

COUNTY OF SAN DIEGO
REPORT FORMAT AND CONTENT REQUIREMENTS
MINERAL RESOURCES



LAND USE AND ENVIRONMENT GROUP

Department of Planning and Land Use
Department of Public Works

July 30, 2007

PURPOSE

These Mineral Resources Report Format and Content Requirements provide guidance on conducting mineral resource investigations and preparing reports for discretionary projects being processed by the Land Use and Environment Group. These guidelines are designed to:

1. Ensure the quality, accuracy and completeness of mineral resource investigations and reports.
2. Aid in staff's efficient and consistent review of documents from different consultants.
3. Provide adequate information to make appropriate planning decisions and to make determinations regarding conformance with applicable regulations and guidelines.
4. Increase the efficiency of the environmental review process and avoid unnecessary time delays.

TABLE OF CONTENTS

INTRODUCTION.....	1
1.0 GENERAL REPORT GUIDELINES	1
2.0 MINERAL RESOURCES INVESTIGATION REPORT	2
2.1 <u>Outline</u>	2
2.2 <u>Content</u>	3

INTRODUCTION

All mineral resource investigation reports shall follow the requirements in this document. The overall length of reports and the amount of information to include will vary depending on the size and scope of the project, and degree of potential impacts to mineral resources. On a case-by-case basis, mineral resource reports may be required for projects located on:

- (1) A MRZ-2 zone or on land within 1,300 feet of an MRZ-2 zone); or
- (2) A MRZ-3 zone; or
- (3) Underlain by Quaternary alluvium; or
- (4) On a known sand and gravel mine, quarry, or gemstone deposit.

A large portion of these areas have already been lost or are permanently inaccessible due to land use compatibility issues. If the resource is not considered lost or inaccessible, a mineral resource investigation may be required. For projects underlain by Quaternary alluvium, the County will additionally evaluate whether the resource has direct access to State and/or Interstate routes to be economically feasible to bring the aggregate to market in western San Diego County.

Specific requirements to be included in mineral resource investigations will be determined on a case-by-case basis by the County. Prior to commencement of any mineral resource investigation, it is strongly recommended to obtain a detailed scoping letter from the County, which specifies the specific requirements of the investigation.

1.0 GENERAL REPORT GUIDELINES

All written reports shall follow these general guidelines:

- Reports should be technical in nature and should avoid anecdotal or extraneous information.
- Reports should be concise and written in a professional manner suitable for peer review. Staff may reject reports based on quality if the report is written in such a manner that a timely and accurate review cannot be completed.
- Mineral resource investigation reports should be bound such that staff may easily review the document. Shorter reports may be stapled, but longer documents should be bound by other methods, such as comb binding.
- Attached topographic maps, geological maps, etc., must be to scale and contain a north arrow and both number and bar scales. When maps are reduced, adjust the scale, or mark the map "Reduced/Use Bar Scale".
- For mineral resource investigation reports, each chapter and subsection of the report should be clearly delineated with bold print and/or underlining and will use the numerical headings contained in these report requirements.

- Draft copies of the report shall have all changes made in response to staff comments in strikeout/underline form. Final copies of the report shall be clean, with all editing marks removed.

All mineral resource investigation reports will be reviewed for technical accuracy and completeness by the County staff geologist or other qualified County staff. Reports are considered draft until the County determines the report to be complete. Each submittal and review of a draft report is an “iteration.” During each iteration County staff will either determine the report to be complete or respond with comments for necessary changes. The County expects that the first iteration will be as complete and comprehensive as possible to address issues in the Scoping Letter. However, each report may have up to three iterations, after which project denial may be recommended due to inadequate environmental progress.

2.0 MINERAL RESOURCE INVESTIGATION REPORT

2.1 Outline

The required sections of a Mineral Resource Investigation Report are provided in the outline below:

<u>MINERAL RESOURCE INVESTIGATION REPORT OUTLINE</u>	
COVER PAGE	
TABLE OF CONTENTS	
GLOSSARY OF TERMS, ACRONYMS, AND ABBREVIATIONS	
EXECUTIVE SUMMARY	
1.0 INTRODUCTION	
1.1	<u>Purpose of the Report</u>
1.2	<u>Project Location and Description</u>
2.0 EXISTING CONDITIONS	
2.1	<u>Topographic Setting</u>
2.2	<u>Land Use</u>
2.3	<u>Mineral Resource Potential</u>
2.4	<u>Geology</u>
3.0 MINERAL RESOURCE IMPACT ANALYSIS	
3.1	<u>Guidelines for Determination of Significance</u>

- 3.2 Methodology**
 - 3.2.1 Land Use Compatibility**
 - 3.2.2 Marketability**
 - 3.2.3 Minimum Dollar Value**
- 3.3 Significance of Impacts Prior to Mitigation**
- 3.4 Mitigation Measures and Design Considerations**
- 3.5 Conclusions**

4.0 REFERENCES

5.0 LIST OF PREPARERS AND PERSONS AND ORGANIZATIONS CONTACTED

FIGURES (order will be determined by reference in report)

- 1. Regional Location Map**
- 2. Site Location Map**
- 3. Land Uses**
- 4. Mineral Resource Zones**
- 5. Geologic Map**
- 6. Geologic Cross Section (as needed, not always required)**
- 7. Potential Onsite and/or Offsite Mineral Resource Impacts**

2.2 Content

Note: The numbering identified below should be used when preparing technical studies. The numbers and titles are shown in italics only for purposes of this document and are not required to be formatted in italics for the technical study.

COVER PAGE

The cover page shall include the following information:

- Project common name;
- Project numbers (i.e., TM, MUP, etc.) including the environmental log number (ER);
- Date ([original report date plus all revisions] must be revised during each iteration of the draft report);
- Name of the County Approved Mineral Resources CEQA Consultant preparing the document, firm name (if applicable) and address;
- Signature of County Approved Mineral Resources CEQA Consultant;
- Project proponent's name and address;
- The following statement: Prepared for the County of San Diego

TABLE OF CONTENTS

The table of contents must follow the order and format outlined in this document. Page numbers should be assigned when possible. Titles of each Table, Figure, Appendix or Attachment should be listed in the order in which they are found in the document.

GLOSSARY OF TERMS, ACRONYMS, AND ABBREVIATIONS

Provide a list of terms, acronyms, and abbreviations used in the report.

EXECUTIVE SUMMARY

Provide a brief summary of the project, the mineral resources onsite, adjacent, and within the vicinity of the project site, potential impacts, and proposed mitigation (if any). No new information should be provided in the summary that is not explained elsewhere in the document. The purpose of the summary is to provide a quick reference for the public and decision makers. Therefore, the language should be less technical than that used in the remainder of the document.

1.0 INTRODUCTION

1.1 Purpose of the Report

Discuss the purpose of the report.

Example language: “The purpose of this report is to document the mineral resources on and within the vicinity of the project site; identify potential mineral resource impacts resulting from the proposed project; and recommend measures to avoid, minimize, and/or mitigate significant impacts consistent with federal, state, and local rules and regulations including the California Environmental Quality Act (CEQA).

1.2 Project Location and Description

Project Location

Discuss the project location in the regional and local context. Include two figures, the first figure showing the project site’s location on a regional location map and the second figure a localized map using a USGS topographic map (or equivalent) with the site boundaries, and APN(s) of the project site shown. Maps must be to scale and contain a north arrow and both number and bar scales.

Project Description

Provide a detailed description of the project, including all on-site and off-site components and any design alternatives. The proposed project description should include the size of the project site and area proposed for development, purpose and scale of proposed uses associated with the project, such as residential/commercial development or recreational camping.

Describe the whole of the project, not just the immediate action being pursued. For example, a Tentative Map or Tentative Parcel Map proposes to subdivide property. The project in question is not just the increase in the number of lots, but the ultimate outcome of residential or commercial development. Another example is an application for a grading permit. The project is not just the immediate grading, but also the end result for which the land was graded.

2.0 EXISTING CONDITIONS

The following subsections include details on describing the physical and geologic characteristics of the project site and within the vicinity of the project.

2.1 Topographic Setting

Provide a general overview of the project site and local topographic setting. Include a discussion of the project site's topography in comparison of areas where potential mining activities could occur. As an example, if the topography is fairly flat, the project could be directly in the line of site of a proposed mine. However, if there is significant relief, the project site could be partially or completely obstructed from view of a potential mining activity.

2.2 Land Use

Provide a general overview of the following:

- Under the current General Plan and Zoning Ordinance, describe existing land use designation(s) both at the project site and within the vicinity of the project. Include lands zoned as S82 by the Extractive Land Use Overlay, or General Plan Extractive Land Use Designation (25) and Impact-Sensitive Land Use Designation (24)
- Describe all existing land uses currently adjacent and within the vicinity of the project including the number of single-family homes or other developed land.

A map showing lands zoned as S82 or General Plan Designation 25 or 24 should be included on a figure.

2.2 Mineral Resource Potential

The California Surface Mining and Reclamation Act (SMARA) of 1975 required the classification of land into Mineral Resource Zones (MRZs), according to the land's known or inferred mineral resource potential. About the western one-third of the County was classified into distinct Mineral Resource Zones (MRZs) according to the California Mineral Land Classification System in 1982. Include a discussion of the MRZs located on, adjacent, and within the vicinity of the project site. In addition, include a discussion of all mines, quarries, and gemstone deposits (both historic and existing) within the vicinity of the project site.

A figure showing the extent of MRZs and mines, quarries, and/or gemstone deposits (both historic and existing) on and within the vicinity of the project site should be included. A regional map showing all MRZ-2 zones should also be included on a figure.

2.3 Geology

Describe the regional and local geologic setting and geologic units associated. Provide a detailed description of geologic units and their mineral resource potential located on the project site, and as necessary within the vicinity of the project site.

A figure showing the geologic units (and any other important features) on a topographic base should be included.

3.0 MINERAL RESOURCE IMPACT ANALYSIS

3.1 Guidelines for the Determination of Significance

Each of the guidelines listed in the County's Guidelines for Determining Significance for Mineral Resources must be addressed.

3.2 Methodology

To be considered significant for the purpose of classifying construction mineral lands, a mineral deposit (or group of deposits that can be mined as a unit) must be actively mined under a valid permit or meet the DMG's criteria of marketability and minimum dollar values (DMG 2000). Some project sites may not meet the marketability and minimum dollar values and would not be considered to have significant mineral resource deposits. However, regardless of whether those marketability and minimum dollar values are met, if a project contributes to the loss of a resource through encroachment of placing incompatible land uses directly adjacent or nearby a known mineral resource, it could still have a significant impact.

3.2.1 Land Use Compatibility

Onsite and possibly offsite impacts to mineral resources as a result of the project need to be analyzed in detail in this subsection. Based upon the analyses conducted as indicated below, a figure (or figures) should be included which shows the potential area of onsite and offsite (if required) mineral resources that could potentially be impacted as a result of the implementation of the proposed project.

Onsite Impacts from Proposed Onsite Land Use

The analysis should indicate the impact of the proposed project and its existing and intended land uses on onsite mineral resources. Projects proposing land uses such as dense residential or commercial development as well as several other types of land uses are incompatible with mining. If the project proposes onsite permanent open

space for the protection of sensitive environmental resources, the land within the open space may be considered to be permanently inaccessible for future mining activities and could contribute to mineral resource loss.

Onsite Impacts from Offsite Land Uses

Existing land uses adjacent and up to 1,300 feet from the project's boundaries should also be analyzed to indicate whether any land use compatibility issues currently exist to a potential mining operation at the project site. Compatible uses are typically minor or temporary. In some cases, existing incompatible land uses near the project site may indicate that mineral resources on the project site have already been lost.

Offsite Impacts (Applicable for MRZ-2 analysis)

The analysis should indicate the impact of the proposed project and its intended land uses on offsite mineral resources. Existing land uses adjacent and up to 1,300 feet from the project site should be analyzed to indicate whether any land use compatibility issues currently exist to a known existing or potential offsite mining operation. Offsite land uses which could not support a mining operation include dense residential or commercial development as well as several other types of land uses such as permanent open space for the protection of sensitive environmental resources.

3.2.2 Marketability

Documentation is needed to indicate whether the mineral resources on the project or in some cases within the vicinity of the project site are minable, processable, and marketable under the technologic and economic conditions that exist or that can be estimated to exist in the next 50 years. Because some of the conditions affecting extraction and marketability cannot be accurately projected 50 years into the future, conservative estimates shall be made in assessing whether a particular mineral resource can be mined, processed, and marketed within the next 50 years.

3.2.3 Minimum Dollar Value

For those deposits that meet the marketability criteria, only those estimated to exceed the following minimum dollar values in 1998-equivalent dollars¹ are considered significant by the DMG (1998) and the County of San Diego.

- **Construction materials** \$12,500,000
(sand and gravel, crushed rock)

- **Industrial and chemical mineral materials** \$2,500,000
(limestone, dolomite, and marble [except where used as construction aggregate]; specialty sands, clays, phosphate, borates and

¹ Based on Consumer Price Index conversion: \$12,500,000 in 1998 equaled \$15,000,000 in 2005; \$2,500,000 in 1998 equaled 3,000,000 in 2005; and \$1,250,000 in 1998 equaled 1,500,000 in 2005.

gypsum, feldspar, talc, building stone and dimension stone)

- **Metallic and rare minerals** \$1,250,000
(precious metals [gold, silver, platinum], iron and other ferro-alloy metals, copper, lead, zinc, uranium, rare earths, gemstones and semi-precious materials, and optical-grade calcite)

Include an economic analysis of mineral resources that lie directly beneath the project site. Also, if the project site will encroach upon known mineral resources offsite, provide an economic analysis of mineral resources which could potentially be permanently lost as a result of the project.

3.3 Significance of Impacts Prior to Mitigation

Discuss whether significant onsite or offsite impacts to mineral resources will occur as a result of the proposed project and its intended land uses. A summary should be provided from the detailed analysis of land use compatibility, marketability, and minimum dollar values included above.

3.4 Mitigation Measures and Project Design Considerations

Provide a brief description of proposed mitigation measures and project design considerations. Refer to Section 5.0 of the County Guidelines for Determining Significance – Mineral Resources for the County’s typical mitigation measures. For any measures proposed, state the impact being mitigated.

3.5 Conclusions

For each significant impact, determine if the proposed mitigation measures have reduced the significance level to “less than significant” in accordance with the above stated Significance Guidelines. Include the rationale and a detailed explanation supporting your conclusion.

4.0 REFERENCES

The list must provide references to documents cited in the technical study. References that were relied upon and which have a limited circulation must include a location where the public can readily access and review the document.

5.0 LIST OF PREPARERS AND PERSONS AND ORGANIZATIONS CONTACTED

Provide a list of preparers, noting each person included on the County list of approved consultants. Note the principal author of reports for privately initiated projects must be

on the County's list or the report will not be accepted. The principal author must sign the front cover of the report.

TECHNICAL APPENDICES/ATTACHMENTS

The Table of Contents shall list each document attached to the report in the order they are referenced in the report.