go dry. | S | <p>Mitigation Measure 3.3-1: If the water level in a <u>an existing</u> well in the Ocotillo area decreases at a rate faster than one foot every eight years and the average water levels in the surrounding wells also decrease for more than two years in a row due to the Proposed Action, as measured from the interpolated linear of one foot every eight years with a starting reference point being the date that pumping by USG increases above the baseline rate, and there is a documented reduction in the available water to the affected user, then USG, at its election will:</p> <ol style="list-style-type: none"> 1. Rehabilitate the well and/or install a new pump to restore the prior pumping rate; or 2. Provide an incremental replacement of water equivalent to the amount of the reduced rate of pumping by the affected party, of a like quantity and quality, and provide reimbursement for the incremental increase for the affected party to pump the remaining available groundwater; or 4. Provide a full replacement water supply to the affected party of a like kind and quality, at a cost that does not exceed the cost to the affected party at the time the impact occurred; or 3. Deepen the existing well or provide a new replacement well to the affected party, drilled to a depth that will not be affected by existing or future Project-related declines in the water table, and capable of providing an equivalent quantity and quality of water that existed prior to the impact, and provide reimbursement for incremental increase in cost for the affected party to pump the available water. | LS |

| Potential Impact | LOS Before Mit | Mitigation Measures | LOS After Mit |
|--|----------------|---|---------------|
| | | <p>The extent to which the Proposed Action will be as contributing to cause the decrease in water levels in the Ocotillo area will be determined only after a review of the water level data and a decision by the Imperial County Planning Commission.</p> <p>The baseline condition in the Basin includes a declining water table, and existing data suggests that water levels recover slowly after significant drawdown occurs. Therefore, if USG elects to provide replacement water or a replacement water supply, arrangements must be made to provide this mitigation until groundwater levels stabilize at return to a level equal to the projected baseline condition or ten years after USG reduces its pumping from the Basin to the baseline rate, whichever first occurs.</p> | |
| <p>Increased pumping from USG wells could degrade water quality in individual wells due to lateral migration of higher-TDS water located to the east of Coyote Wells, lateral migration of higher-TDS water from areas near outcrops of Tertiary sediments, or vertical migration of water from or near Tertiary sediments underlying the alluvial aquifer throughout most areas of the basin.</p> | S | <p>Mitigation Measure 3.3-2: USG will provide an alternative or replacement source of water if the water quality significantly deteriorates in any <u>existing</u> well in the Ocotillo area and such deterioration is caused by the Proposed Action. As discussed above, the secondary drinking water standard for TDS is 500 mg/L and water with a TDS level in excess of 1,000 mg/L is considered non-potable. Therefore, if the <u>Proposed Action causes the</u> TDS level in any <u>existing</u> well <u>to</u> exceed 500 mg/L, or <u>causes</u> the concentration of any other measured parameter <u>sulfate, chloride or boron</u>, as described in the <u>Mitigation Groundwater</u> Monitoring Program below, to exceeds the drinking-water standard that is in force at the time of the measurement, <u>the Proposed Action is approved</u>, then USG will provide the affected party or parties with an alternative supply of water for drinking and cooking, at no cost to the affected party or parties. This alternative supply could be bottled water or a hookup to a replacement water source. If the TDS level in any well exceeds 1,000 mg/L and is caused by the Proposed Action, then the water quality will be such that use of the water for any domestic purpose will be significantly affected due to scale buildup, damage to plumbing, corrosion, and other similar impacts. If the TDS level exceeds 1,000 mg/L and is caused by the Proposed Action, USG will provide the affected party or parties with a hookup to a replacement supply of water. This replacement supply may be a hookup to an existing municipal district or other appropriate drinking water supply system. USG will bear the full cost of the hookup. The affected party or parties, however, would only be responsible for the annual cost of the replacement water equivalent to their costs to pump water prior to the occurrence of the impact. If the annual cost of water for the replacement supply exceeds the affected party or parties costs to pump water prior to the occurrence of the impact, USG will pay the incremental difference.</p> <p>The extent to which the Proposed Action will be considered as contributing to be the cause of the decrease in water quality in the Ocotillo area, will be determined only after a review of the water quality data and a decision by the Imperial County Planning Commission.</p> | LS |

| Potential Impact | LOS Before Mit | Mitigation Measures | LOS After Mit |
|---|----------------|---|---------------|
| | | <p>The existing data from Ocotillo and Yuha Estates indicates that, once the water quality decreases, it may take many decades for the water quality to recover once the pumping causing the impact has ceased. Therefore, If USG will need is required to provide the alternative and/or replacement water supply pursuant to the terms of this mitigation measure, it must continue to do so until (1) concentrations of the above-listed constituents in excess of applicable water-quality standards return to levels below such standards or until the water quality parameters, for which there is data that currently exists, return to pre-Proposed Action levels, (2) ten years after USG reduces its pumping from the Ocotillo/Coyote Wells Groundwater Basin to the baseline rate, whichever first occurs.</p> | |
| <p>Increased pumping from USG wells could degrade water quality in the groundwater Basin due to lateral migration of higher-TDS water located to the east of Coyote Wells, lateral migration of higher-TDS water from areas near outcrops of Tertiary marine sediments, or vertical migration of water from or near Tertiary marine sediments underlying the alluvial aquifer throughout most areas of the basin.</p> | S | <p>As part of the Proposed Project, USG will implement the Groundwater Monitoring Program described below. The data from the groundwater monitoring program will provide an indication of a trend of progressively decreasing information concerning water quality in individual wells and throughout the basin, if such a trend occurs and is a result of the increased pumping for the Proposed Project. If such a trend is identified the data indicates a trend of progressively decreasing water quality in only a few wells in close proximity to the USG pumping wells, and an impact subsequently occurs in any or all of those few wells, then USG can mitigate the impacts in the individual wells as discussed above for Impact 3.3-2A: Water Quality Degradation at Plant Affecting Individual Well Owners. If, however, such a trend is identified in a larger number of wells, and these wells are located over a broader area of the basin and not just in the area of the USG pumping wells, it would not be possible to restore the Basin-wide water quality once it is degraded to concentrations at which the groundwater is no longer suitable for its current uses. There is insufficient recharge to restore the Basin and dilute the salts in the saline water. Therefore, it is not possible to mitigate the Basin-wide degradation of water quality. If such trends are detected by the Groundwater Monitoring Program, the only way to halt or reverse these trends would be to curtail pumping by reducing production at the Plant, or by implementing one or more Alternatives that reduce or eliminate withdrawals from the basin, prior to the groundwater quality being degraded to the point where it was no longer suitable for its current uses.</p> | S |
| Wildlife | | | |
| <p>Increased activity at the Quarry could disturb additional desert upland and wash habitats possibly having a negative impact on wildlife in the area.</p> | S | <p>Mitigation Measure 3.5-1d: Peninsular bighorn sheep: USG, in coordination with the BLM, shall initiate formal consultation with the US Fish and Wildlife Service under Section 7 of the Federal Endangered Species Act and implement the terms and conditions of the incidental take statement authorizing the project. The consultation process will result in the development of a Biological Opinion by the USFWS that will: (1) provide a statement about whether the proposed project is “likely or not likely to jeopardize” the continued existence of the species, or result in the adverse modification of critical habitat; (2)</p> | LS |

| Potential Impact | LOS Before Mit | Mitigation Measures | LOS After Mit |
|--|----------------|---|---------------|
| | | <p>provide an incidental take statement that authorizes the project; and (3) identifies mandatory reasonable and prudent measures to minimize incidental take, along with terms and conditions that implement them.</p> <p><u>Mining shall be conducted only as approved in the Plan of Operation and the Mine Reclamation Plan. Reclamation shall be conducted concurrently with mining and it shall be initiated within each phase as soon as is feasible. Reclamation shall include slope contouring and revegetation with native plant species as specified in the Reclamation Plan.</u></p> <p><u>USG shall instruct its employees and other visitors to the mine to avoid peninsular bighorn sheep. Access to undisturbed lands by humans on foot shall be restricted, and usually would include only biologists and mining personnel. USG shall establish a training program, including new-employee orientation and annual refresher, to educate employees regarding bighorn sheep and the importance of avoidance.</u></p> <p><u>USG shall not allow domestic animals (cattle, sheep, donkeys, dogs, etc.) onto the mine site or any lands under USG control. Training for mine employees shall include instructions to report observations of domestic animals to the quarry's environmental manager. Upon receiving any such reports, the environmental manager shall contact the appropriate authorities for removal of domestic animals.</u></p> | |
| Cultural Resources | | | |
| The Proposed Action may affect unique prehistoric sites or artifacts in the potential impact area. | LS | <p>None required. If any archaeological resources are encountered during implementation of the Proposed Action, construction or any other activity that may disturb or damage such resources shall be halted, and the services of a qualified archaeologist shall be secured to assess the resources and evaluate the potential impact. Such construction or other activity may resume only after the archaeological resources have been assessed and evaluated and a plan to avoid or mitigate any potential impacts to a level of insignificance has been prepared and implemented.</p> | |
| The Proposed Action may affect historic sites or artifacts in the potential impact area. | S | <p>If any archaeological resources are encountered during implementation of the Proposed Action, construction or any other activity that may disturb or damage such resources shall be halted, and the services of a qualified archaeologist shall be secured to assess the resources and evaluate the potential impact. Such construction or other activity may resume only after the archaeological resources have been assessed and evaluated and a plan to avoid or mitigate any potential impacts to a level of insignificance has been prepared and implemented. An archaeologist qualified by the Society of Professional Archaeologists (SOPA) shall be deemed "qualified" for purposes of this mitigation measure. The services of a qualified archaeologist may be secured by contacting the Center for Public Archaeology — California State University, Fullerton or a member of SOPA.</p> | |

| Potential Impact | LOS Before Mit | Mitigation Measures | LOS After Mit |
|---|----------------|---|---------------|
| <u>Global Warming</u> | | | |
| <u>The proposed project will result in cumulative impacts to climate change.</u> | <u>S</u> | <u>USG has already acquired approximately \$1.6 million in emission credits for the Project to meet applicable air quality standards. Similarly, to the extent necessary, USG will acquire recognized carbon credits to offset the Project's increased GHG emissions.</u> | <u>LS</u> |
| LOS = Level of Significance S = Significant or Potentially Significant LS = Less than Significant | | | |